ZIMBABWE OPEN UNIVERSITY

IN COLLABORATION WITH THE UNIVESITY OF ZAMBIA

FACULTY OF ARTS AND EDUCATION

POST GRADUATE 2011-2017

MDEA 506 THE ORGANIZATION & ADMINISTRATION OF PRIMARY & SECONDARY EDUCATION *(May/June) 2011*

MDEA 506 THE ORGANIZATION & ADMINISTRATION OF PRIMARY & SECONDARY EDUCATION *(Nov/Dec)*

MDEA **509** MEASUREMENT AND EVALUATION

MDEA 511 POLITICS OF EDUCATION nov/dec

MDEA 560 RESEARCH METHODS & STATISTICS nov/dec

MSCC 507 ADVANCEMENT PRINCIPLES & STRATEGIES IN COUSELLIN (May/Jun *2012)*

MSCC 511 COUNSELLING SKILLS FOR MANAGEMENT

MSCC 512 ABNORMAL PSYCHOLOGY IN COUNSELLING (*2013)*

MSPL 507 RESEARCH METHODS

MSPL 512 CONFLICT & DEVELOPMENT

MBAZ 501 BUSINESS & ITS ENVIRONMENT 2014

MBAZ 502 ACCOUNTING FOR MANAGERS nov

MBAZ 504 STATISTICS FOR MANAGERS (May)

MBAZ 514 APPLIED HUMAN RESOURCE MANAGEMENT may

MDEA 506 THE ORGANIZATION & ADMINISTRATION OF PRIMARY & SECONDARY EDUCATION

MDEA **509** MEASUREMENT AND EVALUATION may

MDEA 511 POLITICS OF EDUCATION may

MDEA 560 RESEARCH METHODS & STATISTICS may

MSCC 501 MULTICULTURAL COUNSELLING may

MSCC 501 MULTICULTURAL COUNSELLING Nov

MSCC 502 ADVANCED RESEARCH METHODS & STATISTICS *(May)*

MSCC 503 PSYCHOMETRICS IN COUNSELLING

MSCC 504 GENDER ISSUES IN COUNSELLING

MSCC 520 EDUCATION & EMPLOYMENT COUNSELLING

MSCC 502 ADVANCED RESEARCH METHODS & STATISTICS

MSCC 504 GENDER ISSUES IN COUNSELLING

MSCC 520 EDUCATION & EMPLOYMENT COUNSELLING

MSPL 502 PSYCHOLOGY OF PEACE may

MSPL 503 PEACE, GENDER & CONFLICT RESOLUTION may

MSPL 503 PEACE, GENDER & CONFLICT RESOLUTION Nov

MSPL 510 GOVERNANCE, PARTICIPATION & HUMAN RIGHTS

MSPL 512 CONFLICT & DEVELOPMENT feb/mar

MSPL 512 CONFLICT & DEVELOPMENT may

MSPL 512 CONFLICT & DEVELOPMENT Nov

MSPL 521 THEORY & PRACTICE OF LEADERSHIP Nov

MBAZ 501 BUSINESS & ITS ENVIRONMENT *(FEB/MAR 2015)*

MBAZ 502 ACCOUNTING FOR MANAGERS

MBAZ 504 STATISTICS FOR MANAGERS

MSCC 501 MULTICULTURAL COUNSELLING

MSCC 502 ADVANCED RESEARCH METHODS & STATISTICS *(Feb/Mar)*

MSCC 503 PSYCHOMETRICS IN COUNSELLING

MSCC 512 ABNORMAL PSYCHOLOGY IN COUNSELLING

MSPL 501 CONFLICT ANALYSIS & TRANSFORMATION

MSPL 501 CONFLICT ANALYSIS & TRANSFORMATION Nov

MSPL 502 PSYCHOLOGY OF PEACE & CONFLICT MANAGEMENT

MSPL 503 PEACE, GENDER & CONFLICT RESOLUTION

MSPL 512 CONFLICT & DEVELOPMENT

MSPL 512 CONFLICT & DEVELOPMENT may

MSPL 521 THEORY & PRACTICE OF LEADERSHIP

MSPL 521 THEORY & PRACTICE OF LEADERSHIP may

MBAZ 501 BUSINESS & ITS ENVIRONMENT

MBAZ 501 BUSINESS & ITS ENVIRONMENT *feb/mar*

MBAZ 502 ACCOUNTING FOR MANAGERS *(May)*

MBAZ 503 MANAGEMENT & ORGANIZATIONAL BEHAVIOUR (Feb/Mar)

MBAZ 501 MANAGEMENT & ORGANIZATIONAL BEHAVIOUR

MBAZ 504 STATISTICS FOR MANAGERS *(May)*

MBAZ 504 STATISTICS FOR MANAGERS

MBAZ 507 MANAGEMENT INFORMATION SYSTEMS

MBAZ 514 APPLIED HUMAN RESOURCE MANAGEMENT

MSCC 501 MULTICULTURAL COUNSELLING

MSCC 503 PSYCHOMETRICS IN COUNSELLING

MSCC 504 GENDER ISSUES IN COUNSELLING

MSCC 508 PHILOSOPHY, MORALS & ETHICS IN COUSELLING (Sep)

MSCC 508 PHILOSOPHY, MORALS & ETHICS IN COUSELLING *(Oct/Nov)*

MSCC 520 EDUCATION & EMPLOYMENT COUNSELLING

MSPL 501 CONFLICT ANALYSIS & TRANSFORMATION *(Feb/Mar)*

MSPL 502 PSYCHOLOGY OF PEACE & CONFLICT MANAGEMENT

MSPL 503 PEACE, GENDER & CONFLICT RESOLUTION

MSPL 501 CONFLICT ANALYSIS & TRANSFORMATION *(Feb/Mar)*

MSPL 512 CONFLICT & DEVELOPMENT *(Feb/Mar)*

MSPL 521 THEORY & PRACTICE OF LEADERSHIP

MSPL 522 COMPARATIVE LEADERSHIP & GOVERNACE IN AFRICE

MSPL 512 CONFLICT & DEVELOPMENT *(May)*

MSPL 501 CONFLICT ANALYSIS & TRANSFORMATION *(May)*

MBAZ 510 MONEY& CAPITAL MARKETS 2016

MBAZ 506 TAX PLANNING

MBAZ MONEY & CAPITAL MARKETS

MBAZ 512 INDUSTRIAL & LABOUR RELATIONS

MBAZ 519 APPLIED STRATEGIC MANAGEMENT 2

MBAZ 522 CHANGE MANAGEMENT

MBAZ 522 CHANGE MANAGEMENT july

MDEA 523 LEGAL PERSPECTIVES IN EDCUCATION

MSCC 502 ADVANCED RESEARCH METHODS & STATISTICS *(Feb)*

MSCC 502 ADVANCED RESEARCH METHODS & STATISTICS *(Apr)*

MSCC 506 PASTORAL COUNSELLING

MSCC 508 PHILOSOPHY, MORALS & ETHICS IN COUSELLING

MSCC 519 GUIDENCE & COUNSELLING july

MSCC 521 DISABILITY MANAGEMENT

MSCC 507 ADVANCEMENT PRINCIPLES & STRATEGIES IN COUSELLING

MSCC 503 PSYCHOMETRICS IN COUNSELLING

MSCC 503 PSYCHOMETRICS IN COUNSELLING

MSCC 511 COUNSELLING SKILLS FOR MANAGEMENT

MSCC 512 ABNORMAL PSYCHOLOGY IN COUNSELLING

MSCC 520 EDUCATION & EMPLOYMENT COUNSELLING

MSCC 506 PASTORAL COUNSELLING

MSPL 507 RESEARCH METHODS

MBAZ 501 BUSINESS & ITS ENVIRONMENT 2017 (Mar)

MBAZ 501 BUSINESS & ITS ENVIRONMENT (Apr/May)

MBAZ 503 MANAGEMENT & ORGANIZATIONAL BEHAVIOUR

MBAZ 513 MARKETING MANAGEMENT

MBAZ 515 OPERATIONS RESEARCH

MBAZ 504 STATISTICS FOR MANAGERS

MBAZ 511 FINANCIAL MANAGEMENT

MBAZ 522 CHANGE MANAGEMENT

MBAZ 523 ORGANIZATIONAL LEADERSHIP

MDEA 502 SUPERVISION OF EDUCATIONAL PESONNEL

MDEA 502 SUPERVISION OF EDUCATIONAL PESONNEL Mar

MDEA 503 EDUCATIONAL PLANNING

MDEA 503 EDUCATIONAL PLANNING Apr

MDEA 508 ECONOMICS OF EDUCATION

MDEA 512 MANAGEMENT OF INFORMATION SYSTEMS

MDEA 512 MANAGEMENT OF INFORMATION SYSTEMS Apr

MDEA 520 COMPARATIVE EDUCATION

MSCC 504 GENDER ISSUES IN COUNSELLING

MSCC 518 MONITORING & EVALUATION

MSCC 520 EDUCATION & EMPLOYMENT COUNSELLING

MSPL 502 PSYCHOLOGY OF PEACE CONFLICT MANAGEMENT

MSPL 503 PEACE, GENDER & CONFLICT RESOLUTION

MSPL 514 PEACE, EDUCATION & THE MEDIA

MSPL 515 ETHICS OF PEACE & CONFLICT MANAGEMENT

MSPL 517 AFRICAN PHILOSOPHIES OF PEACE & JUSTICE Apr

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATION

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA506: THE ORGANISATION AND ADMINISTRATION OF PRIMARY AND SECONDARY EDUCATION

INTAKE 15

May/June 2011

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks. Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

QUESTIONS

1. Discuss why nations the world over invest a lot of resources in education. [100]

2. Critique the relevance of the Human Resources Development Theory in enhancing organisational effectiveness. [100]

3. Compare and contrast administration and management in the context of running primary or secondary schools. [100]

4. Examine any **five** factors that influence the degree of decentralisation with regards to the organisational structure of primary or secondary schools. [100]

5. Analyse the strengths and weaknesses of your country's education system as an organisation. [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA506: ORGANISATION AND ADMINISTRATION OF PRIMARY AND SECONDARY EDUCATION

November/December 2011

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks.
Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

QUESTIONS

1. Discuss the role of the aims and objectives of primary and secondary education in your country in promoting the social, economic and political agenda. [100]

2. Examine the extent to which universities and polytechnic colleges are perceived as organisations in your country. [100]

3. Analyse the advantages and disadvantages of departmentalising an educational organisation of your choice. [100]

4. Critique the practice of involving the local communities in the management of school resources in your country. [100]

5. Evaluate the merits and demerits of following procedures in your country's educational organisations. [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATION

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA509: MEASUREMENT AND EVALUATION

INTAKE 15

May/June 2011

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks. Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

QUESTIONS

1. Compare and contrast Norm-Reference Tests and Criterion-Reference Tests. [100]

2. Differentiate between Tyler's Model of Evaluation and Scriven's Goal Free Model. Which one works better in your work situation? [100]

3. Reliance on published tests to assess pupils' performance is a disaster. Discuss this assertion. [100]

4. Discuss the importance of goals in measurement and evaluation programmes in your organisation. [100]

5. Assess the role of **four** types of the validity of tests in an educational institution. [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA511: POLITICS OF EDUCATION

November/December 2011

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks. Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

QUESTIONS

1. The curriculum followed in some developing countries is a reflection of their ideologies. To what extent is this assertion accurate? [100]

2. The high levels of unemployment in your country can be blamed on the non-performance of your economy. How well does this statement fit in your country? [100]

3. Using relevant examples particular to your country, discuss the extent to which politics affects education. [100]

4. To what extent has the policy on affirmative action as a way of addressing gender imbalances led to a compromise in service delivery in educational institutions? [100]

5. Lemmer and Badenhorst (1997:121) assert that, "the primary aim of Marxist education is to train leaders in skills and attitudes that will make them efficient and suitable workers for the new economic order. To what extent is your country's education system living up to this assertion? [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATION

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA560: RESEARCH METHODS AND STATISTICS

November/December 2011

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions, at least one question from each section. Each question carries 100 marks.

Statistical tables, Formula sheet and graph paper will be provided

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

QUESTIONS

Section A

1. Discuss the importance of literature review in educational research. [100]

2. Critically discuss any four sampling techniques and demonstrate how each can be used to choose respondents or subjects in the research process. [100]

3. Using examples, explain each of the following terms as they relate to research in education:

   (a) primary data

   (b) secondary data

   (c) internal criticism

   (d) documentary analysis [100]

Section B

4. (a) Describe clearly with diagrammatic illustrations the main features of a standard normal distribution curve.

   (b) The table below is part of a progress report for a student in a large class at college:

SUBJECT	STUDENT'S SCORE	TOTAL OUT OF	CLASS AVERAGE	STANDARD DEVIATION
Communication Skills	60	80	67	7
Computers	60	80	67	6
Research	82	110	75	15

   (i) If the class marks are normally distributed, give a brief description of the general performance of the class in the three subjects using the indicators.

   (ii) Calculate the z-scores for the student in the three subjects.

(iii) Comment on the students' performance compared with his classmates, and state his best and worst subjects.

5. The table below shows the distribution of randomly selected sample of lecturers according to daily newspapers they read and location of their places of residence.

Location of Residence	**Daily Newspaper Read**			
	H-Metro	**Herald**	**Chronicle**	**Manica Post**
High density	26	68	30	48
Low density	22	42	32	32

(a) Choose and justify the statistical test you would use to help you to interpret the data.

(b) Do a statistical test of significance on the data at 95% level of significance.

Formula Sheet

Mean $\bar{x} = \frac{\sum x_i}{n}$

Variance $S_x^2 = \frac{\sum(x_i - \bar{x})^2}{(n-1)}$

Standard deviation $S_x = \sqrt{S_x^2}$

Pearson's Correlation Coefficient

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2] \times [n\sum y^2 - (\sum y)^2]}}$$

Spearman's Correlation Coefficient

$$R_s = 1 - \frac{6 \times \sum d^2}{n(n^2-1)}$$

$$\text{Z score} = \left[\frac{x - \bar{x}}{SD} \right]$$

$$\text{Median} = L_m + \frac{C_m (\frac{1}{2}n - F_{m-1})}{f_m}$$

$$\text{Mode} = L_m + \frac{C_m (f_m - f_{m-1})}{2f_m - (f_{m-1} + f_{m+1})}$$

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC507: ADVANCED PRINCIPLES AND STRATEGIES IN COUNSELLING

May/June 2012

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. State the assumptions that a counsellor needs to adhere to during family counselling relationship with client(s). What implications do these assumptions have on practicing counsellors? [40]

Choice Questions

2. Explain clearly how a counsellor can demonstrate empathy to a client from a different culture. Give practical examples in your answer. [30]

3. Discuss the therapeutic effects/outcomes of behaviour modification programme to an adolescent? Give suggestions for maintaining the newly acquired positive behaviours. [30]

4. Justify why a heterogeneous group is preferable in the assessment process for psychological therapy. Provide practical examples in your answer. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC511: COUNSELLING SKILLS FOR MANAGEMENT

November/December 2012

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify the need for a counsellor-manager at the workplace. Support your answer with practical examples linked to your personal experience. [40]

Choice Questions

2. Discuss strategies that a counsellor can use to improve the counselling relationship process. [30]

3. Justify the rationale for counsellors to continually upgrade themselves in their profession? [30]

4. With specific work related examples, discuss how employment life skills are related to work skills. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE LEADERSHIP AND CONFLICT RESOLUTION

MSPL507: RESEARCH METHODS

May/June 2013

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Critically discuss the utility of evaluation research in peace studies. [40]

Optional Questions: Answer any TWO questions

2. In the context of research discuss the role that any two sources of knowledge can play in peace studies. [30]

3. Discuss the usefulness of research skills when one is investigating the impact of an armed conflict. [30]

4. Assess the relevance and sustainability of the participatory action research approach when addressing problems of violence within a society. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC512: ABNORMAL PSYCHOLOGY IN COUNSELLING

May/June 2013

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Examine how a counsellor can assist an adult with learning disabilities and social perception dilemmas. [40]

Choice Questions

2. Discuss the challenges a professional counsellor is likely to encounter in abnormal psychology counselling especially in Zimbabwe. [30]

3. Analyse the major contributions of the psychodynamic and behaviouristic models to psychopathology. Cite relevant examples in your answer. [30]

4. To what extent is abnormal behaviour classification being used in your country? Support your answer with relevant examples. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

November/December 2013

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Sustained Dialogue is regarded as one of the effective methods of conflict resolution. With reference to a specific examples of your choice, discuss the process and formal stages involved in sustained dialogue. [40]

Optional Questions: Answer any TWO questions

2. Former UN Secretary General Boutros Boutros Ghali said "there cannot be peace without development just as there are no prospects for development without peace". Critically analyse the above statement in relation to :

   (a) Socio-economic issues
   (b) Democracy and human rights
   (c) Empowerment of women
   (d) HIV/AIDS pandemic [30]

3. Some scholars have argued that development aid has contributed to the rise of conflicts in other countries. Critically analyse the above statement touching on issues of Trade and Conflict and how aid has supported peace or war in some situations. [30]

4. Inequality and discrimination has contributed to poverty and under development. Identify other possible causes and relate them to real conflicts that have been experienced in Africa. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ501: BUSINESS AND ITS ENVIRONMENT

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Massive retrenchments have characterised Zimbabwe's economy since 2000. Critically discuss the causes of unemployment and possible policy strategies for reducing the unemployment in the country. [25]

2. Examine the attractiveness of a commuter transport industry in Zimbabwe using Michael Porter's Five Forces Model. [25]

3. There has been varying conflicting arguments on the reintroduction of Zimbabwe dollar into the economy. Discuss critically the implications of the reintroduction of Zimbabwe dollar and indicate whether in your own opinion, it is a noble idea or not given Zimbabwean economic environment. [25]

4. Critically examine the major effects of inflation to your organisation during the peak of the hyper-inflationary period covering the years 2007 to 2008. [25]

5. Discuss the implications of indigenisation policy being a key solution to the country's challenges with regard to:

   (a) Balance of Payments [10]
   (b) Industry Production Capacity [5]
   (c) Employment levels [5]
   (d) Investment capital fronts [5]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ502: ACCOUNTING FOR MANAGERS

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **ALL** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

QUESTIONS

1. The following is a draft trial balance of T. Howe as at 31 December 2013.

	$	$
Bank	6 723	
Trade receivables	18 910	
Trade payables		12 304
Inventory at 01 January 2012	40 360	
Buildings at cost	100 000	
Equipment at cost	45 000	
Profit and loss account		15 286
General reserve		8 000
Share premium		4 200
Ordinary share capital		100 000
Purchases	72 360	
Revenue		135 486
Carriage inwards	1 570	
Carriage outwards	1 390	
Salaries	18 310	
Rates	4 235	
Discount allowed	1 896	
Office expenses	3 022	
Accumulated depreciation: Buildings		32 000
Equipment		16 000
Directors' remuneration	9 500	
	323 276	**323 276**

Additional Information

(i) Inventory at 31 December 2013 $52 360

(ii) Rates owing $280, office expenses owing $190

(iii) Dividend of 10% has been declared on 31 December 2013

(iv) Transfer to general reserve $1 800

(v) Depreciation on cost: Buildings 5%; Equipment 20%

Required

Prepare a Statement of Comprehensive Income for T. Howe for the year ended 31 December 2013 and a Statement of Financial Position as at that date. [30]

2. The draft statements of financial position of PAC Pvt Ltd as at 31 December 2012 and 31 December 2013 and the summary statement of comprehensive income for the year ended 31 December 2013 were as follows:

STATEMENTS OF FINANCIAL POSITION AS AT 31 DECEMBER

	2012		2013	
	$m	$m	$m	$m
ASSETS				
Non Current Assets				
Land and buildings at cost	260		260	
Accumulated depreciation	(60)	200	(64)	196
Plant and machinery at cost	140		160	
Accumulated depreciation	34	106	(46)	114
		306		310
Current Assets				
Inventory	50		48	
Trade receivables	32		52	
Short term investments	10		40	
Cash and bank	6	98	16	156
Total assets		**404**		**466**
EQUITY AND LIABILITIES				
Equity				
Share capital		200		200
Retained earnings		96		108
		296		308
Non Current Liabilities				
10% Debentures		40		80
Current Liabilities				
Trade payables	38		44	
Taxation	30	68	34	78
Total Equity and Liabilities		**404**		**466**

Statement of Comprehensive Income for the year to 30 June 2013

	$m	$m
Revenue		346
Cost of sales		(192)
Gross profit		154
Interest received		6
		160
Expenses		
Sundry expenses	48	
Interest payable	4	
Loss of sale of fixed asses	2	
Depreciation: Buildings	4	
Plant	32	(90)
Profit before tax		70
Taxation		34
Profit after tax		36
Dividend		(24)
Retained earnings for the year		12
Retained earnings b/f		96
Retained earnings c/f		**108**

During the year, plant costing $30 million and with accumulated depreciation of $20 million was sold for $8 million.

Required

Prepare a Statement of Cash Flows for PAC Pvt Ltd for the year ended 31 December 2013. (Use Indirect Method). [30]

3. (a) Critically outline and explain the accounting cycle. [10]

(b) Explain five benefits of budgets. [10]

4. (a) Outline four users of financial statements. [8]

(b) Mention two advantages that accrue from using each of the following forms of business organisation:

(i) Sole trader [3]
(ii) Partnership [3]
(iii) Private Limited Company [3]
(iv) Public company [3]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ504: STATISTICS FOR MANAGERS

May 2014

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** questions in Section A and any **THREE (3)** questions from Section B.
All questions in Section B carry equal marks.
Show all workings and give answers to 4 decimal places where appropriate.
Graphs should be plotted on graph paper.
Candidates will be provided with Statistics List of Formulae, Statistical Tables and graph paper. ***The use of silent and non-programmable calculators is permissible***

SECTION A [COMPULSORY]: 40 MARKS
Answer all questions in this section being careful to number them A1 to A3.

Question A1

(a) There is hardly an area in which the impact of Statistics has been felt more strongly than in business.

i. Give two examples of major areas of business where Statistics plays an important part. [2]

ii. Why is it important for a business manager to have some elementary knowledge of Statistics? [2]

(b) In business research, data collection is usually done through a sample survey rather than a census.

i. Distinguish between a census and a sample survey. [2]

ii. Suggest three reasons why a sample survey is usually preferred to a census. [3]

(c) The questionnaire is one of the most widely used instruments of data collection. Its development is an art that improves with experience.

i. Write down any three attributes of a good questionnaire. [3]

ii. What are the advantages of administering a survey questionnaire on-line? [2]

Question A2.
The following data shows the prices and consumption of three commodities during 2009 and 2010.

Product	Price($)		Quantity	
	2009	2010	2009	2010
A	3	6	500	490
B	2	3	382	256
C	5	3	200	450

(a) Find the simple price index for product A for 2010 using 2009 as the base year. Interpret the result. [3]

(b) Calculate the Fisher Price Index for all the commodities using 2009 as the base year. Interpret the result. [5]

(c) What are the problems associated with the construction of index numbers? [3]

Question A3.
The annual profits made by a random sample of 37 companies in the textiles industry are shown in the table below.

Profit ($00)	**Number of companies**
10 but less than 20	3
20 but less than 30	7
30 but less than 40	12
40 but less than 50	10
50 but less than 60	5

(a) Calculate the:

i. Mean [3]
ii. Median [3]
iii. Standard deviation [4]

(b) Construct a less than ogive and use it to estimate the other two quartiles. [5]

Section B (60 marks)
Answer any three questions in this section being careful to number them B4 to B7.

Question B4

(a) The delays that are experienced at a border post by truck drivers to clear their cargo were found to be normally distributed with mean 48 hours and a standard deviation of 6 hours. Find the probability that a driver has to wait for:

i. at least 36 hours to clear his cargo [4]

ii. between 40 hours and 50 hours to clear his cargo. [6]

(b) The share prices of 7 randomly selected counters on a stock exchange were noted before and after the country's president was admitted ill in hospital.

Price before(USc)	14	18	21	15	17	19	23
Price after (USc)	13	15	20	15	16	16	21

Test at 5% level of significance whether the price after is significantly different from the price before. [10]

Question B5

(a) The projected profits for a retail organisation in its second year of trading are as follows:

Profit($000)	-20	50	60	100
Probability	0.04	0.16	0.5	0.3

i. What is the probability that the organisation will realise a profit in its second year of operation? [2]

ii. Find the expected profit in the second year of operation. [3]

iii. Calculate the standard deviation of the projected profits. [5]

(b) The daily sales of an airtime vendor for 12 randomly selected days are as follows:

9 14 11 10 8 15 7 16 11 10 13 12

i. Find point estimates of the mean and standard deviation of the sales. [2 +3]

ii. Construct a 95% confidence interval for the population mean of sales. [5]

Question B6

(a) Mary makes on average 0.5 errors on each page she types. What is the probability that in a chapter of 8 pages she makes

i. no mistakes? [3]

ii. no more than 4 mistakes? [2]

(b) A social analyst classified the employees of a certain organisation by gender and also according to whether or not they prefer night driving. The following results were obtained.

Gender	Preferred driving time	
	Night	Day
Male	85	45
female	65	55

Test at 5 % level of significance whether gender and preferred time for driving are independent. [15]

Question B7

A company would like to estimate the relationship between its monthly sales and the amount that the company spends on advertisement per month. The following observations were made over 10 months.

Monthly expenditure ($00)	7	9	5	15	12	6	9	8	6	10
Monthly sales ($00)	18	35	12	50	36	24	30	32	27	34

To facilitate analysis of the data, a computer output was obtained using the SPSS statistical package. The results were summarised as shown in the tables below.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908(a)	.824	.802	4.676

a Predictors: (Constant), Monthly expenditure ($00)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2.655	4.676		.568	.586
	Monthly expenditure ($00)	3.120	.510	.908	6.120	.000

a Dependent Variable: Monthly sales ($00)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	818.713	1	818.713	37.451	.000(a)
	Residual	174.887	8	21.861		
	Total	993.600	9			

a Predictors: (Constant), Monthly expenditure ($00)
b Dependent Variable: Monthly sales ($00)

(a) Draw a scatter plot to represent the data. Comment on the kind of relationship between monthly expenditure on advertisement and monthly sales. [5]

(b) State the estimated regression equation for the data. [2]

(c) Interpret the slope of the regression equation. [2]

(d) Use the regression equation to predict the amount of sales when $1100 was spent on advertisement. [3]

(e) State the coefficient of determination. Comment on its value. [3]

(f) Test at 5% level of significance whether there is a regression relationship between sales and expenditure. [5]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ514: APPLIED HUMAN RESOURCE MANAGEMENT

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in the Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. The shift from personnel management to human resource management is a futile attempt by the professionals to elevate themselves to the Board. Discuss. [25]

2. Outline the role of the following players in strategic human resource management:

   (a) Line managers [8]
   (b) Senior managers [6]
   (c) The Human Resources Manager [11]

3. (a) Draw a job description for a human resource manager of a mining firm. [15]

   (b) What qualities do you think the person described in 3(a) should have? [10]

4. What are the factors affecting reward in Zimbabwe? [25]

5. (a) Describe Armstrong (1998)'s performance management process. [15]

   (b) What challenges do managers face in implementing performance reviews? [10]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA506: ORGANISATION AND ADMINISTRATION OF PRIMARY AND SECONDARY EDUCATION

May 2014

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only.
Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

QUESTIONS

1. Evaluate how the Zimbabwean education system has provided equality of educational opportunities in the fulfilment of one of its goals at independence. [100]

2. Examine how far Cark's Cardinal Principles of Education cited in Herbert Spencer (1963) address issues of human development. [100]

3. Compare and contrast McGregor's theory of organisation and the Systems Theory. [100]

4. Evaluate the applicability of the Bureaucratic Theory in an education system. [100]

5. Discuss the applicability of decentralisation of authority in a school or education system. [100]

X2

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA509: MEASUREMENT AND EVALUATION IN EDUCATION

May 2014

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

QUESTIONS

1. Discuss the role played by formative evaluation in the development of educational programmes. [100]

2. Evaluate the importance of summative evaluation in the development of educational programme(s)? [100]

3. Discuss how educational evaluation can be used to assist in:

   (a) Programme management [30]
   (b) Policy analysis [30]
   (c) Political decision-making [40]

4. What is evaluation research? Discuss the challenges encountered in its implementation. [100]

5. Diagnostic procedures should be followed in the evaluation of educational programmes. Assess the validity of the statement. [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA511: POLITICS OF EDUCATION

May 2014

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. Each question carries 100 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

QUESTIONS

1. The Human Capital Theory and the Functionalist Theory are the same. Discuss. [100]

2. Equity and Equality of Educational Opportunities have been elusive concepts in a post-independent Zimbabwe. Examine the validity of this view with the aid of appropriate examples. [100]

3. With the aid of specific examples from an education system of your choice, discuss how politics affects education. [100]

4. Examine the view that localisation of examinations is a great success in developing countries. [100]

5. Evaluate the advantages and disadvantages of capitalism in relation to your education system. [100]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF ARTS AND EDUCATION

DEPARTMENT OF EDUCATION

MASTER OF EDUCATION IN EDUCATIONAL MANAGEMENT

MDEA560: RESEARCH METHODS AND STATISTICS

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer any **THREE** questions. Each question carries 100 marks.
Statistical tables, Formula sheet and graph paper will be provided.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

QUESTIONS

1. Discuss the benefits of reviewing literature to the researcher. [100]

2. Assess the applicability of action research in your organisation. [100]

3. The marks of ten students in English and Maths are shown below:

Student	1	2	3	4	5	6	7	8	9	10
English	32	18	37	41	25	32	25	32	27	31
Maths	30	26	35	40	28	40	28	40	18	30

Showing clearly all the steps of hypothesis testing, use a t-test at 5% level of significance to test whether there is a significance difference in the performance of students in English and Maths.

$$t = \frac{\overline{x}_1 - \overline{x}_2}{\sqrt{\frac{s_1^2}{n1} + \frac{s_2^2}{n^2}}}$$

[100]

4. The figures below show enrolments in 20 primary schools in a district:

218 107 220 541 600 158 218 220 303 412

197 241 258 102 212 245 310 290 260 210

(a) Compute;

(i) The mean [15]
(ii) The median [15]
(iii) The range [15]
(iv) The standard deviation [15]
(v) The coefficient of variation for the data [15]

(b) Use the coefficient of variation to comment on the variation in school enrolments in the district. [25]

5. Compare and contrast the cohort and the panel studies. What advantages does the cohort research design have over the panel research design? [100]

(iv) Salaries paid in advance amounted to $4 000

(v) Corporation tax was estimated at $8 000

(vi) Provision is to be made for a final dividend of 1.25cents per share

Required

Prepare Zunura Ltd's Statement of Comprehensive Income and a Statement of Financial Position as at 31 May 2012 [20]

2. (a) Explain the five branches of accounting. [10]

(b) Cost-volume-profit analysis has been developed as a basic tool for sensitivity analysis.

(i) List four advantages of cost-volume-profit analysis [4]

(ii) List three deficiencies of the cost-volume-profit analysis [3]

3. The following information relates to Dewedzo Ltd for the year ended 30 June 2012

Statement of Comprehensive Income for the year to 30 June 2012

	$000	$000
Gross profit		217
Administrative expenses	76	
Loss on sale of vehicle	3	
Increase in provision for bad debts	1	
Depreciation on vehicles	36	
Net profit		101
Taxation		17
		84
Dividends		60
Retained profit for the year		24

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC501: MULTICULTURAL COUNSELLING

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. With relevant examples, justify the view that multicultural counselling has a lot of challenges. [40]

Choice Questions

2. Why should a multicultural counsellor have knowledge of theories? [30]

3. Critically evaluate the role of ethics in multicultural counselling. [30]

4. Multicultural counselling is a relevant concept in today's world. Discuss. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC501: MULTICULTURAL COUNSELLING

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss the factors that might influence effective multicultural counselling outcomes. What are the implications to the counselling profession? [40]

Choice Questions

2. Justify the relevance of cross cultural counselling to the counselling field. [30]

3. Analyse the applicability of cognitive therapy in multicultural issues. [30]

4. Evaluate the effectiveness of multicultural counselling to persons living with disabilities as well as their families. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC502: ADVANCED RESEARCH METHODS AND STATISTICS

May 2014

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Section A: Compulsory

1. In a study to test counselling graduates; computer literacy skills, a recruitment consultant gave a test before an intensive training course and a test after. A sample of 15 candidates yielded the following scores:

Before	After
21	54
34	59
52	80
36	53
22	64
44	58
18	32
24	44
29	59
38	62
60	74
19	53
21	61
29	59
38	64

(a) Can we conclude that the training course is effective? Use t-test and $\alpha = 0.05$? [20]

(b) Discuss the role that computers might play in counselling research. [10]

(c) What challenges might arise from the use of computers in research in Zimbabwe? [10]

(a) (i) Name the term 'e' in the model. [1]

(ii) Suggest three reasons for including the term 'e' in the model. [3]

(b) Suppose the following results were obtained:

β_0 = 800
β_1 = 40
r = 0,964564632
$1 \leq Ex \leq 13$

(i) Interpret the value of β_1 obtained. [2]

(ii) Write down the estimated regression equation and use it to estimate the annual sales for a salesperson with 9 years of experience. [3]

(iii) Find the coefficient of determination and interpret the result. [3]

SECTION B: ATTEMPT ANY THREE QUESTIONS. [60 MARKS]

B4. A certain medical researcher claimed that the mean birth weight for all male babies of mothers given a certain vitamin is 3.39kg. Sixteen expecting mothers were given a special vitamin supplement. On giving birth, the male baby weights (in kg) were recorded as indicated below:

3.73 4.37 3.73 4.33 3.39 3.68 4.68 3.52 3.02 4.09

2.47 4.13 4.07 3.22 3.43 2.54

(a) Calculate:

(i) The mean birth weight [3]

(ii) The sample standard deviation [4]

(b) Construct a 95% confidence interval for the mean birth weight of all male babies. [6]

(c) Test the researcher's claim at 5% level of significance. [7]

B5. A bank teller with a commercial bank wants to determine whether deposits of current account holders are normally distributed with a mean of $7 600 and standard deviation of $1 400 or not. He has collected the following data:

Range of deposits	Number of observed clients
Less than $7 000	30
$7 000 - $8 000	65
More than $8 000	25

Does the data provide enough evidence at 1% level of significance that the deposits follow a normal distribution with mean $7 600 and standard deviation $1 400? [20]

B6. (a) (i) Distinguish between the seasonal and cyclical components of a time series with the aid of suitable diagrams. [4]

(ii) Why is it important to study cyclical movements in business and economic data? [2]

(b) The number of visitors to a national resort, from June 1997 to May 1998 is given below:

June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
450	410	460	655	1031	1722	1820	1784	1521	979	532	526

(i) Plot this time series and comment. [5]

(ii) Does it show a seasonal or cyclical component? [1]

(iii) Fit a linear trend function to this series. [6]

(iv) Forecast the number of visitors for June 1999. [2]

B7. (a) (i) State the two main types of non-parametric statistical procedures. [2]

(ii) What are the advantages of non-parametric procedures over their parametric counterparts? [4]

(b) A company buys three products with the following characteristics:

Products	**No. of units bought**		**Price paid per unit ($)**	
	2010	**2011**	**2010**	**2011**
A	120	140	9	10
B	150	165	21	23
C	175	180	26	27

Using 2010 as the base year, calculate:

(i) Simple quantity index for product C and interpret it. [3]

(ii) Fisher Ideal price index and interpret it. [7]

(c) The Zambia Consumer Association (ZACA) makes use of index numbers. Explain two problems that ZACA is likely to encounter when constructing these index numbers. [4]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Standardised tests have been criticised for being biased. Critically examine this view giving relevant examples. [40]

Choice Questions

2. Assess the relevance of psychometrics in assessment. [30]

3. Intelligence is measured by its contribution to the life of people. Discuss. [30]

4. The success of an assessment test largely depends on its value to the test-taker. Justify this assertion giving relevant examples drawn from your country. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

November 2014

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Compare and contrast criterion referenced tests and norm referenced tests. Why is it important for counsellors to use these tests? [40]

Choice Questions

2. Assess the RASCH Model. What are the implications to psychometrics? [30]

3. Examine item analysis and explain its major uses. [30]

4. Discuss any two intelligence theories used in counselling. Give practical examples in your discussion. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC504: GENDER ISSUES IN COUNSELLING

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss cultural norms that promote gender inequality in your community. How could they be addressed through counselling? [40]

Choice Questions

2. Families have a primary role in the empowerment of women. Discuss the assertion highlighting the role of a counsellor. [30]

3. Considering Acts, Statutory Instruments and patriarchal cultural practices, discuss how these instruments impact on gender issues. Of what relevance is this knowledge to counsellors? [30]

4. Examine gender issues that need counselling. Suggest appropriate counselling interventions that can address the issues. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC520: EDUCATION AND EMPLOYMENT COUNSELLING

November 2014

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify how counselling may enhance the management of person with disabilities in their development life cycle. [40]

Choice Questions

2. What are the essential elements of a vocational curriculum for people with disabilities? Use practical and relevant examples from your community to illustrate your answer. [30]

3. Explain why vocational assessment requires a cultural context evaluation. [30]

4. Critically analyse the collaborative model for rehabilitation consultants. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL501: CONFLICT ANALYSIS AND TRANSFORMATION

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. With reference to any African regional body of your choice discuss how it has intervened in ending conflicts in Africa. [40]

Optional Questions: Answer any TWO

2. Citing relevant examples, discuss the role played by traditional African conflict resolution methods. [30]

3. Conflicts in Africa are as a result of cultural and ethnic divergences. Discuss. [30]

4. Zimbabwe has experienced various forms of conflict. Discuss. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE LEADERSHIP AND CONFLICT RESOLUTION

MSPL502: PSYCHOLOGY OF PEACE

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. With reference to examples, discuss the concept of group psychology and its relevance to peace and conflict studies. [40]

Optional Questions: Answer any TWO questions

2. Discuss and evaluate any two theories of aggression in the context of conflict studies. [30]

3. Evaluate the contribution of research in conformity and compliance in peace and conflict studies. [30]

4. Evaluate the role of culture in conflict management. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE LEADERSHIP AND CONFLICT RESOLUTION

MSPL503: PEACE, GENDER AND CONFLICT RESOLUTION

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. The Sixteen Days of Activism in Zimbabwe last year November 25 to December 10 2013 were based on the following theme:

   'From peace in the home to peace in the world. Lets challenge militarism and end violence against women.

   Giving specific examples elaborate on the following sub themes that were identified:

   (a) Bringing together women peace and human rights movements to challenge militarism

   (b) Sexual violence in and after conflict

   (c) Proliferation of small arms and their role in domestic violence

   (d) Political violence against women including pre, during post election violence. [40]

Optional Questions: Answer any TWO

2. Give an analysis of the impact of conflict on women, youth and children in relation to the social, political, and economic environment. [30]

3. The United Nations Security Council at its 4213th meeting on 31 October 2000 adopted a resolution on women peace and security. Discuss in detail the name of the resolution and its components. [30]

4. Discuss the challenges faced by women in national armies in Africa today. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL503: PEACE, GENDER AND CONFLICT RESOLUTION

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. 'From peace in the home to peace in the world: lets challenge militarism and end violence against women'. The above theme was used during 2010 campaign on 16 days to end gender based violence.

   Using the above theme, discuss any five approaches that could be used to bring about a more just world. [40]

Optional Questions: Answer any TWO

2. Discuss using relevant examples some of the four issues below that policy makers should consider to ensure that gender concerns are addressed in peace and conflict resolution:

   (a) CEDAW the Bill of Rights of Women
   (b) Gender and Health HIV and AIDS
   (c) Addressing gender disparities in politics and decision making
   (d) Economic justice to ensure gender equality in the economy agriculture and the environment. [30]

3. The Zimbabwe Women's Lawyers Association on behalf of women's coalition has spelt out some important points under transitional justice and national healing in the women's charter. Discuss at least four of the points that both men and women in the process of healing the nation of Zimbabwe. [30]

4. In spite of the Beijing Declaration on affirmative action, African women generally are not yet in the mainstream of the political, social, economic as well as peace and conflict related issues. Discuss. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC504: GENDER ISSUES IN COUNSELLING

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss how gender perceptions impact on females and males as they grow into adulthood. Cite practical examples from your community. [40]

Choice Questions

2. Analyse the activities that developed women's rights. [30]

3. "An abused individual is likely to beget an abused life." Discuss this assertion indicating where counselling comes in. [30]

4. "Women with disabilities suffer a double jeopardy". Examine this assertion and suggest how counselling can help these clients. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL510: GOVERNANCE, PARTICIPATION AND HUMAN RIGHTS

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Compare the republican and constitutional republican systems of two countries of your choice in Africa and distinguish the role of the citizen in terms of voting and personal freedoms. [40]

Optional Questions: Answer any TWO

2. Discuss the view that non participatory approaches to governance are the panacea to development problems. [30]

3. With reference to examples discuss the links between good governance and human rights. [30]

4. Not much attention has been paid to the rights of the child in Zimbabwe. How far true is this statement? [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

May 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Citing relevant examples in Africa, discuss the three types of conflict identified by Fisher (1989). [40]

Optional Questions: Answer any TWO questions

2. According to Fisher (1989), conflict impacts on different groups of society. Discuss the impact of conflict on vulnerable groups. [30]

3. Discuss measures to combat poverty in Africa as outlined by the United Nations Commission on Sustainable Development (1995). [30]

4. The Zimbabwe government has established the Ministry of Youth, Indigenisation and Economic Empowerment as a way of empowering the youth. Discuss the challenges faced in the process of empowering the youth in Zimbabwe. Suggest possible solutions. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Citing relevant examples, discuss the principles of preventing conflict. [40]

Optional Questions: Answer any TWO questions

2. Baregu (1999) discussed some of the consequences of conflict on poverty. Giving examples, analyse the above statement. [30]

3. Conflicts that have been experienced in Africa are as a result of external factors. Discuss. [30]

4. Discuss the role of the youth in development and the possible challenges faced in development. [30]

ZIMBABWE OPEN UNIVERSITY

FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC520: EDUCATION AND EMPLOYMENT COUNSELLING

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify how counselling may enhance the management of person with disabilities in their development life cycle. [40]

Choice Questions

2. What are the essential elements of a vocational curriculum for people with disabilities? Use practical and relevant examples from your community to illustrate your answer. [30]

3. Explain why vocational assessment requires a cultural context evaluation. [30]

4. Critically analyse the collaborative model for rehabilitation consultants. [30]

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL521: THEORY AND PRACTICE OF LEADERSHIP

November 2014

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Discuss the merits and demerits of the GREAT MAN theories. [40]

Optional Questions: Answer any TWO

2. Evaluate the notion that what makes a leader good is not the style but the strategy in relation to political leadership. [30]

3. How far true is it that the pluralistic-dependency theory of power helps to build peace between the ruler and the ruled especially in Africa? [30]

4. To what extent should leadership be gendered? [30]

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FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ501: BUSINESS AND ITS ENVIRONMENT

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Distinguish between the internal and external environment of business and in each case, explain five components of the environment. [25]

2. Discuss the critical functions of the RBZ to the Zimbabwean economy. [25]

3. Foreign Direct Investment (FDI) is critical for sustainable economic development. Discuss some of the measures Zimbabwe can adopt to improve its investment climate. [25]

4. With specific reference to the SME sector in Zimbabwe, discuss giving examples, how a company's management can use Michael Porter's five forces competitive model to examine the industry's competitiveness. [25]

5. Outline some policy measures the government can adopt to promote employment creation in Zimbabwe. [25]

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THE UNIVERSITY OF ZAMBIA

MASTER OF BUSINESS ADMINISTRATION

MBAZ501: BUSINESS AND ITS ENVIRONMENT

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. The Central Bank of Zambia is one of the most important institutions to business in Zambia. Discuss the critical functions of the Central Bank to the Zambian economy. [25]

2. A good business environment is vital for economic development. Distinguish between internal and external environment of business and in each case explain five components of the environment. [25]

3. Unemployment has remained a major problem for most African economies. Outline some policy measures the government can adopt to promote employment creation in Zambia. [25]

4. It is essential for a company's management to understand the structure of the industry or industries in which it operates. Discuss how a company's management can use Michael Porter's five forces model to examine the industry's attractiveness. [25]

5. Foreign Direct Investment (FDI) is critical for sustainable economic development. Discuss some of the measures Zambia can adopt to improve its investment climate. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ502: ACCOUNTING FOR MANAGERS

February/March 2015

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

QUESTIONS

1. The following balances were extracted from the accounting of Masango Investments on 31 December 2012.

	$	$
Advertising	3 000	
Bank	400	
Capital		73 500
Cash	100	
Furniture at cost	12 000	
Motor vehicles at cost	35 000	
Accumulated depreciation		
Furniture		1 800
Motor vehicles		7 000
Discount	400	500
Drawings	10 000	
Electricity	3 200	
General expenses	28 900	
Interest on investments		800
Investment at cost	5 000	
Provision for doubtful debts		2 300
Purchases	645 000	
Purchases returns		2 000
Rates	6 000	
Sales		820 000
Sales returns	4 000	
Inventories 1 January 2012	47 500	
Telephone	1 300	
Accounts receivable	42 000	
Salaries and wages	77 600	
Accounts payable		13 500
	921 400	**921 400**

You are required to prepare the statement of comprehensive income for the period ending 31 December 2012 and a statement of financial position as at that date taking into account the following information:

(i) Inventories at 31 December 2012 is $50 000

(ii) The provision for doubtful debts should be adjusted to 5% of accounts receivable

(iii) Depreciation should be provided for as follows:

Furniture	15% on cost
Motor vehicles	20% reducing balance method

(iv) At 31 December 2010 accrued electricity amounted to $300 and rates prepaid amounted $1 000. [30]

2. (a) Briefly state and explain five benefits of budgeting. [10]

(b) Briefly state and explain five types of budgeting you know and explain how these budgets can be applied in an organisation you know. [10]

3. (a) Identify five users of financial statements and give two reasons for each why they need financial statements information. [15]

(b) What do you understand by liquidity? Give two examples of liquidity ratios that can be used to assess the liquidity in an organisation. [5]

4. (a) State and briefly explain four fundamental qualitative characteristics of useful financial information. [10]

(b) State and briefly explain any four accounting concepts which are used in the preparation of financial statements. [10]

5. State and briefly explain five factors which can be considered in making pricing decisions. [20]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ504: STATISTICS FOR MANAGERS

February/March 2015

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** Questions in Section A and any **THREE (3)** Questions from Section B.

All questions in Section B carry equal marks.

Show all workings and give answers to 4 decimal places where appropriate.

Graphs should be plotted on graph paper.

Candidates will be provided with Statistics List of Formulae, Statistical Tables and graph paper.

The use of silent and non-programmable calculators is permissible

SECTION A [COMPULSORY]: 40 MARKS

A1. (a) State three attributes of a good questionnaire. [3]

(b) Suggest four reasons for conducting a pilot survey before conducting the actual study. [4]

A2. The number of patients (visits per day) who visited a certain district hospital in a month are shown below:

48	20	68	42	54	41
24	34	51	50	42	35
29	39	45	25	32	49
12	24	50	60	48	42
37	58	62	43	18	32

(a) Generate a grouped frequency distribution using classes 10 to less than 20, 20 to less than 30, 30 to less than 40 etc until all observations have been accommodated. [5]

(b) Using the grouped frequency distribution of part (a), calculate the:

(i) Mean [3]

(ii) Median [3]

(iii) Standard deviation [5]

(c) Draw a less than ogive and use it to estimate the upper and lower quartiles. [5]

A3. A sales manager for a car assembly firm is studying the relationship between annual sales (S) and years of experience (Ex) of a sales person. He postulates a model of the form:

$$S = \beta_0 + \beta_1 Ex + e$$

(a) (i) Name the term 'e' in the model. [1]

(ii) Suggest three reasons for including the term 'e' in the model. [3]

(b) Suppose the following results were obtained:

β_0 = 800
β_1 = 40
r = 0,964564632
$1 \leq Ex \leq 13$

(i) Interpret the value of β_1 obtained. [2]

(ii) Write down the estimated regression equation and use it to estimate the annual sales for a salesperson with 9 years of experience. [3]

(iii) Find the coefficient of determination and interpret the result. [3]

SECTION B: ATTEMPT ANY THREE QUESTIONS. [60 MARKS]

B4. A certain medical researcher claimed that the mean birth weight for all male babies of mothers given a certain vitamin is 3.39kg. Sixteen expecting mothers were given a special vitamin supplement. On giving birth, the male baby weights (in kg) were recorded as indicated below:

3.73 4.37 3.73 4.33 3.39 3.68 4.68 3.52 3.02 4.09

2.47 4.13 4.07 3.22 3.43 2.54

(a) Calculate:

(i) The mean birth weight [3]

(ii) The sample standard deviation [4]

(b) Construct a 95% confidence interval for the mean birth weight of all male babies. [6]

(c) Test the researcher's claim at 5% level of significance. [7]

B5. A bank teller with a commercial bank wants to determine whether deposits of current account holders are normally distributed with a mean of $7 600 and standard deviation of $1 400 or not. He has collected the following data:

Range of deposits	Number of observed clients
Less than $7 000	30
$7 000 - $8 000	65
More than $8 000	25

Does the data provide enough evidence at 1% level of significance that the deposits follow a normal distribution with mean $7 600 and standard deviation $1 400? [20]

(a) (i) Name the term 'e' in the model. [1]

(ii) Suggest three reasons for including the term 'e' in the model. [3]

(b) Suppose the following results were obtained:

β_0 = 800
β_1 = 40
r = 0,964564632
$1 \leq Ex \leq 13$

(i) Interpret the value of β_1 obtained. [2]

(ii) Write down the estimated regression equation and use it to estimate the annual sales for a salesperson with 9 years of experience. [3]

(iii) Find the coefficient of determination and interpret the result. [3]

B6. (a) (i) Distinguish between the seasonal and cyclical components of a time series with the aid of suitable diagrams. [4]

(ii) Why is it important to study cyclical movements in business and economic data? [2]

(b) The number of visitors to a national resort, from June 1997 to May 1998 is given below:

June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
450	410	460	655	1031	1722	1820	1784	1521	979	532	526

(i) Plot this time series and comment. [5]

(ii) Does it show a seasonal or cyclical component? [1]

(iii) Fit a linear trend function to this series. [6]

(iv) Forecast the number of visitors for June 1999. [2]

B7. (a) (i) State the two main types of non-parametric statistical procedures. [2]

(ii) What are the advantages of non-parametric procedures over their parametric counterparts? [4]

(b) A company buys three products with the following characteristics:

Products	**No. of units bought**		**Price paid per unit ($)**	
	2010	**2011**	**2010**	**2011**
A	120	140	9	10
B	150	165	21	23
C	175	180	26	27

Using 2010 as the base year, calculate:

(i) Simple quantity index for product C and interpret it. [3]

(ii) Fisher Ideal price index and interpret it. [7]

(c) The Zambia Consumer Association (ZACA) makes use of index numbers. Explain two problems that ZACA is likely to encounter when constructing these index numbers. [4]

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MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. "Intelligence is how well a person deals with the environmental changes". Discuss this view citing relevant counselling examples. [40]

Choice Questions

2. Justify the relevance of personality tests in educational and counselling settings. [30]

3. Discuss the contribution of Sternberg towards information processing. [30]

4. Examine the qualities of a reliable assessment in psychometrics. [30]

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THE UNIVERSITY OF ZAMBIA

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL501: CONFLICT ANALYSIS AND TRANSFORMATION

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Using the force field conflict analysis tool for Zimbabwe or Kenya, develop a case study of your choice highlighting the following issues:

   (a) History and context of the conflict
   (b) Conflict issues
   (c) Actors involved in the conflict
   (d) Intervention strategies used to resolve the conflict [40]

Optional Questions: Answer any TWO

2. With reference to a particular case situation discuss the extent to which conflict can be potentially beneficial. [30]

3. The African Peace and Security Council has achieved nothing since its formation. How far true is this statement? [30]

4. With reference to two case studies of your choice discuss in one case where negotiation was used and the other where mediation was effectively used to resolve the conflict. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL502: PSYCHOLOGY OF PEACE AND CONFLICT MANAGEMENT

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. For many years, researchers, activists and survivors have struggled with the dynamics underlying intimate violence. Evaluate the approaches and contribution of psychology to our understanding of intimate violence. [40]

Optional Questions: Answer any TWO questions

2. In many studies of peace, children's conceptions of peace are overlooked. With reference to any psychological theory of human development, discuss how this theory can help us understand children's notions of peace. [30]

3. Post-war reconstruction entails interrelated tasks of economic, political and social reconstruction (Ball, 1997). Discuss the need for and the role that psychosocial interventions can play in a post conflict situation. [30]

4. With reference to examples, discuss the strengths and limitations of any approach to negotiation. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL503: PEACE, GENDER AND CONFLICT RESOLUTION

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Discuss Human Trafficking and its impact on Human Development and Gender. [40]

Optional Questions: Answer any TWO

2. With reference to four examples of your choice, discuss how you would mainstream gender in peace building processes. [30]

3. Citing specific examples discuss why gender is an essential issue in peace and conflict studies. [30]

4. How useful are post-conflict rituals? With the use of relevant examples from your community argue for and against. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Citing relevant examples, discuss the relationship between conflict and development. [40]

Optional Questions: Answer any TWO questions

2. In general, natural resources promote conflicts through three mechanisms. Discuss. [30]

3. While it is generally accepted that humanitarian international non-governmental organisations (HINGOs) are doing good work in African conflicts, there are many instances where their relief efforts have produced unintended and even counter-productive consequences. Comment on this statement. [30]

4. Development is most likely where there is high participation and involvement of members of the community. Discuss. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL521: THEORY AND PRACTICE OF LEADERSHIP

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. To what extent do you agree with the notion that 'African leaders are known for signing without implementing'? [40]

Optional Questions: Answer any TWO

2. 'Political leaders derive power from the office not the electorate'. Discuss citing relevant examples. [30]

3. Evaluate the notion that 'negative memories of aborted agreements, unkept promises, attacks on characters of leaders, are all serious obstacles for conflict resolution'. [30]

4. Citing relevant examples, critique the role of leadership and followers in post-conflict governance programming in any country of your choice. [30]

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FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ502: ACCOUNTING FOR MANAGERS

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

1. (a) Define standard costing. [1]

(b) Give the five uses of standards and standard costing. [5]

(c) Give the seven advantages of standard costing. [7]

(d) You are presented with the following information for Manonga Ltd:

Standard price per unit	$10
Standard quantity for actual production	5 units
Actual price per unit	$12
Actual quantity	6 units

Required

Calculate the following variances:

(i) Direct material cost variance
(ii) Direct material price variance
(iii) Direct material usage variance [6]

(e) The following information relates to Tikwiri Limited

Actual hours	1 000
Actual wage rate per hour	$6.50
Standard hours for actual production	900
Standard wage rate per hour	$6.00

Required

Calculate the following variances:

(i) Direct labour cost
(ii) Direct labour rate
(iii) Direct labour efficiency [6]

2. You are to study the following financial statements for two similar types of retail store.

	A		B	
STATEMENT OF COMPREHENSIVE INCOME				
Sales		80 000		120 000
less Cost of Sales				
Opening stock	25 000		22 500	
Purchases	50 000		91 000	
	75 000		113 500	
Closing stock	15 000	60 000	17 500	96 000
Gross profit		20 000		24 000
less depreciation	1 000		3 000	
other expenses	9 000	10 000	6 000	9 000
		10 000		**15 000**
STATEMENT OF FINANCIAL POSITION				
Fixed Assets				
Equipment at cost	10 000		20 000	
less depreciation	8 000	2 000	6 000	14 000
Current Assets				15 000
Stock	15 000		17 500	
Debtors	25 000		20 000	
Bank	5 000		2 500	
	45 000		40 000	
less Current Liabilities				
Creditors	5 000	40 000	10 000	30 000
		42 000		**44 000**
Financed by				
Capital		38 000		36 000
Net profit		10 000		15 000
Drawings		(6 000)		(7 000)
		42 000		**44 000**

Required

(a) Calculate the following ratios:

(i) Gross profit as a percentage of sales
(ii) Net profit as a percentage of sales
(iii) Expenses as a percentage of sales
(iv) Stock-turn
(v) Rate or return on capital employed (use average of the capital account for this purpose)
(vi) Current ratio

(vii) Acid test ratio
(viii) Debtor/sales ratio
(ix) Creditor purchases ratio [18]

(b) Comment upon the differences and similarities of the accounting ratios for A and B. [9]

(c) Which business seems to be the most efficient and why? [3]

3. The following information is available:

Sales	$10 000
Variable costs	$6 000
Margin of safety ratio	50%
Profit margin	$2 000
Number of units	1 000

Required

Calculate the following with the aid of algebraic calculations:

(a) Marginal income
(b) Marginal income ratio
(c) Fixed costs
(d) Break-even point in value and in quantity
(e) Safety margin [12]

(f) List the six assumptions of break-even analysis. [6]

4. You are to draw up a statement of comprehensive income for the year ended 31 December 2013 and a statement of financial position as at that date from the following trial balance and details of Mukanya Ltd.

	Dr ($000)	Cr ($000)
Bank	6 723	
Debtors	18 910	
Creditors		12 304
Stock at 31.12.12	40 360	
Buildings at cost	100 000	
Equipment at cost	45 000	
Profit and Loss A/C 31.12.12		15 286
General reserve		8 000
Foreign exchange reserve		4 200
Authorized and Issued Share Capital		100 000
Purchases	72 360	
Sales		135 486
Carriage Inwards	1 570	
Carriage Outwards	1 390	
Salaries	18 310	
Rates and Occupancy Expenses	4 235	
Office expenses	3 022	
Sundry expenses	1 896	
Provision for depreciation at 31.12.12		
Buildings		32 000
Equipment		16 000
Director's remuneration	9 500	
	323 276	**323 276**

Notes

- Stock at 31.12.13 $52 360
- Rates owing $280; office expenses owing $190
- Dividend of 10% proposed
- Transfers to reserves – general $1 000
  Foreign exchange $800
- Depreciation on cost – Buildings 5%
  Equipment 20%

[27]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ503: MANAGEMENT AND ORGANISATIONAL BEHAVIOUR

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Discuss the range of talks and roles performed by a manager in a service organisation. Cite suitable examples. [25]

2. What is the role and importance of communication in an organisation? Explain the different barriers to effective communication. [25]

3. Define organisational conflict. Explain the various sources of conflict with suitable illustrations. [25]

4. What are the various determinants of organisational culture? How does leadership influence the culture of an organisation? [25]

5. What is "control" in context to an organisation? Explain the characteristics of an effective control system. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ503: MANAGEMENT AND ORGANISATIONAL BEHAVIOUR

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Frederick Taylor has contributed a lot to the development of management even in contemporary times. Discuss one of his evolution theories to management giving its relevance to an organisation of your choice. [25]

2. "Failing to plan is planning to fail". Discuss this statement fully, giving practical examples to support your argument(s). [25]

3. "A leader is born and not made". Critique this statement giving examples of any two contemporary theories to leadership to consolidate your views. [25]

4. "Money is not the only motivator". Discuss this statement fully citing three motivational theories. [25]

5. Write brief notes on:

   (a) Matrix structure [6]

   (b) Resistance to change [6]

   (c) Control system [6]

   (d) Strategic management process [7]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ504: STATISTICS FOR MANAGERS

February/March 2015

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** Questions in Section A and any **THREE (3)** Questions from Section B.

All questions in Section B carry equal marks.

Show all workings and give answers to 4 decimal places where appropriate.

Graphs should be plotted on graph paper.

Candidates will be provided with Statistics List of Formulae, Statistical Tables and graph paper.

The use of silent and non-programmable calculators is permissible

SECTION A [COMPULSORY]: 40 MARKS

A1. (a) State three attributes of a good questionnaire. [3]

(b) Suggest four reasons for conducting a pilot survey before conducting the actual study. [4]

A2. The number of patients (visits per day) who visited a certain district hospital in a month are shown below:

48	20	68	42	54	41
24	34	51	50	42	35
29	39	45	25	32	49
12	24	50	60	48	42
37	58	62	43	18	32

(a) Generate a grouped frequency distribution using classes 10 to less than 20, 20 to less than 30, 30 to less than 40 etc until all observations have been accommodated. [5]

(b) Using the grouped frequency distribution of part (a), calculate the:

(i) Mean [3]

(ii) Median [3]

(iii) Standard deviation [5]

(c) Draw a less than ogive and use it to estimate the upper and lower quartiles. [5]

A3. A sales manager for a car assembly firm is studying the relationship between annual sales (S) and years of experience (Ex) of a sales person. He postulates a model of the form:

$$S = \beta_0 + \beta_1 Ex + e$$

(a) (i) Name the term 'e' in the model. [1]

(ii) Suggest three reasons for including the term 'e' in the model. [3]

(b) Suppose the following results were obtained:

β_0 = 800
β_1 = 40
r = 0,964564632
$1 \leq Ex \leq 13$

(i) Interpret the value of β_1 obtained. [2]

(ii) Write down the estimated regression equation and use it to estimate the annual sales for a salesperson with 9 years of experience. [3]

(iii) Find the coefficient of determination and interpret the result. [3]

SECTION B: ATTEMPT ANY THREE QUESTIONS. [60 MARKS]

B4. A certain medical researcher claimed that the mean birth weight for all male babies of mothers given a certain vitamin is 3.39kg. Sixteen expecting mothers were given a special vitamin supplement. On giving birth, the male baby weights (in kg) were recorded as indicated below:

3.73 4.37 3.73 4.33 3.39 3.68 4.68 3.52 3.02 4.09

2.47 4.13 4.07 3.22 3.43 2.54

(a) Calculate:

(i) The mean birth weight [3]

(ii) The sample standard deviation [4]

(b) Construct a 95% confidence interval for the mean birth weight of all male babies. [6]

(c) Test the researcher's claim at 5% level of significance. [7]

B5. A bank teller with a commercial bank wants to determine whether deposits of current account holders are normally distributed with a mean of $7 600 and standard deviation of $1 400 or not. He has collected the following data:

Range of deposits	Number of observed clients
Less than $7 000	30
$7 000 - $8 000	65
More than $8 000	25

Does the data provide enough evidence at 1% level of significance that the deposits follow a normal distribution with mean $7 600 and standard deviation $1 400? [20]

B6. (a) (i) Distinguish between the seasonal and cyclical components of a time series with the aid of suitable diagrams. [4]

(ii) Why is it important to study cyclical movements in business and economic data? [2]

(b) The number of visitors to a national resort, from June 1997 to May 1998 is given below:

June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
450	410	460	655	1031	1722	1820	1784	1521	979	532	526

(i) Plot this time series and comment. [5]

(ii) Does it show a seasonal or cyclical component? [1]

(iii) Fit a linear trend function to this series. [6]

(iv) Forecast the number of visitors for June 1999. [2]

B7. (a) (i) State the two main types of non-parametric statistical procedures. [2]

(ii) What are the advantages of non-parametric procedures over their parametric counterparts? [4]

(b) A company buys three products with the following characteristics:

Products	**No. of units bought**		**Price paid per unit ($)**	
	2010	**2011**	**2010**	**2011**
A	120	140	9	10
B	150	165	21	23
C	175	180	26	27

Using 2010 as the base year, calculate:

(i) Simple quantity index for product C and interpret it. [3]

(ii) Fisher Ideal price index and interpret it. [7]

(c) The Zambia Consumer Association (ZACA) makes use of index numbers. Explain two problems that ZACA is likely to encounter when constructing these index numbers. [4]

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FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ504: STATISTICS FOR MANAGERS

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** questions in Section A and any **THREE (3)** questions from Section B.

All questions in Section B carry equal marks.

Show all workings and give answers to 4 decimal places where appropriate.

Graphs should be plotted on graph paper.

Candidates will be provided with Statistics List of Formulae, Statistical Tables and graph paper.

The use of silent and non-programmable calculators is permissible

SECTION A [COMPULSORY]: 40 MARKS
Answer all questions in this section being careful to number them A1 to A3.

Question A1

(a) Sampling plays a pivotal role in data collection procedures.

(i) Suggest two reasons for sampling. [2]

(ii) Describe how a bank can randomly select 20 accounts from 1000 accounts using systematic random sampling [5]

(iii) Why is systematic random sampling often regarded as a quasi-random sampling method? [2]

(b) Suggest five reasons for carrying out a pilot survey before the actual survey. [5]

Question A2

The projected monthly rates of return for a risky asset for the last quarter of the year 2014 are tabulated below:

Return (%)	8	12	10	6
Probability	0.3	0.4	0.2	0.1

(a) What is the most probable monthly rate of return? Justify your answer. [2]

(b) Calculate the

i. expected monthly rate of return. [3]

ii. standard deviation of monthly returns. [6]

Question A3

The following data give prices and quantities of three products bought by a household in the years 2011 and 2012.

Product	2011		2012	
	Price	Quantity	Price	Quantity
A	25	40	37	78
B	27	31	42	70
C	30	24	50	39

a) Using 2011 as the base year and interpreting your results, find the:

(i) Laspeyre's Price Index, [4]
(ii) Paashe Price Index, and [4]
(iii) Fisher's Ideal Price Index. [4]

b) State any three problems encountered in the construction of index numbers. [3]

Section B (60 marks). Answer any three questions from this section. Each question carries 20 marks.

Question B4

(a) A new drug for a rare disease is known to be effective in 70% of the cases treated. Six patients suffering from the disease are to be treated.

Find the probability that:

i. 4 patients will be successfully treated. [3]

ii. at least 2 patients will be successfully treated. [4]

(b) The monthly commission earned by a random sample of 20 salespersons employed in the funeral insurance industry are presented in the table below:

Commission/($00)	Number of employees
20 to less than 30	2
30 to less than 40	4
40 to less than 50	8
50 to less than 60	5
60 to less than 70	1

(i) Calculate the mean and standard deviation of the monthly commission. [7]

(ii) Construct a less than ogive of the data and use it to estimate the proportion of employees earning a commission of $5 000 or less per month. [6]

Question B5

(a) A random sample of 10 cigarettes of a certain type has an average nicotine content of 15 milligrams and a standard deviation of 2.5 milligrams. Construct a 99% confidence interval for the true average nicotine content of all the cigarettes. [8]

(b) A non-governmental organisation is carrying out a study to compare the standard of living in Zambia and in Zimbabwe. A random sample of 1 500 Zambian families gave a mean family income of $8 050 with a standard deviation of $210 while a random sample of 1800 Zimbabwean families gave a mean family income of $11 500 with a standard deviation of $1000. Test at 5 % whether the standard of living in Zimbabwe is significantly different from that in Zambia. [12]

Question B6

(a) The scatter plot shown in Figure 1 below shows the relationship between a manufacturer's market share (measured as a percentage) and the quality of his product (measured on a scale of 0 to 100).

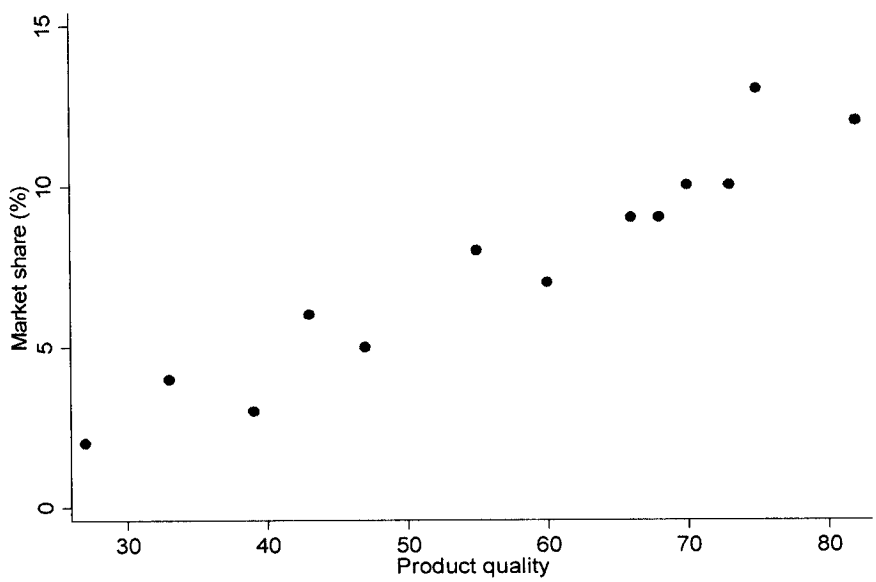

Figure 1: Scatter plot

i. Use the scatter plot to comment on the relationship between market share and product quality. [3]

ii. A regression of market share on product quality gave a correlation coefficient (r) of 0.960052081. Find the coefficient of determination and explain its meaning. [5]

(b) In a survey of drug abuse at the workplace, workers at a gold mine answered to the questions: (1) 'Do you smoke dagga?' (2) 'Do you drink alcohol?' as shown in the table below:

	Question 1	
Question2	Yes	No
Yes	56	30
No	18	6

Test at 5% level of significance whether drinking alcohol is associated with smoking dagga? [12]

Question B7

(a) The prices of a certain model of cell phone are normally distributed with mean $150 and standard deviation $10. Out of 1000 such cell phones, how many are expected to cost between $120 and $200. [6]

(b) The following data show annual gross domestic investment (GDI) in millions of dollars for a certain country.

Year	1	2	3	4	5	6	7	8	9	10
GDI(million)	4	6	4	7	5	9	11	13	10	16

i) Calculate the three – point moving average. [4]

ii) On the same axes, plot the original annual gross domestic investment series and the three point moving average series. [8]

iii) Brief comment on the trend of GDI over the years. [2]

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FACULTY OF COMMERCE AND LAW

MASTER OF BUSINESS ADMINISTRATION

MBAZ514: APPLIED HUMAN RESOURCE MANAGEMENT

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in the Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Discuss and evaluate the evidence suggesting that Human Resources Management (HRM) practices should be designed to fit the business strategy and strategic objectives of an organisation. [25]

2. One of the functions of HRM is human resource planning.

   (a) Briefly describe the human resource planning process. [10]

   (b) Critically discuss its importance to the human resource management functions and business functions in an organisation. [15]

3. What gets measured gets done.

   (a) How can a human resource manager monitor and assess the performance of employees? [15]

   (b) What can be done to ensure that these activities are effective? [10]

4. Career development is one of the most neglected area of human resource practice.

   (a) Based on the culture of Zimbabwean organisations, identify some of the major reasons why career development is not given the prominence it deserves. [15]

   (b) What can you propose to improve the situation? [10]

5. (a) Distinguish between employee "involvement" and "participation". [10]

   (b) Outline some of the reasons for implementing employee involvement and participation schemes in organisations. [15]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ507: MANAGEMENT INFORMATION SYSTEMS

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

1. A traditional file environment can create a number of problems for any organisation. Discuss any five problems that can be caused by this file approach. [25]

2. (a) Explain the differences between Decision Support Systems and Executive Support Systems. [10]

   (b) Describe, giving examples, any two functional information systems that can be used by organisations. [15]

3. You are requested by your managing director to solve systems problems in your organisation. Discuss the stages you would follow in coming up with a new computerised system. [25]

4. E-Commerce has brought a number of economic benefits to the modern world. Explain by using practical example, how the economies have benefited. [25]

5. (a) Besides bringing advantages to the organisations, computers have brought in a number of problems. Discuss any two challenges that have occurred as a result of using computers. [10]

   (b) As a manager responsible for implementing projects, describe how would you manage project risk. [15]

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC501: MULTICULTURAL COUNSELLING

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the counselling situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify the relevance of assessment in multicultural counselling. What are the implications to the counselling profession? [40]

Choice Questions

2. Analyse the assertion that 'multicultural perspective calls for complementing theories for application to culturally different populations'. [30]

3. Discuss the applicability of Bowlby's attachment theory in multicultural counselling. [30]

4. To what extent can a counsellor effectively establish therapeutic relationships with clients in multicultural counselling sessions? [30]

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DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC502: ADVANCED RESEARCH METHODS AND STATISTICS

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Section A: Compulsory

1. In a study of the factors that altered scores in a calculus course, data were collected for 10 different people. Scores on an algebra placement test are given along with calculus achievement scores.

Algebra	17	21	11	16	15	11	24	17	19	8
Calculus	73	66	64	61	70	71	90	68	84	52

(a) Plot a scatter diagram for the data. [5]

(b) What type of relationship is depicted by the plot? [2]

(c) Calculate Spearmen's correlation coefficient. [15]

(d) Calculate Pearson's correlation coefficient. [15]

(e) Comment on the result (c) and (d). [3]

Section B: Answer any TWO questions

2. Compare and contrast an ethnographic design and a case study design. [30]

3. Justify the rationale behind undertaking experiments in Social Sciences. [30]

4. Examine the aspects to consider when reviewing literature. [30]

LIST OF FORMULAE

1. Arithmetic Mean Ungrouped data

$$x = \frac{\sum x_i}{n}$$

2. Arithmetic mean Grouped data

$$x = \frac{\sum f_i x_i}{n}$$

3. Mode Grouped Data

$$M_0 = O_{mo} + \frac{c\,(f_m - f_{m-1})}{2f_m - f_{m-1} - f_{m+1}}$$

4. Median Grouped Data

$$M_e = O_{me} + \frac{c\,[\frac{n}{2} - f(<)]}{f_m}$$

5. Range for Ungrouped data $= x_{max} - x_{min}$

6. Range for Grouped data

Upper limit (highest class) – Lower Limit (lowest class)

7. Pearson's Correlation Coefficient

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2] \times [n\sum y^2 - (\sum y)^2]}}$$

8. Spearman's rank correlation coefficient

$$R = 1 - \frac{6 \times \sum d^2}{n(n^2 - 1)}$$

9. Variance $S_x^2 = \frac{\sum f(x - \bar{x})^2}{(n-1)}$

10. Standard deviation $S_x = \sqrt{S^2_x}$

11. Standard deviation $SD = \sqrt{\sum x^2 - \frac{(\sum x)^2}{n}}{N}$

12. Z-score $= \frac{x - \bar{x}}{sd}$

13. Pearson' measure of skewness $= \frac{3(\text{mean} - \text{median})}{\text{Standard deviation}}$

OR

14. Pearson's measure of skewness $= \frac{\text{mean} - \text{mode}}{\text{Standard deviation}}$

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MASTER OF SCIENCE IN COUNSELLING

MSCC501: MULTICULTURAL COUNSELLING

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss factors for consideration into the effective therapeutic assessment of multicultural issues. [40]

Choice Questions

2. How can a counsellor effectively use group counselling with clients from various cultural backgrounds. [30]

3. "Communication is vital on the counselling process". Analyze the functions of non-verbal cues during a counselling process. [30]

4. Justify the significance of family therapy to an individual's challenges. What multicultural issues should be considered? [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC502: ADVANCED RESEARCH METHODS AND STATISTICS

February/March 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Four samples have the following

Sample	1:	8	13	9	12	7	9	11	14
Sample	2:	15	16	14	17	8	9	11	
Sample	3:	13	7	19	5	8	9	11	12
Sample	4:	11	16	16	14	21	17	18	22

(a) Construct the ANOVA table. [30]

(b) Test the hypothesis at 0,05 level of significance that there are no differences among treatment means. [10]

Choice Questions

2. Objectives and Goals are important in research work. To what extent is this assertion true in the area of counselling? Support your answer with relevant examples. [30]

3. Why is the knowledge of statistics important in the counselling field? [30]

4. Justify the importance of research studies in the counselling field. [30]

LIST OF FORMULAE

1. Arithmetic Mean Ungrouped data

$$x = \frac{\sum x_i}{n}$$

2. Arithmetic mean Grouped data

$$x = \frac{\sum f_i x_i}{n}$$

3. Mode Grouped Data

$$M_0 = O_{mo} + \frac{c\,(f_m - f_{m-1})}{2f_m - f_{m-1} - f_{m+1}}$$

4. Median Grouped Data

$$M_e = O_{me} + \frac{c\,[\frac{n}{2} - f\,(<)]}{f_m}$$

5. Range for Ungrouped data $= x_{max} - x_{min}$

6. Range for Grouped data

   Upper limit (highest class) – Lower Limit (lowest class)

7. Pearson's Correlation Coefficient

$$r = \frac{n\sum xy - (\sum x)\,(\sum y)}{\sqrt{[\,n\sum x^2 - (\sum x)^2]\;x\;[n\sum y^2 - (\sum y)^2\,]}}$$

8. Spearman's rank correlation coefficient

$$R = 1 - \frac{6 \times \sum d^2}{n\,(n^2 - 1)}$$

9. Variance $S^2_x = \frac{\sum f(x - \overline{x})^2}{(n-1)}$

10. Standard deviation $S_x = \sqrt{S^2_x}$

11. Standard deviation $SD = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{N}}$

12. Z-score $= \frac{x - \bar{x}}{sd}$

13. Pearson' measure of skewness $= \frac{3(\text{mean} - \text{median})}{\text{Standard deviation}}$

OR

14. Pearson's measure of skewness $= \frac{\text{mean} - \text{mode}}{\text{Standard deviation}}$

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from counselling situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss the accuracy of performance-based assessment. [40]

Choice Questions

2. 'The study of the Myers-Briggs Type Indicator (MBTI) is not important for counsellors.' Discuss. [30]

3. Examine the characteristics of an acceptable standardised assessment test. [30]

4. An assessee who is brilliant during the formative assessment may not do well for the summative assessment. Support this view with relevant examples. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. "Intelligence is how well a person deals with the environmental changes". Discuss this view citing relevant counselling examples. [40]

Choice Questions

2. Justify the relevance of personality tests in educational and counselling settings. [30]

3. Discuss the contribution of Sternberg towards information processing. [30]

4. Examine the qualities of a reliable assessment in psychometrics. [30]

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DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC504: GENDER ISSUES IN COUNSELLING

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the counselling situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. 'Women have demonstrated their ability in implementing management concepts in agro based activities'. Discuss. [40]

Choice Questions

2. Discuss the gaps that may impede gender equality when you only consider women involvement in gender issues. [30]

3. Assess the applicability of any gender theory in a society of your choice. [30]

4. Giving practical examples, discuss how counselling can help defuse the observed traditional gender inequalities. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC508: PHILOSOPHY, MORALS AND ETHICS IN COUNSELLING

September 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Analyse how moral and political philosophy contribute to counselling. [40]

Choice Questions

2. With practical illustrations, examine the concept of philosophical counselling. [30]

3. Analyse the three main issues in the study of values (axiology) with practical examples. [30]

4. Discuss with counselling examples the nature of orderly thinking. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC508: PHILOSOPHY, MORALS AND ETHICS IN COUNSELLING

October/November 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Analyse the applicability of ethics in the counselling field. [40]

Choice Questions

2. Discuss the similarity between philosophical counselling and psychotherapy. [30]

3. Justify the need to consider philosophy, morals and ethics in counselling. [30]

4. Examine the relevance of philosophy to the counselling field. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC512: ABNORMAL PSYCHOLOGY IN COUNSELLING

October/November 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss the contribution of the cognitive paradigm to psychopathology. [40]

Choice Questions

2. Assess the appropriateness of assessment to psychopathological counselling. [30]

3. Justify the importance of ancient perspectives on abnormal psychology and their contributions to counselling. [30]

4. Examine the dangers associated with relying on a single assessment tool. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC520: EDUCATION AND EMPLOYMENT COUNSELLING

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Critically discuss how education assists in the management of persons with disabilities. Support your answer with relevant examples in the Zambian context. [40]

Choice Questions

2. Examine the rights of people with disabilities to employment in the context of equalization of opportunities at the workplace. Illustrate your answer with relevant examples. [30]

3. "Rehabilitation counsellors should take into consideration aspects of social and spiritual attachments when assessing people with disabilities". Discuss. [30]

4. What assets do individuals with disabilities prevent to the learning situation? Give relevant examples. [30]

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MASTER OF SCIENCE IN COUNSELLING

MSCC520: EDUCATION AND EMPLOYMENT COUNSELLING

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the counselling situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. 'Educational inclusion is clearly a control pillar to the commitment of equality of opportunities'. Discuss. [40]

Choice Questions

2. Outline the usefulness of counselling to persons with disability self management. [30]

3. Analyse the period of extreme stress that parents of children with disabilities are likely to experience. What intervention strategies would you employ as a counsellor? [30]

4. Discuss why women still face discrimination at the work place. [30]

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IN COLLABORATION WITH

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL501: CONFLICT ANALYSIS AND TRANSFORMATION

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Using the force field conflict analysis tool for Zimbabwe or Kenya, develop a case study of your choice highlighting the following issues:

   (a) History and context of the conflict
   (b) Conflict issues
   (c) Actors involved in the conflict
   (d) Intervention strategies used to resolve the conflict [40]

Optional Questions: Answer any TWO

2. With reference to a particular case situation discuss the extent to which conflict can be potentially beneficial. [30]

3. The African Peace and Security Council has achieved nothing since its formation. How far true is this statement? [30]

4. With reference to two case studies of your choice discuss in one case where negotiation was used and the other where mediation was effectively used to resolve the conflict. [30]

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL501: CONFLICT ANALYSIS AND TRANSFORMATION

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one** and **any other two** questions.

Credit will be given for answers that are clear, concise and coherent.

Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Examine the stages of conflict according to Fisher and explain how best conflict can be managed at each stage. [40]

Optional Questions: Answer any TWO

2. Closely examine the conflict tree as a conflict analysis tool being used in the African context. [30]

3. 'Conflict in Africa is closely linked to colonialism'. Discuss this assertion. [30]

4. Discuss the impact of donor aid in the resolution of conflicts in Africa. [30]

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DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL502: PSYCHOLOGY OF PEACE AND CONFLICT MANAGEMENT

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. "In Psychology we have several concepts that are applicable to the understanding of human behaviour which are relevant to peace and conflict studies". Discuss these concepts. [40]

Optional Questions: Answer any TWO questions

2. Discuss the link between group dynamics and terrorism. [30]

3. By relating to peace, leadership, governance and conflict resolution issues, discuss the different forms of prejudice and discrimination. [30]

4. Citing at least three examples, critically analyse the applicability of the different negotiating strategies to different conflict situations. [30]

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DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL503: PEACE, GENDER AND CONFLICT RESOLUTION

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Social scientists have come to realise that conflicts are the major hindrance to development in most countries.

   Analyse the above statement in relation to:

   (a) Human development
   (b) Human rights
   (c) Gender equality
   (d) Social justice [40]

Optional Questions: Answer any TWO

2. The Canadian International Development Agency Policy on Gender highlights that gender equality does not mean that men and women become the same, but that their opportunities and life chances are equal.

   Discuss the above in relation to:

   (a) Social
   (b) Economic
   (c) Cultural
   (d) Ethnicity
   (e) Disability [30]

3. Patriarchy in African societies has affected the development of women so much so that structural violence emerged. Discuss. [30]

4. Lederach (1997) talked of tools which are important for reconciliation to be attained. Discuss using specific examples the following tools:

   (a) Truth
   (b) Mercy
   (c) Justice
   (d) Peace [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Citing relevant examples, discuss the relationship between conflict and development. [40]

Optional Questions: Answer any TWO questions

2. In general, natural resources promote conflicts through three mechanisms. Discuss. [30]

3. While it is generally accepted that humanitarian international non-governmental organisations (HINGOs) are doing good work in African conflicts, there are many instances where their relief efforts have produced unintended and even counter-productive consequences. Comment on this statement. [30]

4. Development is most likely where there is high participation and involvement of members of the community. Discuss. [30]

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DEPARTMENT OF PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL512: CONFLICT AND DEVELOPMENT

May 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL521: THEORY AND PRACTICE OF LEADERSHIP

February/March 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. To what extent do you agree with the notion that 'African leaders are known for signing without implementing'? [40]

Optional Questions: Answer any TWO

2. 'Political leaders derive power from the office not the electorate'. Discuss citing relevant examples. [30]

3. Evaluate the notion that 'negative memories of aborted agreements, unkept promises, attacks on characters of leaders, are all serious obstacles for conflict resolution'. [30]

4. Citing relevant examples, critique the role of leadership and followers in post-conflict governance programming in any country of your choice. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL521: THEORY AND PRACTICE OF LEADERSHIP

May 2015

Time: 3 Hours

INSTRUCTIONS

Answer **question one** and **any other two** questions.

Credit will be given for answers that are clear, concise and coherent.

Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. "African leaders are autocratic". Discuss this statement. [40]

Optional Questions: Answer any TWO

2. Citing relevant examples, discuss the evolution of political leadership in Africa. [30]

3. "Leadership should be gendered". Discuss. [30]

4. "The Government of National Unity (GNU) that was formed in Zimbabwe after the signing of the Global Political Agreement on 15 September 2008 was a total failure". Discuss this assertion. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL522: COMPARATIVE LEADERSHIP AND GOVERNANCE IN AFRICA

September 2015

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. You are an officer recently employed by the African Union (AU). The Chairperson of the AU Commission has tasked you to examine the effects of the democratisation process in two African regions of your choice since 2000. Examine the democratic leadership styles that emerged and explain the extent to which they have managed to bring about an enabling democratic environment. [40]

Optional Questions: Answer any TWO questions

2. Why have liberation movements remained stuck in the ideological framework of resistance in most African countries? [30]

3. 'Unless durable reforms are instituted by the political leadership, to prevent various armed factions from interfering in the political processes, the possibility of renewed conflict would continue to loom in the African continent'. Is this statement true? [30]

4. Do you think that African governments can conform to the practices that promote and advance constitutionalism? If so how? If not why? [30]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ506: TAX PLANNING

July 2016

Time: 3 Hours

INSTRUCTIONS
Answer **ALL FOUR** Questions
Each question should start on a fresh answer sheet.
Tax tables are attached.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. (a) Simon died on 28 December 2000. At the date of his death Simon owned:

   (i) House worth $1 000 000

   (ii) 100 000 shares worth $300 000

   (iii) Four paintings worth $100 000

   (iv) A loan of $25 000 owed by an uncle

   (v) Bank deposits of $70 000

   (vi) A motor car worth $250 000

   At the date of his death, Simon owed $4 500 000 on mortgage for the family home, $8 000 for gambling debts, his funeral amounted to $11 000. All of Simon's estate was left to his minor daughter, Shekede.

   Calculate the dutiable amount. [15]

   (b) State the estate planning options. [10]

2. (a) Define the following terms:

   (i) Tax planning [2]

   (ii) Tax avoidance [3]

   (iii) Capital Redemption Allowance [5]

   (iv) Tax evasion [5]

   (b) List 5 examples of offences of tax evasion where penalties are imposed. [10]

3. Mr Chikochiya has just been resettled in the Uzumba-Marambafunde farming area. He commenced livestock farming. He submitted the accounts supporting his return for income for the year ended 31st December 2015. He also returned the following information:

In respect of his livestock farming activities, the following purchases were made during the year of assessment:

Beast	**Cost $**	**Suggested Fixed Standard Values (FSV) $**
1 stud bull	4 500	-
100 cows	7 700	400
50 heifers	6 600	350
50 tollies	5 500	300
100 oxen	6 000	300
50 calves	5 000	150
351	34 700	

There were 60 births during the year, 4 deaths (2 tollies and 2 cows). Sales of 80 beasts (30 tollies and 50 oxen) yielded $575 000. Expenses for maintaining head $115 000. 30 calves turned to tollies and the same number to heifers.

Required

(a) Prepare the Livestock Reconciliation Account relating to Mr Chikochiya. [10]

(b) Determine the taxable income. [15]

4. (a) Write down the test used to determine whether an expenses is allowable or not as contained in Section 15 (2) (a). [5]

(b) Mrs Svosvayi has worked for a licensed investor for the past 2 years. The following accrued to her from her employer:

	$
Salary	350 000
Use of Benz engine capacity 3 500cc	
Cash allowance	15 000
Interest free loan	200 000
Cost of holiday	300 000

She contributes $50 000 to an approved pension fund. Determine her taxable income for:

(i) 2014
(ii) 2015 [20]

TAX TABLES

1. (a) Individual Rates of Tax

January – December 2014 (Annual)

Band US$	Rate of Tax %
Up to 3 000	0
3 001 – 12 000	20
12 001 – 24 000	25
24 001 – 60 000	30
60 001 – 90 000	35
90 001 – 120 000	40
120 001- 240 000	45
240 000 and above	50

AIDS levy is 3% of the individual's tax payable.

1. (b) Individual Rates of Tax

January – December 2015 (Annual)

Band US$	Rate of Tax %
Up to 3 600	0
3 601 – 18 000	20
18 001 – 36 000	25
36 001 – 60 000	30
60 001 – 120 000	35
120 001 – 180 000	40
180001 - 240 000	45
240 000 and above	50

AIDS levy is 3% of the individual's tax payable.

2. Tax Credits

Blind, disabled and elderly person	US$75 per month

3. Bonus – exempt US1 000 per annum

4. Motoring Benefits

Engine Capacity	**Deemed cost per month**
	US$
Up to 1500cc	3 600
1 501 – 2000cc	4 800
2001 – 3000	7 200
3001cc and above	9 600

5. Company rates 25%

6. Capital Allowance SIA 25%

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MASTER OF BUSINESS ADMINISTRATION

MBAZ510: MONEY AND CAPITAL MARKETS

August 2016

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Discuss the main types of risks to the banking sector that can be brought about by dollarization of the economy. [25]

2. Discuss the role of the Zambian Stock Exchange in the Zambian financial market today. [25]

3. (a) Explain what is meant by "Forward Rate Agreement". [5]

   (b) Calculate the settlement proceeds of a 3 by 6 FRA described below:

Nominal Amount	$50 000
FRA rate	40%
Benchmark rate	35%
The Day Term	182 days
Day Base days	360

[5]

   (c) Discuss the advantages and disadvantages of entering into a forward rate agreement. [15]

4. Explain the main currency risk exposures, their related consequences and how they can be managed. [25]

5. Discuss how banks can manage interest rate risk, liquidity risk and operational risk in their operations. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ510: MONEY AND CAPITAL MARKETS

July 2016

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Discuss five (5) techniques that firms can use to counter foreign exchange risk. [25]

2. Discuss five (5) main factors that have led to the globalisation of financial markets and five (5) main consequences thereof. [25]

3. Discuss how bonds help firms carry out their specific financial management strategies. Give practical examples. [25]

4. Discuss five (5) various risks associated with investing in bonds. [25]

5. Discuss five (5) non-depository institutions' roles in financial intermediation, giving practical examples. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ512: INDUSTRIAL AND LABOUR RELATIONS

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Using your organisation or any other, demonstrate the importance of worker participation and involvement. [25]

2. The Systems Approach to industrial relations has been hailed as pivotal to the success of industrial harmony. How accurate is this statement using an industry of your choice. [25]

3. (a) Define conflict. [4]

   (b) Highlight five major causes of conflict in organisations. [5]

   (c) How have the three third party conflict intervention strategies helped to resolve conflicts citing relevant examples? [16]

4. Discuss the nature of collective bargaining in Zimbabwe at:

   (a) Enterprise level [12]

   (b) Industrial level [13]

5. Write brief notes on:

   (a) Marxist perspective [6]
   (b) Worker involvement [6]
   (c) Code of Conduct [6]
   (d) Negotiation process [7]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ519: APPLIED STRATEGIC MANAGEMENT 2

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Synergy is a golden price of related diversification. Discuss this statement giving examples. [25]

2. Building core competencies and competitive capabilities is a time consuming, managerially challenging exercise (Thompson et al, 2011). Discuss this statement giving practical examples. [25]

3. Discuss six primary ways companies can achieve a cost advantage by reconfiguring their value chains. Give examples to support your answer. [25]

4. Discuss the importance of bench-marking in improving the firm's knowledge base on how to achieve competitive advantage in the future. Include case examples to support your answer. [25]

5. In today's highly competitive business environment, budget oriented planning or forecast based planning methods are insufficient for large corporations to survive and prosper. The firms must engage in strategic planning. Discuss the main stages in the strategic planning process giving examples. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ522: CHANGE MANAGEMENT

July 2016

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. 'All changes are irksome to the human mind, especially those which are attended with greater dangers and uncertain effects'. In view of this thinking identify any five strategies that institutions can adopt to deal with resistance to change. [25]

2. The success of organisations in the 21st century will depend on the ability of managers to anticipate and manage change. Discuss. [25]

3. Discuss the four strategies of change management by Bennis, Benne and Chih (1969). [25]

4. Discuss the major changes that occurred in an institution of your choice in the last five years. Highlight the causes and effects of this change. [25]

5. Discuss with the aid of relevant examples the applicability of Kurt Lewin's model of change. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ522: CHANGE MANAGEMENT

July 2016

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. 'All changes are irksome to the human mind, especially those which are attended with greater dangers and uncertain effects'. In view of this thinking identify any five strategies that institutions can adopt to deal with resistance to change. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ522: CHANGE MANAGEMENT

August 2016

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. With the aid of examples, what would you say are the key challenges in managing internally generated transformation programmes? [25]

2. Discuss any change model of your choice. Relate this change model to the changes that occurred in any organisation of your choice. [25]

3. 'People generally detest change hence the need to manage the change processes. To what extent do you agree with this assertion? [25]

4. 'Change is making things different'. In view of the changes that took place in an organisation of your choice, show exactly what changes in organisations. [25]

5. Identify and discuss any **six** strategies that can be adopted to deal with resistance to change. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ523: ORGANISATIONAL LEADERSHIP

May 2017

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Discuss any five political tactics of Yukl and Falbe which are applicable to your organisation. [25]

2. What do you understand by:

   (a) Physical power [5]
   (b) Resource power [5]
   (c) Position power [5]
   (d) Expert power [5]
   (e) Negative power [5]

3. Discuss steps you can take in order to create an empowering culture in your organisation. [25]

4. Many public institutions are blamed for inefficiency and corruption. With reference to any such institution, explain the various strategies which would bring a lasting change for better services. [25]

5. Do men and women behave differently when in leadership roles? Discuss. [25]

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA523: LEGAL PERSPECTIVES IN EDUCATION

August 2016

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks.

You are advised to spend 1 hour on each of your answers.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

Answer all questions in the Answer Books provided

QUESTIONS

1. Discuss the rationale for charging fees and levies in view of the EFA goals. [100]

2. Zambia has some good educational policies. What challenges militate against these policies? Suggest how best these challenges can be addressed. 100]

3. Discuss the roles of learner, the parent and the education manager in controlling use of school premises for educational and non-educational activities. [100]

4. Examine the rationale for teacher minimum standards and clearly show how such standards impact on the education system? [100]

5. Analyse the provisions of any school health policy in Zambia and give examples from a school of your choice. [100]

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MASTER OF SCIENCE IN COUNSELLING

MSCC502: ADVANCED RESEARCH METHODS AND STATISTICS

April 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Quantitative research studies fall under two broad headings, descriptive quantitative research design and experimental research design. Critically examine the distinctive differences of these research designs. [40]

Choice Questions

2. (a) An MSc Counselling Programme Leader hypothesised that the mean for prospective students on a standard examination is 76%. From a particular group of prospective students, a sample of 16 students was selected. The mean mark for these 16 students in the examination was found to be 82% with a standard deviation of 4.

   Assuming that the data are normally distributed, test the hypothesis that mean mode of the entrance test is greater than 76%. Use 0.05 level of significance. [20]

   (b) Briefly discuss the 3 basic assumptions for the use of a t-test for the comparison of means. [10]

3. Research in counselling enables the formation of new paradigm that stimulates new thinking. Discuss. [30]

4. "Ethical considerations are critical component of a research study". Discuss. [30]

LIST OF FORMULAE

1. Arithmetic Mean Ungrouped data

$$x = \frac{\sum x_i}{n}$$

2. Arithmetic mean Grouped data

$$x = \frac{\sum f_i x_i}{n}$$

3. Mode Grouped Data

$$M_0 = O_{mo} + \frac{c\,(f_m - f_{m-1})}{2f_m - f_{m-1} - f_{m+1}}$$

4. Median Grouped Data

$$M_e = O_{me} + \frac{c\,[\frac{n}{2} - f\,(<)]}{f_m}$$

5. Range for Ungrouped data $= x_{max} - x_{min}$

6. Range for Grouped data

   Upper limit (highest class) – Lower Limit (lowest class)

7. Pearson's Correlation Coefficient

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2]\,x\,[n\sum y^2 - (\sum y)^2]}}$$

8. Spearman's rank correlation coefficient

$$R = 1 - \frac{6 \times \sum d^2}{n(n^2 - 1)}$$

9. Variance $S_x^2 = \frac{\sum f(x - \bar{x})^2}{(n-1)}$

10. Standard deviation $S_x = \sqrt{S^2_x}$

11. Standard deviation $SD = \sqrt{\sum x^2 - \frac{(\sum x)^2}{n}}{N}$

12. Z-score $= \frac{x - \bar{x}}{sd}$

13. Pearson' measure of skewness $= \frac{3(\text{mean} - \text{median})}{\text{Standard deviation}}$

OR

14. Pearson's measure of skewness $= \frac{\text{mean} - \text{mode}}{\text{Standard deviation}}$

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MASTER OF SCIENCE IN COUNSELLING

MSCC502: ADVANCED RESEARCH METHODS AND STATISTICS

February 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Compare and contrast qualitative and quantitative research paradigms in counselling. [40]

Choice Questions

2. Discuss the essential aspects of a comprehensive research proposal for studies in social science. [30]

3. In a study of car accidents and drivers who use cell phones when driving, a sample of 800 drivers were interviewed. 320 used cell phones when driving and 30 of them had an accident in the previous year. Of those who do not use cell phones when driving 60 had an accident.

   (a) Construct a contingency table for the data. [2]

   (b) Test at the 5% level of significance whether the occurrence of accidents is independent of the use of cell phones. [28]

4. Critically assess the importance of case studies in social science research. [30]

LIST OF FORMULAE

1. Arithmetic Mean Ungrouped data

$$x = \frac{\sum x_i}{n}$$

2. Arithmetic mean Grouped data

$$x = \frac{\sum f_i x_i}{n}$$

3. Mode Grouped Data

$$M_0 = O_{mo} + \frac{c\,(f_m - f_{m-1})}{2f_m - f_{m-1} - f_{m+1}}$$

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$$M_e = O_{me} + \frac{c\,[\frac{n}{2} - f(<)]}{f_m}$$

5. Range for Ungrouped data $= x_{max} - x_{min}$

6. Range for Grouped data

Upper limit (highest class) – Lower Limit (lowest class)

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$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2]\,x\,[n\sum y^2 - (\sum y)^2]}}$$

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13. Pearson' measure of skewness $= \frac{3(\text{mean} - \text{median})}{\text{Standard deviation}}$

OR

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MASTER OF SCIENCE IN COUNSELLING

MSCC503: PSYCHOMETRICS IN COUNSELLING

February 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Examine the view that standardized tests have been criticized for being biased. [40]

Choice Questions

2. Discuss the two key traditional concepts in classical test theory. [30]

3. 'Intelligence is measured by its contribution to people's lives'. Discuss. [30]

4. Analyse the qualities of a good psychometric test. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC506: PASTORAL COUNSELLING

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Critically analyse challenges that a pastoral counsellor is likely to encounter when counselling an anti-Christian adolescent. [40]

Choice Questions

2. To what extent can a pastoral counsellor manage crisis situations? [30]

3. Discuss the type of treatment that a pastoral counsellor could give for sexual dysfunction on a marriage relationship. [30]

4. Pastoral counsellors should have a current and comprehensive understanding of ethical principles in their work. Discuss. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC506: PASTORAL COUNSELLING

August 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss how best as a counsellor you can promote effective communication among families in your community. [40]

Choice Questions

2. Examine the assumptions of the crisis theory. [30]

3. Why is it important that a family counsellor should have sound personal characteristics? [30]

4. Compare and contrast pastoral counselling and psychological counselling. [30]

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"Empowerment Through Open Learning"

IN COLLABORATION WITH

THE UNIVERSITY OF ZAMBIA

MASTER OF SCIENCE IN COUNSELLING

MSCC507: ADVANCE PRINCIPLES AND STRATEGIES IN COUNSELLING

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Additional Materials

1. Scientific calculators are allowed in the examination
2. Candidates must be provided with Statistical Tables and Formulae.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify the vitality in counselling:

   (a) Contracts and informed consent;
   (b) Counsellor competence: and
   (c) Confidentiality. [40]

Choice Questions

2. Discuss the inhuman behaviours that are likely to be displayed by people deprived of each of the psychological needs. [30]

3. Critically analyse the assertion that life skills counselling is mainly concerned with the psychological rather than the biological life of an individual. [30]

4. Examine the challenges that group counselling is likely to bring about. [30]

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MSCC508: PHILOSOPHY, MORALS AND ETHICS IN COUNSELLING

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Examine the significance of questions in philosophical counselling. [40]

Choice Questions

2. Everyone is a philosopher on the field of counselling. Discuss. [30]

3. Compare and contrast the thinking behind philosophical indigenous and modern counselling. [30]

4. Critically analyse the contributions of ancient philosophers to counselling. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC511: COUNSELLING SKILLS FOR MANAGENENT

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Discuss the value of multicultural competence when conducting counselling at the workplace. [40]

Choice Questions

2. Analyse the assertion that counselling is incomplete without effective communication. [30]

3. Examine the challenges faced by management in counselling staff of diverse cultures. [30]

4. Evaluate the benefits of ethical values to management counselling at the workplace in a Zambian context. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC512: ABNORMAL PSYCHOLOGY IN COUNSELLING

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Compare and contrast psychodynamic and humanistic paradigms in counselling clients with psychological behaviours. [40]

Choice Questions

2. Sexual disorders create dysfunctional relationships among couples. Discuss. [30]

3. Analyse how counselling can help clients with schizophrenic disorders. [30]

4. Examine the relevance of traditional mental institutions in the African context. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC518: MONITORING AND EVALUATION

February 2016

Time: 3 Hours

INSTRUCTIONS
Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.
Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Justify the rationale behind monitoring and evaluation on the counselling practice. [40]

Choice Questions

2. To what extent do the principles of monitoring and evaluation enhance the quality of results/outcomes in counseling? [30]

3. Analyse the different ways in which stakeholder participants can adapt a more vigorous approach to the monitoring and evaluation process within the counselling practice. [30]

4. Evaluate the usefulness of log frames in the counselling practice. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC519: GUIDANCE AND COUNSELLING

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Examine the counsellor's role in guidance and counselling within the education sector. [40]

Choice Questions

2. Analyse the significant breakthroughs and the stages of development on guidance and counselling on the western world. [30]

3. Discuss the role of guidance and counselling in the schools. [30]

4. Evaluate mainstreaming on any **two** counselling theories in relation to the non-western context. [30]

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MSCC520: EDUCATION AND EMPLOYMENT COUNSELLING

February 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. "Giftedness in an employee threatens the position of the supervisor". Discuss. [40]

Choice Questions

2. Analyse the following aspects of the stagical process:

   (a) Denial and isolation [6]
   (b) Anger [6]
   (c) Bargaining [6]
   (d) Depression [6]
   (e) Acceptance [6]

3. Examine the behaviours of parents towards children's disabilities. [30]

4. Evaluate the idea of sex education services to people with disability. [30]

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MASTER OF SCIENCE IN COUNSELLING

MSCC521: DISABILILTY MANAGEMENT

July 2016

Time: 3 Hours

INSTRUCTIONS

Answer **question one (40 marks)** and **any other two** questions. Each question carries 30 marks.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from the teaching and learning situation.

Credit will be awarded for good presentation.

Questions

Compulsory Question

1. Rehabilitation counselling is crucial. Discuss. [40]

Choice Questions

2. Examine the major counselling theories related to mental health counselling and psychiatric rehabilitation. [30]

3. To what extent does Zambian education provide leisure education to its students? [30]

4. Analyse the relevance of criteria for the selection of "best practices" according to World Health Organisation (WHO). [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL507: RESEARCH METHODS

August 2016

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Imagine that the SADC Organ on Politics Defence and Security (OPDS) has engaged you to evaluate the progress on the peace negotiation in South Sudan. You are supposed to make a presentation on the methodologies you will use to a SADC appointed facilitator before the task starts.

   Write a proposal of what you intend to do in order to accomplish this mission. In your proposal, highlight the challenges you are likely to face and how you could possibly overcome them. [40]

Optional Questions: Answer any TWO questions

2. Analyse the use of quantitative designs in peace research. [30]

3. According to Berg (2001), during the past several decades, changing social attitudes about research as well as changing legislation have led professional associations to create codes of ethical conduct. Discuss **two** ethical concerns in peace research. [30]

4. Identify and explain some of the challenges and problems associated with using the questionnaire as a data collection tool during item formulation and administration. How can you overcome some of these challenges and problems as a peace researcher? [30]

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THE UNIVERSITY OF ZAMBIA

MASTER OF BUSINESS ADMINISTRATION

MBAZ501: BUSINESS AND ITS ENVIRONMENT

March 2017

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions
Each question should start on a fresh answer sheet.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Assuming your company is considering investing in a foreign country and has requested you to carry out an evaluation of that country's economy before making a final decision. Identify and discuss five factors you would consider for your evaluation. [25]

2. Knowing business cycle facts is useful for interpreting economic data and evaluating the state of the economy. Outline five reasons why managers should concern themselves with tracking the business cycle trends. [25]

3. (a) Evaluate the three approaches used to measure national income. [10]

   (b) Using appropriate illustrations, discuss any five problems that are often encountered in measuring national income. [15]

4. The main objectives of macroeconomic policy are asserted to be full employment, stable prices, balance of payments equilibrium and a high growth rate. Discuss five difficulties facing the Zambian government in its attempt to attain these objectives simultaneously. [25]

5. Discuss any five factors that affect the foreign exchange value of the Zambian Kwacha. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ501: BUSINESS AND ITS ENVIRONMENT

April/May 2017

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** Questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Unemployment remains one of the major challenges facing Zambia. Discuss the various types of unemployment and for each suggest one practical solution the government can adopt. [25]

2. Critically analyse the business implications of any five (5) elements of the economic environment of business to a cross border trader operating in Zambia. [25]

3. Foreign trade plays a vital role in the economic development of a country. With specific reference to Zambia, discuss five (5) benefits Zambia derives from trading with other nations. [25]

4. Discuss any five (5) functions of the Central Bank of Zambia. [25]

5. Discuss any five measures the government of Zambia should adopt to improve Zambia's competitiveness on a global level. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ503: MANAGEMENT AND ORGANISATIONAL BEHAVIOUR

April/May 2017

Time: 3 Hours

INSTRUCTIONS

Answer any **Four** questions

Each question should start on a fresh answer sheet.

Marks will be awarded for clear, concise and practical illustrations.

All Answers must be written in Answer Books provided.

ANSWER ANY FOUR QUESTIONS

1. Critically compare and contrast any two classical administrative theories on evolution of management and how they have contributed to contemporary management practices. [25]

2. Psychology and Sociology are the two central concepts in organisational behaviour. Drawing from the concepts, demonstrate the importance of organisational behaviour to any manager. [25]

3. Explain any six qualities of a good control measure or system by giving relevant examples from an organisation of your choice. [25]

4. Demonstrate how strategic planning process is critical to the survival and performance of an organisation. [25]

5. Write brief notes on:

   (a) Chain of command [6]

   (b) Management By Objectives [6]

   (c) Total Quality Management [6]

   (d) Change drivers or forces [7]

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THE UNIVERSITY OF ZAMBIA

MASTER OF BUSINESS ADMINISTRATION

MBAZ504: STATISTICS FOR MANAGERS

April/May 2017

Time: 3 Hours

INSTRUCTIONS

Answer **ALL** Questions in Section A and any **THREE (3)** Questions from Section B.
All questions in Section B carry equal marks.
Show all workings and give answers to 4 decimal places where appropriate.
Graphs should be plotted on graph paper.
Candidates will be provided with Statistics List of Formulae, Statistical Tables and graph paper.
The use of silent and non-programmable calculators is permissible

SECTION A: Answer all questions from this section (40 marks)

Question A1

During the past ten years, an insurance company owned two stocks that had the following annual rates of return:

Year	1	2	3	4	5	6	7	8	9	10
Stock A (%)	19	8	-12	-3	15	18	20	-10	-6	15
Stock B (%)	8	3	-9	2	4	5	10	12	8	11

(a) Calculate the mean annual rate of return for each stock. [4]

(b) Calculate the standard deviation of the annual rate of return for each stock. [6]

(c) Find the coefficient of variation for each stock. Hence determine which stock is more consistent. [7]

Question A2

You are considering acquiring shares of common stock in ABC Corporation. Your rate of return expectations are as follows:

Possible rate of return	Probability
-0.10	0.30
0.00	0.10
0.10	0.30
0.25	0.30

(a) Calculate the expected return in the investment. [3]

(b) Calculate the standard deviation of the expected return [5]

Question A3

(a) Explain any three problems that are encountered in the construction of index numbers. [6]

(b) The following data give prices and quantities of three products bought by a household in the years 2011 and 2012.

	2011		2012	
Product	Price	Quantity	Price	Quantity
A	25	40	37	78
B	27	31	42	70
C	30	24	50	39

Using 2011 as the base year and interpreting your results, calculate the:

i. Laspeyre's Price Index, [3]

ii. Paashe Price Index, and [3]

iii. Fisher's Ideal Price Index. [3]

Section B: Answer any three questions from this section. Each question carries 20 marks.

Question B4

The daily sales of an airtime vendor over 30 randomly selected days are:

53	59	74	28	61	46	70	54	48	56
36	34	63	59	38	52	51	44	49	66
60	50	41	46	53	51	53	31	30	23

(a) Construct a grouped frequency distribution of the above data. Use a class width of 10 and let 21 be the lower limit of the initial class. [3]

(b) Use the grouped frequency distribution in (a) to estimate the:

i. mean; [3]
ii. median; and [3]
iii. standard deviation of the sales. [5]

(c) Construct a histogram of the data and use it to estimate the mode. [6]

Question B5

(a) Statistics show that only 25% of companies submit their annual tax returns before the deadline. In a sample of six randomly selected companies, what is the probability that:

i. None of them will submit their tax returns before the deadline? [3]

ii. At least half of them will submit their tax returns before the deadline? [5]

(b) A survey of first year university students sought to establish any association between gender and choice of degree programme. Assuming only two degree programmes were on offer, the following results were obtained:

Gender	Degree Programme	
	Mathematics	Marketing
Male	117	63
Female	24	56

Use 5% level of significance to test whether there is an association between gender and choice of degree programme. [12]

Question B6

A local church organisation reported quarterly amounts (in $000) of tithes contributed by its members for the period 2010 to 2012 as follows:

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2010	100	120	132	110
2011	125	156	168	130
2012	141	164	180	200

(a) Obtain a centred 4-point moving average series of the data. [6]

(b) Figure 1 below shows time series plots of the original series and the moving average series.

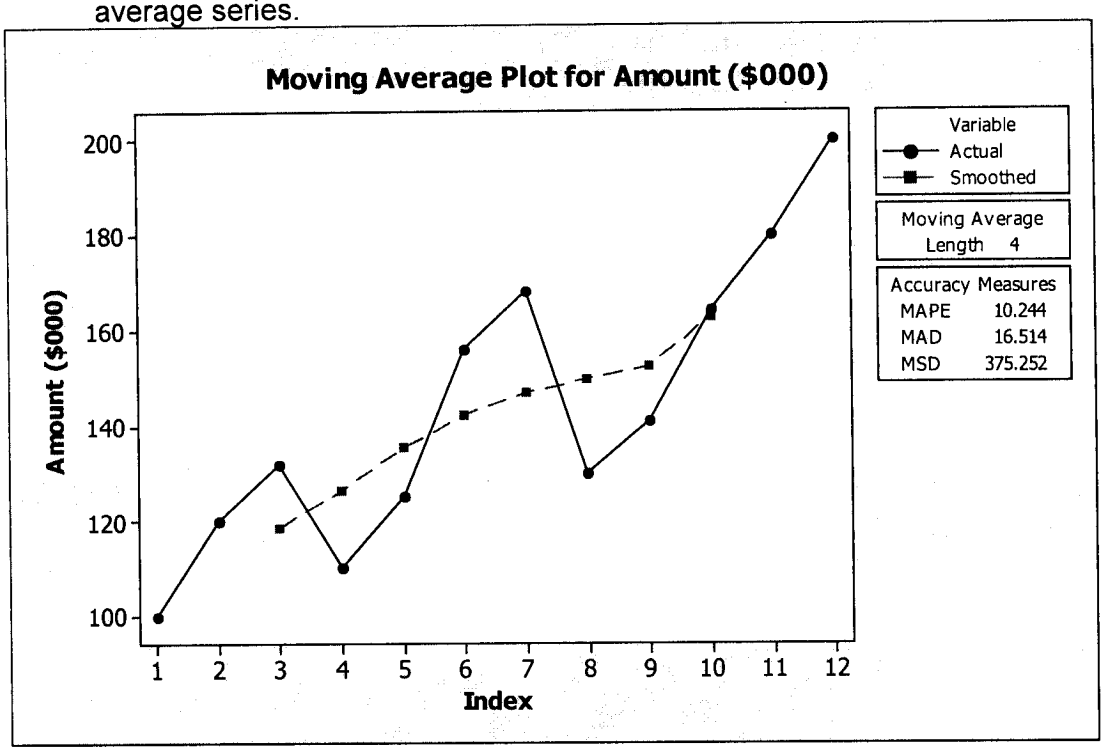

Figure 1: Time series plots

Comment on the trend in tithes contributions. [2]

(c) Find the deseasonalised series of the data [12]

Question B7

In a research study for the effect of smoking on infant birth weight, the following variables were recorded: Birth weight in grams, Gestation period in weeks, Mother smoke or not (1=smoked; 0=did not smoke) and Mother's age.

The following results were obtained:

Descriptive Statistics

	Mean	Std. Deviation	N
Birth weight in grams	2928.60	324.421	30
Gestation period in weeks	37.87	2.474	30
Mother smoke or not	.50	.509	30
Mother's age in years	26.57	5.587	30

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.893[a]	.798	.775	153.924	.798	34.275	3	26	.000	1.792

a. Predictors: (Constant), Mother's age in years, Gestation period in weeks, Mother smoke or not

b. Dependent Variable: Birth weight in grams

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2436216.949	3	812072.316	34.275	.000[a]
	Residual	616008.251	26	23692.625		
	Total	3052225.200	29			

a. Predictors: (Constant), Mother's age in years, Gestation period in weeks, Mother smoke or not

b. Dependent Variable: Birth weight in grams

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1811.534	487.346		-3.717	.001		
Gestation period in weeks	130.379	12.882	.994	10.121	.000	.805	1.243
Mother smoke or not	-246.382	62.915	-.386	-3.916	.001	.798	1.253
Mother's age in years	-2.774	5.147	-.048	-.539	.595	.988	1.012

a. Dependent Variable:
Birth weight in grams

(a) How many mothers took part in the study? [1]

(b) Comment on the ages of the mothers who took part in the study. [2]

(c) Comment on the direction and significance of the relationship between the dependent variable and each of the independent variables. [6]

(d) Interpret the regression coefficient on gestation period. [2]

(e) State and interpret the value of the adjusted coefficient of multiple determination. [3]

(f) Use the ANOVA table results to test whether the variables simultaneously have a significant effect on infant birth weight. [6]

MBAZ504 STATISTICS FOR MANAGERS
LIST OF FORMULAE

1.1 Measures for Describing Ungrouped Data

1.1.1 Measures of central tendency

Median

a. $y_{\frac{n+1}{2}}$ if n is odd

b. $\frac{1}{2}(y_{\frac{n}{2}} + y_{\frac{n+2}{2}})$ if n is even.

Population mean, $\mu = \frac{1}{N}\sum_{i=1}^{N} x_i$

Sample mean, $\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$

1.1.2 Measures of position

The position of the pth percentile is given by:

$$\frac{(n+1)p}{100}$$

1.1.3 Measures of dispersion

Range = highest observed value – lowest observed value

Inter-quartile range = $Q_3 - Q_1$

Sample variance $s^2 = \frac{1}{n-1}\left(\sum_{i=1}^{n} x_i^2 - \frac{1}{n}\left(\sum_{i=1}^{n} x_i\right)^2\right)$

Population variance $\sigma^2 = \frac{1}{N}\left(\sum_{i=1}^{N} x_i^2 - \frac{1}{N}\left(\sum_{i=1}^{N} x_i\right)^2\right)$

Coefficient of variation (CV) $= \frac{s}{\bar{x}} \times 100$

Coefficient of skewness, Skp $= \frac{3(mean - median)}{standard\ deviation}$

1.2 Measures for Describing Grouped Data

1.2.1 Measures of central tendency

Mean $= \frac{\sum_{i=1}^{k} f_i x_i}{\sum_{i=1}^{k} f_i}$

$$\text{Median} = L_m + \frac{C_m(n/2 - F_{m-1})}{f_m}$$

$$\text{Mode} = L_m + \frac{C_m(f_m - f_{m-1})}{2f_m - f_{m-1} - f_{m+1}}$$

1.2.2 Measures of position

$$\text{Lower quartile, } Q_1 = L_q + \frac{C_q(n/4 - F_{q-1})}{f_q}$$

$$\text{Upper quartile, } Q_3 = L_q + \frac{C_q(3n/4 - F_{q-1})}{f_q}$$

$$\text{P}^{\text{th}} \text{ percentile } P_k = L_p + \frac{C_p(\frac{kn}{100} - F_{p-1})}{f_p}$$

1.2.3 Measures of Dispersion

Population variance $$\sigma^2 = \frac{1}{N}(\sum f_i x_i^2 - \frac{(\sum f_i x_i)^2}{N})$$

Sample variance $$s^2 = \frac{1}{n-1}(\sum f_i x_i^2 - \frac{(\sum f_i x_i)^2}{n})$$

1.3 Discrete Probability Distributions

Expectation of a discrete random variable X

$$\mu = E(X) = \sum_{all\ x} xP(X = x)$$

Expectation of a function of a random variable

$$E[h(X)] = \sum_{all\ x} h(x)P(X = x)$$

Expected value of a linear function of a random variable

$$E(aX + b) = aE(X) + b$$

Variance of a discrete random variable

$$\sigma^2 = Var(X) = E(X^2) - [E(X)]^2$$

Binomial probability distribution

$$P(X = x) = \binom{n}{x} p^x (1-p)^{n-x} \qquad \text{for x = 0, 1, 2,... n.}$$

If X~ B (n, p), then

E(X) = n p

Var(X) = n p (1 – p)

Poisson probability distribution

$$P(X = x) = \frac{e^{-\lambda}\lambda^x}{x!} \qquad \text{for x = 0, 1, 2, ...}$$

If X~ $P_o(\lambda)$, then the mean and variance of X both equal to λ

1.4 Normal Distribution

An arbitrary normal value X is transformed to a standard normal variable Z by the transformation

$$Z = \frac{X - \mu}{\sigma}$$

1.5 Statistical Estimation

1.5.1 Point estimators

Sample mean, $\bar{x} = \frac{1}{n}\sum x_i$

Sample variance, $s^2 = \frac{1}{n-1}(\sum x_i^2 - \frac{(\sum x_i)^2}{n})$

Sample population proportion, $\hat{p} = \frac{k}{n}$

1.5.2 Confidence interval estimation

If the population standard deviation σ is known, a $100(1-\alpha)\%$ confidence interval for μ is given by:

$$\bar{x} \pm Z_{\alpha/2} \times \frac{\sigma}{\sqrt{n}}$$

If the population standard deviation σ is unknown and $n \geq 30$, then a $100(1-\alpha)\%$ confidence interval for population mean μ is given by:

$$\bar{x} \pm Z_{\alpha/2} \times \frac{s}{\sqrt{n}}$$

If the population standard deviation σ is unknown and $n < 30$, then a $100(1-\alpha)\%$ confidence interval for μ is given by:

$$\bar{x} \pm t_{\alpha/2}(n-1) \times \frac{s}{\sqrt{n}}$$

When populations variances are known, a $100(1-\alpha)\%$ confidence interval for $\mu_1 - \mu_2$ is given by:

$$(\bar{x}_1 - \bar{x}_2) \pm z_{\frac{\alpha}{2}} \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_1^2}{n_2}}$$

When populations variances are unknown and samples are large, a $100(1-\alpha)\%$ confidence interval for $\mu_1 - \mu_2$ is given by:

$$(\bar{x}_1 - \bar{x}_2) \pm z_{\frac{\alpha}{2}} \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

When populations variances are unknown and samples are small, that is $n_1, n_2 < 30$, a $100(1-\alpha)\%$ confidence interval for $\mu_1 - \mu_2$ is given by

$$(\bar{x}_1 - \bar{x}_2) - t_{\frac{\alpha}{2}}(n_1 + n_2 - 2) \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

Pooled variance $S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$

A $100(1-\alpha)\%$ confidence interval for the mean difference of the paired observations is given by:

$$\bar{d} \pm t_{\frac{\alpha}{2}}(n-1)\frac{S_d}{\sqrt{n}}$$

The minimum sample size necessary to ensure that the error in estimating μ will not exceed a specified amount e is given by:

$$n = \left[\frac{Z_{\alpha/2} \times \sigma}{e}\right]^2$$

A $100(1-\alpha)\%$ confidence interval for the population proportion p is given by:

$$\hat{p} \pm Z_{\alpha/2} \times \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$$

For large samples, the confidence interval estimate for $(p_1 - p_2)$ is given by:

$$(\hat{p}_1 - \hat{p}_2) \pm z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}_1\hat{q}_1}{n_1} + \frac{\hat{p}_2\hat{q}_2}{n_2}}$$

When samples are small $(n_1, n_2 < 30)$ we use the t-distribution. A confidence interval for $p_1 - p_2$ is given by:

$$(\hat{p}_1 - \hat{p}_2) \pm t_{\frac{\alpha}{2}}(n_1 + n_2 - 2)\sqrt{\frac{\hat{p}_1\hat{q}_1}{n_1} + \frac{\hat{p}_2\hat{q}_2}{n_2}}$$

The minimum sample size required to estimate the population proportion to be within a specified amount e with $100(1-\alpha)\%$ confidence is given by:

$$n = \frac{\hat{p}(1-\hat{p})Z^2_{\alpha/2}}{e^2}$$

$$n = \left[\frac{Z_{\alpha/2}}{2e}\right]^2$$

1.6 Hypothesis Testing

1.6.1 Tests concerning the mean of a single population

Test statistic for testing for the mean of a single population

When σ is known	**When σ is unknown**
Case I: n is large or small $Z_{cal} = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}} \sim N(0,1)$	**Case II**: n is large $Z_{cal} = \frac{\bar{x} - \mu_0}{s/\sqrt{n}} \sim N(0,1)$ **Case III**: n is small $T_{cal} = \frac{\bar{x} - \mu_0}{s/\sqrt{n}} \sim t(n-1)$

1.6.2 Tests concerning means of two populations

When the variances (σ_1^2 and σ_2^2) are known, the test statistic is given by:

$$Z_{cal} = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{(\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2})}}$$

When variances are unknown but samples are large (both n_1 and n_2 are greater than 30), the test statistic is given by:

$$Z_{cal} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}\right)}}$$

When variances are unknown and sample sizes are small, and assuming that populations are normally distributed with homogeneous variance, the test statistic is:

$$T_{cal} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{s_p^2}{n_1} + \frac{s_p^2}{n_2}\right)}}$$

1.6.3 Test concerning a population proportion

The test statistic for testing for a proportion of a single population is given by:

$$Z_{cal} = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0 q_0}{n}}}$$

$$Z_{cal} = \frac{(\hat{p}_1 - \hat{p}_2) - (p_1 - p_2)}{\sqrt{\frac{pq}{n_1} + \frac{pq}{n_2}}}$$

1.7 Chi-Square Tests

$$\text{Expected frequency} = \frac{row\ total \times column\ total}{Grand\ total}$$

$$\text{Test statistic, } \chi^2_{cal} = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

1.8 Simple Linear Regression Analysis

The least squares estimates of β_0 and β_1 are a and b respectively

$$\text{where } b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

$$\text{and } a = \frac{\sum y - b\sum x}{n}$$

1.9 Correlation Analysis

Pearson's product moment correlation coefficient is given by

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{\left(n\sum x^2 - (\sum x)^2\right)\left(n\sum y^2 - (\sum y)^2\right)}}$$

Spearman's Rank Correlation Coefficient r_s is given by

$$r_s = 1 - \frac{6\sum d_i^2}{n(n^2 - 1)}$$

1.10 Introduction to Time Series Analysis

1.10.1 Trend Analysis

The fitted trend line is

and $\hat{Y} = a + bX_t$

$$b = \frac{n\sum X_t Y_t - \sum X_t \sum Y_t}{n\sum X_t^2 - (\sum X_t)^2}$$

$$a = \frac{\sum Y_t - b\sum X_t}{n}$$

1.10.2 Seasonal Analysis

Seasonal ratio $= \frac{Y_t}{MA} = \frac{T_t \times C_t \times S_t \times I_t}{T_t \times C_t} = S_t \times I_t$

Deseasonalised Y = $\frac{Actual\ Y}{Adjusted\ Seasonal\ index\ S}$

1.11 Index Numbers

1.11.1 Simple Index Numbers

Simple Price Index $SPI = \frac{P_n}{P_0} \times 100$

Simple Quantity Index $SQI = \frac{Q_n}{Q_0} \times 100$

1.11.2 Weighted Index Numbers

Laspeyre Price Index, LPI $= \frac{\sum P_n Q_0}{\sum P_0 Q_0} \times 100$

Laspeyre Quantity Index, LQI $= \frac{\sum Q_n P_0}{\sum Q_0 P_0} \times 100$

Paasche Price Index, PPI $= \frac{\sum P_n Q_n}{\sum P_0 Q_n} \times 100$

Paasche Quantity Index, PQI $= \frac{\sum Q_n P_n}{\sum Q_0 P_n} \times 100$

Fisher Price Index, FPI $= \sqrt{LPI \times PPI}$

Fisher Quantity Index, FQI $= \sqrt{LQI \times PQI}$

1. The following rates of return for the firms A and B are expected to occur under the various states of the economy.

Economy	Probability of State occurring	Associated rates of Return for firms A and B	
		A	B
Boom	0.25	30%	80%
Normal	0.40	20%	10%
Recession	0.35	6%	24%

(a) Calculate the expected rate of return for each firm. [5]

(b) Calculate the variance and standard deviation for each firm. [10]

(c) Calculate coefficient of variation and interpret the result. [10]

2. Discuss the factors, both shareholder and firm oriented, which can influence a firm's dividend policy, using Zambian practical examples. [25]

3. You have been provided with the following project of XYZ Limited:

Year	Cash flows
0	481 250
1	136 250
2	171 250
3	171 250
4	171 250
5	117 000
Terminal	88 000

The discount rate is 20%.

(a) Calculate the NPV of the project and interpret the result. [6]

(b) Calculate the IRR of the project and interpret the result. [10]

(c) Calculate the acceptable payback period. [5]

(d) Discuss two advantages and two disadvantages of using NPV as the project appraisal method. [4]

4. (a) Discuss the critical assumptions of Capital Asset Pricing Model (CAPM). [10]

(b) Discuss the differences between CAPM and Arbitrage Pricing Theory. [5]

(c) The listing requirements of the Zambia Stock Exchange (ZSE) are very restrictive to companies being listed on the exchange. Discuss the listing requirements of ZSE and evaluate in light of the statement. [10]

5. Using practical examples, discuss FIVE roles of a financial manager in a listed company in Zambia. [25]

FORMULA SHEET

1. $NPV = \left[CF_1 \times PVIF\ [K\%, \text{'1' year}] + CF_2 \times PVIF\ [K\%, \text{'2' years}] + . \right.$

$\left. CF_n \times PVIF\ [K\%, \text{'n' years}] \right] - \square_0$

2. $NPV = \left[CF_1\ (1 + K\%)^{-1} + CF_2\ (1 + K\%)^{-2} + \ldots. \right.$

$\left. CF_n\ (1 + K\%)^{-n} \right] - \square_0$

3. $NPV = [CF \times PVIFA\ (K\%, \text{'n' years})] - \square_0$

4. $NPV = \left[CF \left[\frac{1 - (1 + K\%)^{-n}}{K\%} \right] \right] - \square_0$

5. $IRR = i\% + \frac{A}{A - B} (r\% - i\%)$

6. $EPS = \frac{\text{Period's total earnings available}}{\text{Number of shares of common stock}}$

7. $R_i = R_f + b_i\ (R_m - R_f)$

8. $P_o = \frac{D_1}{K_e}$

9. $P_o = \frac{D_1}{K_e - g}$

Present Value and Future Value Tables

Table A-1 Future Value Interest Factors for One Dollar Compounded at k Percent for n Periods: $FVIF_{k,n} = (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.4400	1.5376	1.5625	1.6900
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.7280	1.9066	1.9531	2.1970
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	2.0736	2.3642	2.4414	2.8561
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.4883	2.9316	3.0518	3.7129
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.9860	3.6352	3.8147	4.8268
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.5832	4.5077	4.7684	6.2749
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8526	3.0590	3.2784	4.2998	5.5895	5.9605	8.1573
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	5.1598	6.9310	7.4506	10.604
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	6.1917	8.5944	9.3132	13.786
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	7.4301	10.657	11.642	17.922
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	8.9161	13.215	14.552	23.298
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	10.699	16.386	18.190	30.288
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	12.839	20.319	22.737	39.374
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	15.407	25.196	28.422	51.186
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.748	18.488	31.243	35.527	66.542
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9861	9.2765	10.761	12.468	22.186	38.741	44.409	86.504
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	6.5436	7.6900	9.0243	10.575	12.375	14.463	26.623	48.039	55.511	112.455
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.197	12.056	14.232	16.777	31.948	59.568	69.389	146.192
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.523	13.743	16.367	19.461	38.338	73.864	86.736	190.050
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.804	13.021	15.668	18.822	22.574	46.005	91.592	108.420	247.065
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.100	14.714	17.861	21.645	26.186	55.206	113.574	135.525	321.184
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.026	13.552	16.627	20.362	24.891	30.376	66.247	140.831	169.407	417.539
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.239	15.179	18.788	23.212	28.625	35.236	79.497	174.631	211.758	542.801
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.835	13.585	17.000	21.231	26.462	32.919	40.874	95.396	216.542	264.698	705.641
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.063	13.268	17.449	22.892	29.960	39.116	50.950	66.212	85.850	237.376	634.820	807.794	*
35	1.4166	1.9999	2.8139	3.9461	5.5160	7.6861	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.176	180.314	590.668	*	*	*
36	1.4308	2.0399	2.8983	4.1039	5.7918	8.1473	11.424	15.968	22.251	30.913	42.818	59.136	81.437	111.834	153.152	209.164	708.802	*	*	*
40	1.4889	2.2080	3.2620	4.8010	7.0400	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.782	188.884	267.864	378.721	*	*	*	*
50	1.6446	2.6916	4.3839	7.1067	11.467	18.420	29.457	46.902	74.358	117.391	184.565	289.002	450.736	700.233	*	*	*	*	*	*

Table A-2 Future Value Interest Factors for a One-Dollar Annuity Compounded at k Percent for n Periods: $FVIFA_{k,n} = [(1 + k)^n - 1] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	1.0000	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.2000	2.2400	2.2500	2.3000
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	3.6400	3.7776	3.8125	3.9900
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	5.3680	5.6842	5.7656	6.1870
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	6.4803	6.6101	6.7424	6.8771	7.4416	8.0484	8.2070	9.0431
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	9.9299	10.980	11.259	12.756
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.089	10.405	10.730	11.067	11.414	12.916	14.615	15.073	17.583
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.260	10.637	11.028	11.436	11.859	12.300	12.757	13.233	13.727	14.240	16.499	19.123	19.842	23.858
9	9.3685	9.7546	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164	14.776	15.416	16.085	16.786	17.519	20.799	24.712	25.802	32.015
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722	17.549	18.420	19.337	20.304	21.321	25.959	31.643	33.253	42.619
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.045	24.349	25.733	32.150	40.238	42.566	56.405
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133	25.650	27.271	29.002	30.850	39.581	50.895	54.208	74.327
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029	29.985	32.089	34.352	36.786	48.497	64.110	68.760	97.625
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095	32.393	34.883	37.581	40.505	43.672	59.196	80.496	86.949	127.913
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405	37.280	40.417	43.842	47.580	51.660	72.035	100.815	109.687	167.286
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.753	46.672	50.980	55.717	60.925	87.442	126.011	138.109	218.472
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501	48.884	53.739	59.118	65.075	71.673	105.931	157.253	173.636	285.014
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396	55.750	61.725	68.394	75.836	84.141	128.117	195.994	218.045	371.518
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939	63.440	70.749	78.969	88.212	98.603	154.740	244.033	273.556	483.973
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203	72.052	80.947	91.025	102.444	115.380	186.688	303.601	342.945	630.165
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.002	72.265	81.699	92.470	104.768	118.810	134.841	225.026	377.465	429.681	820.215
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.403	81.214	92.503	105.491	120.436	137.632	157.415	271.031	469.056	538.101	*
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.543	91.148	104.603	120.205	138.297	159.276	183.601	326.237	582.630	673.626	*
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.497	102.174	118.155	136.831	158.659	184.168	213.978	392.484	723.461	843.033	*
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.413	133.334	155.620	181.871	212.793	249.214	471.981	898.092	*	*
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.283	136.308	164.494	199.021	241.333	293.199	356.787	434.745	530.312	*	*	*	*
35	41.660	49.994	60.462	73.652	90.320	111.435	138.237	172.317	215.711	271.024	341.590	431.663	546.681	693.573	881.170	*	*	*	*	*
36	43.077	51.994	63.276	77.598	95.836	119.121	148.913	187.102	236.125	299.127	380.164	484.463	618.749	791.673	*	*	*	*	*	*
40	48.886	60.402	75.401	95.026	120.800	154.762	199.635	259.057	337.882	442.593	581.826	767.091	*	*	*	*	*	*	*	*
50	64.463	84.579	112.797	152.667	209.348	290.336	406.529	573.770	815.084	*	*	*	*	*	*	*	*	*	*	*

Present Value and Future Value Tables

Table A-3 Present Value Interest Factors for One Dollar Discounted at k Percent for n Periods: $PVIF_{k,n} = 1 / (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6944	0.6504	0.6400	0.5917
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.5787	0.5245	0.5120	0.4552
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.4823	0.4230	0.4096	0.3501
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4019	0.3411	0.3277	0.2693
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3349	0.2751	0.2621	0.2072
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.2791	0.2218	0.2097	0.1594
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2326	0.1789	0.1678	0.1226
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.1938	0.1443	0.1342	0.0943
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.1615	0.1164	0.1074	0.0725
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149	0.1954	0.1346	0.0938	0.0859	0.0558
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869	0.1685	0.1122	0.0757	0.0687	0.0429
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625	0.1452	0.0935	0.0610	0.0550	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.0779	0.0492	0.0440	0.0254
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229	0.1079	0.0649	0.0397	0.0352	0.0195
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069	0.0930	0.0541	0.0320	0.0281	0.0150
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929	0.0802	0.0451	0.0258	0.0225	0.0116
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1528	0.1300	0.1108	0.0946	0.0808	0.0691	0.0376	0.0208	0.0180	0.0089
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0313	0.0168	0.0144	0.0068
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611	0.0514	0.0261	0.0135	0.0115	0.0053
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531	0.0443	0.0217	0.0109	0.0092	0.0040
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462	0.0382	0.0181	0.0088	0.0074	0.0031
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402	0.0329	0.0151	0.0071	0.0059	0.0024
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349	0.0284	0.0126	0.0057	0.0047	0.0018
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304	0.0245	0.0105	0.0046	0.0038	0.0014
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151	0.0116	0.0042	0.0016	0.0012	*
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0259	0.0189	0.0139	0.0102	0.0075	0.0055	0.0017	0.0005	*	*
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323	0.0234	0.0169	0.0123	0.0089	0.0065	0.0048	0.0014	*	*	*
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0007	*	*	*
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	*	*	*	*

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at k Percent for n Periods: $PVIFA = [1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3616	2.1662
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	2.9906	2.7454	2.6893	2.4356
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.1925	3.6819	3.5705	3.0915
11	10.368	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.3271	3.7757	3.6564	3.1473
12	11.255	10.575	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.4392	3.8514	3.7251	3.1903
13	12.134	11.348	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	4.5327	3.9124	3.7801	3.2233
14	13.004	12.106	11.296	10.563	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	4.6106	3.9616	3.8241	3.2487
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	4.6755	4.0013	3.8593	3.2682
16	14.718	13.578	12.561	11.652	10.838	10.106	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.6685	4.7296	4.0333	3.8874	3.2832
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	4.7746	4.0591	3.9099	3.2948
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.8178	4.8122	4.0799	3.9279	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982	5.8775	4.8435	4.0967	3.9424	3.3105
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	4.8696	4.1103	3.9539	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	4.8913	4.1212	3.9631	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	4.9094	4.1300	3.9705	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	4.9245	4.1371	3.9764	3.3254
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	4.9371	4.1428	3.9811	3.3272
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	4.9476	4.1474	3.9849	3.3286
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.1772	4.9789	4.1601	3.9950	3.3321
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.6442	8.8552	8.1755	7.5856	7.0700	6.6166	6.2153	4.9915	4.1644	3.9984	3.3330
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.6765	8.8786	8.1924	7.5979	7.0790	6.6231	6.2201	4.9929	4.1649	3.9987	3.3331
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	4.9966	4.1659	3.9995	3.3332
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	9.0417	8.3045	7.6752	7.1327	6.6605	6.2463	4.9995	4.1666	3.9999	3.3333

ANSWER ANY FOUR QUESTIONS

1. Identify and explain the available growth strategies for an ailing textiles firm. [25]

2. As a business consultant you have been hired by a company to appraise them on the need to prioritise the marketing function within their business. Present to the company's management the crucial role that marketing plays in a business. [25]

3. M. E. Porter put forward the "5 Forces Model" for industry competition and latter proposed strategies that a firm may use to ward off competition. Using examples discuss the generic competitive strategies that a firm might use to compete with other industry players. [25]

4. Using appropriate examples, identify and discuss five key characteristics of a desirable market segment. [25]

5. By acquiring ABC Bank, Fresh Foods (Pvt) Ltd, a consumer goods company, is diversifying its business portfolio. Describe the key challenges that will be faced by the company in the marketing of its new acquisition. [25]

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MASTER OF BUSINESS ADMINISTRATION

MBAZ515: OPERATIONS RESEARCH

September 2017

Time: 3 Hours

INSTRUCTIONS
Answer any **Four** Questions. Each question carries 25 marks.
Each question should start on a fresh answer sheet.
Formula Sheet and Annuity Tables are attached.
Marks will be awarded for clear, concise and practical illustrations.
All Answers must be written in Answer Books provided.

Question 1

A manufacturer finds that the total cost C of producing a product is given by the function $C = 0{,}05q^2 + 5q + 500$, where q is the number of units produced.

Find;

(a) (i) the level of output at which average cost per unit will be a minimum. [14]

(ii) the minimum average cost per unit. [3]

(b) Assume that a company's marginal profit function is $Y = 400 - 2x$ where x is number of units sold. Given that the company breaks even on sales of 10 units, find the fixed costs of the company. [8]

Question 2

(a) Distinguish between Decision Making Under Uncertainty and Decision Making Under Risk. [4]

(b) Consider the payoff table below which shows decision alternatives (d_1; d_2 and d_3) that a company is faced with under three different states of nature (S_1; S_2 and S_3).

di/s_j	S_1	S_2	S_3
d_1	6	5	4
d_2	2	8	6
d_3	3	1	4
$P(S_j)$	0.5	0.3	0.2

Determine the appropriate decision that the company should make using the following approaches:

i. Optimistic approach (maximax) [3]

ii. Conservative approach (maximin) [3]

iii. Minimax Regret Approach [5]

iv. Expected Monetary Value (EMV) approach. Hence find the Expected Value of Perfect Information (EVPI). [7 + 3]

Question 3

Zambian Breweries is planning to launch a new product. The table below shows a list of activities required for the launch and the estimated time for each activity.

Activity	Estimated duration (Weeks)	Must be preceded by
A	4	-
B	4	-
C	5	B
D	3	A, C
E	10	B
F	9	B
G	6	E
H	7	E
I	3	D, G
J	5	F, H

(i) Draw a network diagram for this project? [15]

(ii) Identify the critical path on your diagram by using bold lines. [4]

(iii) State the estimated minimum project completion time. [3]

(iv) How would the minimum project completion time be affected if activity F required 20 weeks rather than 9 weeks? [3]

Question 4

(a) Distinguish between simple and compound interest. [2]

(b) (i) Mr Mwale invested K5 000 on the Inter Market for two years at 16% per annum simple interest. Calculate the amount of interest he will earn on the investment. [3]

(ii) If the simple interest rate was 12% p.a., how much should Mr Bere invest if he wishes to have K10 000 in his account after the 2 years? [4]

(c) Mrs Mwale. deposited K5 000 into an account which pays 16% p.a. compounded quarterly. If she leaves the amount in the account for 2 years, find the amount of interest she will earn. [6]

(d) A firm wishes to accumulate a fund of K30 000 in 3 years by paying equal quarterly instalments earning 20% p.a. compounded quarterly. Construct a sinking fund schedule for the accumulation of the fund. [10]

Question 5

(a) Suggest five(5) reasons why companies should have in place an efficient inventory management policy. [10]

(b) State any four (4) assumptions of the Economic Order Quantity (EOQ) model. [4]

(c) Mrs Mwansa uses 1000 reams of bond paper per year. Each time an order for bond paper is placed, an ordering cost of K50 is incurred. Each ream of bond paper costs K4 and the holding cost is K2 per ream per year. Assuming that use of bond paper occurs at a constant rate and no shortages are allowed;

i. Obtain the economic order quantity. [5]

ii. How many orders will be placed each year? [3]

iii. How much time will elapse between the placement of orders? [3]

Present Value and Future Value Tables

Table A-1 Future Value Interest Factors for One Dollar Compounded at k Percent for n Periods: $FVIF_{k,n} = (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.4400	1.5376	1.5625	1.6900
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.7280	1.9066	1.9531	2.1970
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	2.0736	2.3642	2.4414	2.8561
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.4883	2.9316	3.0518	3.7129
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.9860	3.6352	3.8147	4.8268
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.5832	4.5077	4.7684	6.2749
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8526	3.0590	3.2784	4.2998	5.5895	5.9605	8.1573
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	5.1598	6.9310	7.4506	10.604
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	6.1917	8.5944	9.3132	13.786
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	7.4301	10.657	11.642	17.922
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	8.9161	13.215	14.552	23.298
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	10.699	16.386	18.190	30.288
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	12.839	20.319	22.737	39.374
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	15.407	25.196	28.422	51.186
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.748	18.488	31.243	35.527	66.542
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9861	9.2765	10.761	12.468	22.186	38.741	44.409	86.504
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	6.5436	7.6900	9.0243	10.575	12.375	14.463	26.623	48.039	55.511	112.455
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.197	12.056	14.232	16.777	31.948	59.568	69.389	146.192
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.523	13.743	16.367	19.461	38.338	73.864	86.736	190.050
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.804	13.021	15.668	18.822	22.574	46.005	91.592	108.420	247.065
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.100	14.714	17.861	21.645	26.186	55.206	113.574	135.525	321.184
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.026	13.552	16.627	20.362	24.891	30.376	66.247	140.831	169.407	417.539
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.239	15.179	18.788	23.212	28.625	35.236	79.497	174.631	211.758	542.801
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.835	13.585	17.000	21.231	26.462	32.919	40.874	95.396	216.542	264.698	705.641
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.063	13.268	17.449	22.892	29.960	39.116	50.950	66.212	85.850	237.376	634.820	807.794	*
35	1.4166	1.9999	2.8139	3.9461	5.5160	7.6861	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.176	180.314	590.668	*	*	*
36	1.4308	2.0399	2.8983	4.1039	5.7918	8.1473	11.424	15.968	22.251	30.913	42.818	59.136	81.437	111.834	153.152	209.164	708.802	*	*	*
40	1.4889	2.2080	3.2620	4.8010	7.0400	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.782	188.884	267.864	378.721	*	*	*	*
50	1.6446	2.6916	4.3839	7.1067	11.467	18.420	29.457	46.902	74.358	117.391	184.565	289.002	450.736	700.233	*	*	*	*	*	*

Table A-2 Future Value Interest Factors for a One-Dollar Annuity Compounded at k Percent for n Periods: $FVIFA_{k,n} = [(1 + k)^n - 1] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	1.0000	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.2000	1.2400	1.2500	1.3000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.2000	2.2400	2.2500	2.3000
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	3.6400	3.7776	3.8125	3.9900
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	5.3680	5.6842	5.7656	6.1870
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	6.4803	6.6101	6.7424	6.8771	7.4416	8.0484	8.2070	9.0431
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	9.9299	10.980	11.259	12.756
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.089	10.405	10.730	11.067	11.414	12.916	14.615	15.073	17.583
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.260	10.637	11.028	11.436	11.859	12.300	12.757	13.233	13.727	14.240	16.499	19.123	19.842	23.858
9	9.3685	9.7546	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164	14.776	15.416	16.085	16.786	17.519	20.799	24.712	25.802	32.015
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722	17.549	18.420	19.337	20.304	21.321	25.959	31.643	33.253	42.619
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.045	24.349	25.733	32.150	40.238	42.566	56.405
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133	25.650	27.271	29.002	30.850	39.581	50.895	54.208	74.327
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029	29.985	32.089	34.352	36.786	48.497	64.110	68.760	97.625
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095	32.393	34.883	37.581	40.505	43.672	59.196	80.496	86.949	127.913
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405	37.280	40.417	43.842	47.580	51.660	72.035	100.815	109.687	167.286
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.753	46.672	50.980	55.717	60.925	87.442	126.011	138.109	218.472
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501	48.884	53.739	59.118	65.075	71.673	105.931	157.253	173.636	285.014
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396	55.750	61.725	68.394	75.836	84.141	128.117	195.994	218.045	371.518
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939	63.440	70.749	78.969	88.212	98.603	154.740	244.033	273.556	483.973
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203	72.052	80.947	91.025	102.444	115.380	186.688	303.601	342.945	630.165
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.002	72.265	81.699	92.470	104.768	118.810	134.841	225.026	377.465	429.681	820.215
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.403	81.214	92.503	105.491	120.436	137.632	157.415	271.031	469.056	538.101	*
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.543	91.148	104.603	120.205	138.297	159.276	183.601	326.237	582.630	673.626	*
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.497	102.174	118.155	136.831	158.659	184.168	213.978	392.484	723.461	843.033	*
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.413	133.334	155.620	181.871	212.793	249.214	471.981	898.092	*	*
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.283	136.308	164.494	199.021	241.333	293.199	356.787	434.745	530.312	*	*	*	*
35	41.660	49.994	60.462	73.652	90.320	111.435	138.237	172.317	215.711	271.024	341.590	431.663	546.681	693.573	881.170	*	*	*	*	*
36	43.077	51.994	63.276	77.598	95.836	119.121	148.913	187.102	236.125	299.127	380.164	484.463	618.749	791.673	*	*	*	*	*	*
40	48.886	60.402	75.401	95.026	120.800	154.762	199.635	259.057	337.882	442.593	581.826	767.091	*	*	*	*	*	*	*	*
50	64.463	84.579	112.797	152.667	209.348	290.336	406.529	573.770	815.084	*	*	*	*	*	*	*	*	*	*	*

Present Value and Future Value Tables

Table A-3 Present Value Interest Factors for One Dollar Discounted at k Percent for n Periods: $PVIF_{k,n} = 1 / (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6944	0.6504	0.6400	0.5917
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.5787	0.5245	0.5120	0.4552
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.4823	0.4230	0.4096	0.3501
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4019	0.3411	0.3277	0.2693
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3349	0.2751	0.2621	0.2072
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.2791	0.2218	0.2097	0.1594
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2326	0.1789	0.1678	0.1226
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.1938	0.1443	0.1342	0.0943
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.1615	0.1164	0.1074	0.0725
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149	0.1954	0.1346	0.0938	0.0859	0.0558
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869	0.1685	0.1122	0.0757	0.0687	0.0429
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625	0.1452	0.0935	0.0610	0.0550	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.0779	0.0492	0.0440	0.0254
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229	0.1079	0.0649	0.0397	0.0352	0.0195
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069	0.0930	0.0541	0.0320	0.0281	0.0150
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929	0.0802	0.0451	0.0258	0.0225	0.0116
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1528	0.1300	0.1108	0.0946	0.0808	0.0691	0.0376	0.0208	0.0180	0.0089
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0313	0.0168	0.0144	0.0068
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611	0.0514	0.0261	0.0135	0.0115	0.0053
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531	0.0443	0.0217	0.0109	0.0092	0.0040
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462	0.0382	0.0181	0.0088	0.0074	0.0031
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402	0.0329	0.0151	0.0071	0.0059	0.0024
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349	0.0284	0.0126	0.0057	0.0047	0.0018
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304	0.0245	0.0105	0.0046	0.0038	0.0014
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151	0.0116	0.0042	0.0016	0.0012	*
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0259	0.0189	0.0139	0.0102	0.0075	0.0055	0.0017	0.0005	*	*
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323	0.0234	0.0169	0.0123	0.0089	0.0065	0.0048	0.0014	*	*	*
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0007	*	*	*
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	*	*	*	*

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at k Percent for n Periods: $PVIFA = [1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3616	2.1662
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	2.9906	2.7454	2.6893	2.4356
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.1925	3.6819	3.5705	3.0915
11	10.368	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.3271	3.7757	3.6564	3.1473
12	11.255	10.575	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.4392	3.8514	3.7251	3.1903
13	12.134	11.348	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	4.5327	3.9124	3.7801	3.2233
14	13.004	12.106	11.296	10.563	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	4.6106	3.9616	3.8241	3.2487
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	4.6755	4.0013	3.8593	3.2682
16	14.718	13.578	12.561	11.652	10.838	10.106	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.6685	4.7296	4.0333	3.8874	3.2832
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	4.7746	4.0591	3.9099	3.2948
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.8178	4.8122	4.0799	3.9279	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982	5.8775	4.8435	4.0967	3.9424	3.3105
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	4.8696	4.1103	3.9539	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	4.8913	4.1212	3.9631	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	4.9094	4.1300	3.9705	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	4.9245	4.1371	3.9764	3.3254
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	4.9371	4.1428	3.9811	3.3272
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	4.9476	4.1474	3.9849	3.3286
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.1772	4.9789	4.1601	3.9950	3.3321
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.6442	8.8552	8.1755	7.5856	7.0700	6.6166	6.2153	4.9915	4.1644	3.9984	3.3330
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.6765	8.8786	8.1924	7.5979	7.0790	6.6231	6.2201	4.9929	4.1649	3.9987	3.3331
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	4.9966	4.1659	3.9995	3.3332
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	9.0417	8.3045	7.6752	7.1327	6.6605	6.2463	4.9995	4.1666	3.9999	3.3333

Operations Research Formulae Sheet

1. Calculus

1.1 Common Derivatives

$F(x)$ function	$F'(x)$ Derivative
K = Constant	0
x^n	nx^{n-1}
$sin(x)$	$cos(x)$
$cos(x)$	$-sin(x)$
$tan(x)$	$sec^2(x)$
e^{ax}	ae^{ax}

1.2 Derivative of a Sum (Difference) of Functions

$$\frac{dy}{dx} = \frac{du}{dx} \pm \frac{dv}{dx} \tag{1}$$

1.3 Derivative of a Product of Two Functions

$$\frac{dy}{dx} = u\frac{dv}{dx} \pm v\frac{du}{dx} \tag{2}$$

1.3 Derivative of a Quotient of Two Functions

$$\frac{dy}{dx} = \frac{v\frac{du}{dx} - u\frac{dv}{dx}}{v^2} \tag{3}$$

1.4 Derivative of a Composite Functions

$$\frac{dy}{dx} = \frac{dy}{du} \times \frac{du}{dx} \tag{4}$$

1.5 Basic Intergation Formulae

$$\int k dx = kx + c, \quad k \text{ is a constant} \tag{5}$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + c, n \neq -1 \tag{6}$$

$$\int e^x dx = e^x + c \tag{7}$$

$$\int kf(x)dx = k\int f(x)dx, \quad k \text{ is a constant} \tag{8}$$

$$\int [f(x) \pm g(x)] = \int f(x)dx \pm \int g(x)dx \tag{9}$$

$$\int sin(x)dx = -cos(x) + c \tag{10}$$

$$\int cos(x)dx = sin(x) + c \tag{11}$$

$$\int sec^2(x)dx = tan(x) + c \tag{12}$$

1.6 Growth Model

$$P(t) = P(0)e^{Kt} \tag{13}$$

2. Approximations

2.1 The Newton-Raphson Method

$$x_{n+1} = x_n - \frac{f(x_n)}{f'(x_n)} \tag{14}$$

2.2 Trapezium Rule

$$\int_b^a f(x)dx \approx \frac{h}{2}[f(a)+2f(a+h)+2f(a+2h)+\ldots+2f(a+(n-1)h)+f(b)] \tag{15}$$

where $h = \frac{b-a}{n}$

2.3 Simpson's Rule

$$\int_b^a f(x)dx \approx \frac{h}{3}[f(a)+4f(a+h)+2f(a+2h)+\ldots+4f(a+(n-1)h)+f(b)] \tag{16}$$

where $h = \frac{b-a}{n}$ and n is even.

2.4 Maclaurin's Series

$$f(x) = f(0) + f'(0)x + \frac{f''(0)x^2}{2!} + \frac{f'''(0)x^3}{3!} + \ldots + \frac{f^n(0)x^n}{n!} + \ldots \tag{17}$$

2.5 Taylor's Series

$$f(x) = f(a) + f'(a)(x-a) + \frac{f''(a)(x-a)^2}{2!} + \frac{f'''(a)(x-a)^3}{3!} + \ldots + \frac{f^n(a)(x-a)^n}{n!} + \ldots \tag{18}$$

3. Project Management

3.1 Forward pass

$$ES_j = max(ES_i + D_{ij}) \text{for all } ij \tag{19}$$

where ES_i is the Earliest Start Time and D_{ij} is the duration of activity ij.

3.2 Backward pass

$$LC_i = min(LC_j - D_{ij}) \text{for all } ij \tag{20}$$

where LC_i is the Latest Completion Time

3.3 Total Float

$$TF_{ij} = LC_j - EC_{ij} \tag{21}$$

where EC_{ij} is the Earliest Completion time

3.3 Free Float

$$FF_{ij} = (ES_j - ES_i) - D_{ij} \tag{22}$$

4. Game Theory

4.1 Solution of Game Problems Using Probabilities

4.1.1 Player 1 Probabilities

$$p_1 = \frac{a_{22} - a_{21}}{a_{11} - a_{12} - a_{21} + a_{22}} \tag{23}$$

$$p_2 = 1 - p_1 = \frac{a_{11} - a_{12}}{a_{11} - a_{12} - a_{21} + a_{22}} \tag{24}$$

4.1.2 Player 2 Probabilities

$$q_1 = \frac{a_{22} - a_{12}}{a_{11} - a_{12} - a_{21} + a_{22}} \tag{25}$$

$$q_2 = 1 - p_2 = \frac{a_{11} - a_{21}}{a_{11} - a_{12} - a_{21} + a_{22}} \tag{26}$$

4.1.3 The Value of the Game

$$V = \frac{a_{11}a_{22} - a_{12}a_{21}}{a_{11} - a_{12} - a_{21} + a_{22}} \tag{27}$$

4.2 Solution of Game Problems Matrix Algebra

4.2.1 Player 1 Probabilities

$$[P_1, P_2] = \frac{[1\ 1][adj\ A]}{[1\ 1][adj\ A]\begin{bmatrix} 1 \\ 1 \end{bmatrix}} \tag{28}$$

where $A = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$ and $adj\ A = \begin{bmatrix} a_{22} & -a_{12} \\ -a_{21} & a_{11} \end{bmatrix}$

4.2.1 Player 2 Probabilities

$$[Q_1, Q_2] = \frac{[1\ 1][adj\ A]^T}{[1\ 1][adj\ A]\begin{bmatrix} 1 \\ 1 \end{bmatrix}} \tag{29}$$

where $A = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$ and $adj\ A^T = \begin{bmatrix} a_{22} & -a_{21} \\ -a_{12} & a_{11} \end{bmatrix}$

4.2.3 Value of the Game

$$\frac{det[A]}{[1\ 1][adj\ A]\begin{bmatrix} 1 \\ 1 \end{bmatrix}} \tag{30}$$

where $A = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$ then $det[A] = a_{11}a_{22} - a_{12}a_{21}$

5. Decision Analysis

5.1 Binomial Probabilities

$$p(x) = P(X = x) = P(Z_j/a_j) = {}^{n}C_x p^x (1-p)^{n-x} \quad (31)$$

5.2 Laplace Criterion

$$Max_{ai} \frac{1}{n} \sum_{i=1}^{n} V(a_i, Q_j) \qquad \text{If Profit} \quad (32)$$

$$Min_{ai} \frac{1}{n} \sum_{i=1}^{n} V(a_i, Q_j) \qquad \text{If Loss} \quad (33)$$

Where V stands for value

$\frac{1}{n}$ is one probability that $Q_j\{1, 2, \ldots, n\}$ occurs

5.3 Savage Minmax Regret Criterion

If V is profit

$$r(a_i, Q_j) = max_{ak}(V(a_k, Q_j) - V(a_i, Q_j)) \quad (34)$$

If V is loss

$$r(a_i, Q_j) = V(a_i, Q_j) - min_{ak}(V(a_k, Q_j)) \quad (35)$$

5.4 Hirwicz Criterion

If $V(a_i, Q_j)$ represents profit

$$Max_{aj}\,(k\, max_{aj}(V(a_i, Q_j)) + (1-k) min_{af}(V(a_f, Q_j))) \quad (36)$$

If $V(a_i, Q_j)$ represents loss

$$Min_{aj}\,(k\, min_{aj}(V(a_i, Q_j)) + (1-k) max_{af}(V(a_e, Q_j))) \quad (37)$$

where k is the index of optimism.

6. Inventory Analysis

6.1 Simple Ordering Inventory Model

$$\text{Total Annual Cost, } TC(Q) = C_1 D + C_2 \frac{D}{Q} + C_3 \frac{Q}{2} \quad (38)$$

Where C_1 = Unit cost per item
C_2 = purchasing (ordering) cost or fixed cost per order
C_3 = Holding cost
D = Annual demand
Q = Purchase order quantity

$$\text{Optimal Order Quantity, } Q^* = EOQ = \sqrt{\frac{2C_2D}{C_3}} \qquad (39)$$

6.2 Simple Ordering Inventory Model with Shortages
Total Annual Cost

$$TC(Q) = C_1D + C_2\frac{D}{Q} + \frac{C_3}{2Q}(Q-S) + C_4\frac{S^2}{2Q} \qquad (40)$$

Where C_1, C_2, C_3, D and Q are as defined in 1.1
and S = Shortages
C_4 = Shortage cost per unit

$$\text{Optimal Order Quantity with Shoratges, } Q^* = EOQ = \sqrt{\frac{2C_2D}{C_3}}\sqrt{\frac{C_3+C_4}{C_4}} \qquad (41)$$

where

$$S = \sqrt{\frac{2C_2D}{C_3}}\sqrt{\frac{C_4}{C_3+C_4}} \qquad (42)$$

6.3 Simple Economic Production Model
Total annual cost

$$TC(Q) = C_1D + C_2\frac{D}{Q} + C_3\frac{Q}{2}\left(1-\frac{Q}{R}\right) \qquad (43)$$

Where C_1 = Unit cost per item
C_2 = Set-up cost
C_3 = Holding cost
D = Annual demand
Q = Purchase order quantity
R = Replacement rate

Optimal Order Quantity, $Q^* = EOQ = \sqrt{\dfrac{2C_2D}{C_3\left(1-\frac{D}{R}\right)}}$ (44)

6.4 **Simple Economic Production Model with Shortages**
Total Annual Cost

$$TC(Q) = C_1D + C_2\frac{D}{Q} + \frac{C_3D}{2Q}\left(Q\left(1-\frac{D}{R}\right)-S\right)\left(\frac{1}{R-D}+\frac{1}{D}\right) + \frac{C_4S^2}{2}\left(\frac{1}{R-D}+\frac{1}{D}\right) \quad (45)$$

Where C_1, C_2, C_3, D, Q and R are as defined in 1.3
and S = Shortages
C_4 = Shortage cost per unit

Optimal Production Quantity with Shortages, $Q^* \sqrt{\dfrac{2C_2D}{C_3\left(1-\frac{D}{R}\right)}}\sqrt{\dfrac{C_3+C_4}{C_4}}$ (46)

and

$$S = \sqrt{\left(\frac{2C_2D}{C_3}\right)\left(1-\frac{D}{R}\right)\left(\frac{C_4}{C_3+C_4}\right)} \quad (47)$$

7. 7.1 **For Simple Interest**

$$S = P(1+vt) \quad (48)$$

7.2 **Simple Discount Note**

$$P_r = M(1 - dt) \quad (49)$$

7.3 **For Compound Interest**

$$S = P\left(1+\frac{V}{m}\right)^{mt} = P(1+i)^n$$

7.4 **For Effective Rate with no Continuous Compounding**

$$\text{Effective rate} = \left(1+\frac{v}{m}\right)^m - 1 \quad (50)$$

7.5 For Continous Compounding

$$S - Pe^{rt} \tag{51}$$

7.6 For Effective Rate with Continuous Compounding

$$\text{Effective rate} = e^{r} - 1 \tag{52}$$

7.7 Future Value for an Ordinary Annuity

$$S = \frac{R((1+i)^n - 1}{i} \tag{53}$$

7.8 Periodic Payment for an Annuity

$$R = \frac{S(i)}{(i+i)^n - 1} \tag{54}$$

7.9 Sinking Fund Payments

$$S = \frac{R(1+i)^n - 1}{i} \tag{55}$$

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THE UNIVERSITY OF ZAMBIA

MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA502: SUPERVISION OF EDUCATIONAL PERSONNEL

March 2017

Time: 3 Hours

INSTRUCTIONS
Answer **THREE** questions only. All questions carry equal marks.
You are advised to spend 1 hour on each of your answers.
You will be penalised for repeating material used to answer another question.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.
Answer all questions in the Answer Books provided

QUESTIONS

1. Analyse the suitability of the Scientific Supervision Model in an educational institution of your choice. [100]

2. Effective supervision is the cornerstone of effective and efficient organisational performance. Assess the validity of the above statement. [100]

3. Discuss the place of data collection analysis and interpretation during the supervisory process. [100]

4. Critically examine the role of the supervisor in curriculum change. [100]

5. Discuss the extent to which the Zambian teacher organisations have bargained for equal employment opportunities to ensure non-discrimination in hiring of staff on the basis of sex, race, religion or ethnic origin. [100]

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA503: EDUCATIONAL PLANNING

March 2017

Time: 3 Hours

INSTRUCTIONS
Answer **THREE** questions only. All questions carry equal marks.
You are advised to spend 1 hour on each of your answers.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.
Answer all questions in the Answer Books provided

QUESTIONS

1. Discuss the extent to which the Malthusian Theory of population is relevant to the success of Zambian educational planning. [100]

2. Discuss how demographic trends have negatively impacted on the provision of quality education in Zambia. [100]

3. Discuss the nature of the unemployment problem in developing nations. Suggest the role that educational planning can play in reducing unemployment in your country. [100]

4. Examine the extent to which the Zambian education system has been influenced by the Social Demand and the Manpower Forecasting Approach. [100]

5. Evaluate the view that Educational Planning and Economic Planning are inseparable. [100]

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA503: EDUCATIONAL PLANNING

April 2017

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks.

You are advised to spend **one hour** on each of your answers.

You will be penalised for repeating material used to answer another question.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

Answer all questions in the Answer Books provided

QUESTIONS

1. Examine the validity of the assertion that the manpower approach remains the most rational model for educational planning. [100]

2. Discuss the extent to which increased expenditure on education in your country might contribute to a faster rate of economic development. [100]

3. Measuring social demand is almost always extremely difficult and often impossible. Discuss the extent to which the above assertion is true. [100]

4. What is the role of non-formal education in development and social change? [100]

5. Assess the extent to which educational planning influences policy and decision- making in an educational establishment. [100]

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA508: ECONOMICS OF EDUCATION

April 2017

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks.

You are advised to spend **one hour** on each of your answers.

You will be penalised for repeating material used to answer another question.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

Answer all questions in the Answer Books provided

QUESTIONS

1. Discuss **any four** economic tools relevant for effective management of educational institutions in your country. [100]

2. Compare and contrast micro and macro-economics in relation to their role in education in your country. [100]

3. Critically examine the economic implications of educational reforms in your country. [100]

4. Evaluate the role of the "Human Capital Theory" in the development of education in your country. [100]

5. Analyse with specific reference to your own country how education has transformed rural development. [100]

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA512: MANAGEMENT OF INFORMATION SYSTEMS

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **THREE** questions only. All questions carry equal marks.
You are advised to spend **one hour** on each of your answers.
You will be penalised for repeating material used to answer another question.
Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.
Answer all questions in the Answer Books provided

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MASTER OF EDUCATION (EDUCATIONAL MANAGEMENT)

MDEA520: COMPARATIVE EDUCATION

April 2017

Time: 3 Hours

INSTRUCTIONS

Answer **THREE** questions only. All questions carry equal marks.

You are advised to spend **one hour** on each of your answers.

You will be penalised for repeating material used to answer another question.

Credit will be given for answers that are clear, concise, cogent and drawing on relevant examples and illustrations from practice.

Answer all questions in the Answer Books provided

QUESTIONS

1. Discuss **any four** interventions that have transformed education in your country. [100]

2. In what ways does the education system in your country compare with that of the United Kingdom? [100]

3. Compare and contrast the curriculum of your country and that of any other country of your choice. [100]

4. Show how Dependency and Post Modernism Theories of comparative education apply to your country's education system. [100]

5. The education system of a former colony is largely a replica of the colonial power. Discuss the assertion citing examples from any two countries of your choice. [100]

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FACULTY OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF COUNSELLING

MSCC504 GENDER ISSUES IN COUNSELLING

MARCH 2017 EXAMINATION MARKING GUIDE

1. Analyse gender issues that require counselling when women manage men at the workplace.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARK
A	**Introduction** Is clear and to the point	3
B	**Definition of key terms** • Gender issues • Counselling	4
C	**Main discussion** Use these and any other relevant views from the student: • Over-time allowances when men feel that women should not have it because of the belief that they are unable to withstand the length hours at work. • Going out of the demands of work ethics as men would feel that women should not over-ride them. • Changing policies to suit men as an attempt to frustrate the woman • Managers are usually going for meetings therefore the male assistant manager can instigate some conflicts to sabotage the woman manager. • Sexual harassment when some men would want to seek favour through establishing relationships with the woman manager so as to weaken her authority on them.	30
D	**Conclusion** Summary of the body	3
E	**Total**	**40**

2. Examine the socio-cultural influences on gender roles that lead people to seek counselling.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARK
A	**Introduction** Short and to the point by highlighting the focus of the question.	3
B	**Definition of key terms** • Culture • gender role	4
C	**Main discussion** Accept these and any other relevant views that the student points out: • Excessive labour on women when men deliberately go out drinking. • Draining family's hard-won resources on unprofiting activities by men. • Failing to balance education on children when men would feel that it is not their role to educate a girl-child. • In patriarchal systems men dominate even on the agricultural produce which the wives and children suffered for. • Supporting roles-it is the role of men to support wives. Men may fail to do so and this creates conflicts which need counselling.	20
D	**Conclusion** Gives the summary of the body	3
E	Total	**30**

3. Evaluate the policy on confidentiality and HIV and AIDS in your country.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARK
A	**Introduction** Highlights the pertinent issues for the discussion	3
B	**Definition of key terms** • confidentiality • HIV and AIDS	4
C	**Main discussion** Accept these and any other relevant views from the student: • Voluntary self-disclosure of HIV infection- sexual partner should disclose to another partner but partner notification raises issues of ethics and moral dilemma due to the duty to warn those at risk. • Confidentiality of patients' information-Medical personnel are required to keep the patients' information confidential. In some cases this is breached through partner notification. • Exceptions to the partner's right to privacy-Although client's information should be kept confidential , there are exceptions when this can be breached e.g. when the law demands the information • Domestic Violence Act- this prohibits any form of domestic violence. However not all people receive the information. Culture also sometimes inhibits reporting such cases because it condones it. • Marriage laws-while there are dangers that unregistered and registered customary union is polygynous and multiple partners. There is a high possibility of infecting the whole chain of women if one is infected.	20
D	**Conclusion** A summary of the body which provides the writer's view	3
E	Total	**30**

4. Discuss the counselling needs for women who have been exposed to HIV and AIDS through domestic violence.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARK
A	**Introduction** Highlights the clear focus of the body	3
B	**Definition of key terms** • Counselling • Domestic Violence	4
C	**Main discussion** Accept these and any other relevant points raised by the student: • HOPE FOR LIFE-encourage the women to believe that they can live longer if they seek relevant treatment and information on sero-positivity. • SELF-BLAME- they tend to blame themselves because they did not resist the enemy. Restore their ego to believe that they are still alive • TREATMENT- Encourage early treatment and advocate for life. • REINFECTION-educate the clients on the use of safe sex e.g. use of condoms. • POOR HEALTH-encourage the clients to regularly seek advice from the health personnel.	20
D	**Conclusion** The summary of the body	3
E	Total	**30**

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DEPARTMENT OF COUNSELLING

MSCC520 EDUCATION AND EMPLOYMENT COUNSELLING

MARCH 2017 EXAMINATION MARKING GUIDE

1. Examine the impact of a child with a disability on a family and the community.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARKS
A	**Introduction** It establishes the main issues for the discussion.	3
B	**Definition of terms** • Disability • Community	4
C	**Main discussion** **Impact of a child with a disability on a family** • Living with a disabled child can have profound effects on the entire family–parents, siblings, and extended family members. It is a unique shared experience for families and can affect all aspects of family functioning. • On the positive side, it can broaden horizons, increase family members' awareness of their inner strength, enhance family cohesion, and encourage connections to community groups or religious institutions. • On the negative side, the time and financial costs, physical and emotional demands, and logistical complexities associated with raising a disabled child can have far-reaching effects as we describe below. • The impacts will likely depend on the type of condition and severity, as well as the physical, emotional, and financial wherewithal of the family and the resources that are available. • For parents, having a disabled child may increase stress, take a toll on mental and physical health, make it difficult to find appropriate and affordable child care, and affect decisions about work, education/training, having additional children, and relying on public support. • It may be associated with guilt, blame, or reduced self-esteem. • It may divert attention from other aspects of family functioning. • The out-of-pocket costs of medical care and other services may be enormous. All of these potential effects could have repercussions for the quality of the relationship between the parents, their living arrangements, and future relationships and family structure. • Having a disabled child may also affect parents' allocation of time and financial resources to their healthy and unhealthy children, their	15

	parenting practices, their expectations of healthy siblings in terms of achievement, responsibility, and short- and long-term contributions to the household, and the siblings' health and development. • Finally, having a disabled child in the family may affect the contributions of time and financial resources on the part of the child's grandparents or other extended family members, the relationships of those individuals to the core family, and the financial, physical, and emotional well-being of those family members. All of these potential effects on families have implications for the health and well-being of disabled children. • Families appear to go through four periods of extreme stress during the development of their child with disability • Process of identification of loss • Entrance into the school situation • Beginning adolescence • Early adulthood **Impact of a child with a disability on a the community** • There is a lot of stigmatization and discrimination of such children with disabilities from the community • Communities view people with disabilities as a curse caused by the parents or other close family members • Denial to educational institutions by the community • Children will develop low self esteem from an unresponsive community to their needs • Accessibility to certain facilities in the community for those with disabilities is high • Acceptance of children with disabilities from the community is disturbed	15
D	**Conclusion** It gives the writer's view.	3
E	Total	**40**

2. To what extent do vocational training services assist and address challenges in the management of students with disabilities in your community.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARKS
A	**Introduction** It points out to the focus of the body.	3
B	**Definition of terms** • Vocational Training • Disability	4
C	**Main discussion** • Vocational training services are essential for the successful transition from school to adult life. Vocational training is the best known 'time limited' transitional service for students with disabilities and should be introduced early in the students' education. • Vocational training should be reserved for adolescent students with disabilities. E.g. vocational activities like home Economics, Agriculture, Woodwork. These should be progressively intensified and developed throughout secondary education. • School based simulated work settings are required to extend the vocational preparedness of students with disabilities through engaging them in specific work conditions and tasks. They provide a solid basis for job pre-requisites, experiences and ethics. • Sheltered workshops prepare students with disabilities for community sheltered employment. They provide basic benchmark skills to help students with moderate to severe disabilities. • Vocational training for students with disabilities in small communities tend to be orientated towards sheltered employments is may discourage their integration into the mainstreaming employment. Such isolation can be minimized by employing persons without disabilities at the sheltered workshops. Competitive employment is the most desirable option of vocational training services. • Vocational training for competitive employment should be carried out in integrated settings within business and industrial setups found in the local community are most favourable if conducted within the local community. • People with disabilities require vocational training more than other people because of their disability conditions. Vocational training should match the individual's capacities and conditions. • Training opportunities for people with disabilities should consider aspects of compatibility, accessibility, essential personal and environmental adjustments and adaptations, teaching and learning methods, gender issues and parental role in the desired employment. • Training opportunities should focus on vocational inclusivity of people with disabilities in their communities.	20
D	**Conclusion** It is the summary of the body.	3
E	Total	**30**

3. Analyse how behavior modification techniques may be applied to persons who are mentally challenged.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARKS
A	**Introduction** It introduces the focus of the body	3
B	**Definition of terms** • Mentally challenged • Behaviour modification	4
C	**Main discussion** • The philosophy of the behavioural model is that the inner causes or underlying conditions are not important determinants of behaviour; it emphasizes the role of learning. • Information about the behaviour of a person is obtained through systematic observation and facilitates an account comprising of performance before, during and after training. A base- line is a record of existing behaviour before training takes place and usually refers to a specific behaviour. Time sampling and continuous observation are the commonly used methods. • A number of techniques may be used to strengthen existing behaviour or develop new behaviour. The more commonly used techniques include shaping, progressive and backward chaining, prompt and fade and modeling. The choice of technique is usually influenced by the nature of the skill that is being taught, the degree of disability and the skill of the teacher. • In objective terms the process of describing behaviour considers its frequency, rate and duration. Similarly this process is applied in exactly the same way to inappropriate behaviour. After a base-line recording the target behaviour is identified and an appropriate technique for managing the behaviour is decided on. • The techniques that may be used to reduce or weaken behaviour include; extinction, time out, response cost, shaping incompatible behaviours, punishment and many others.	20
D	**Conclusion** It summarises the body.	3
E	Total	**30**

4. Discuss challenges faced in disability management in an education or employment setting and suggest how counselors may minimize them.

ASPECT	KNOWLEDGE, SKILLS AND CONCEPT	MARKS
A	**Introduction** It is focused, short and precise.	3
B	**Definition of terms** • Disability management • Education	4
C	**Main discussion** • Discrimination and stigmatization challenges are rife both in the education and employment setting when faced with people with disabilities • People with disabilities are often denied access to information on employment as society often sees them not as potential employees. • Rehabilitation counsellors have a responsibility to ensure that people with disabilities get access to information regarding employment. The information may be about entry requirements or other employment benefits and rights at the workplace such grievance reporting procedures, lodging complaints access to leave and HIV & AIDS issues at the workplace. • Information is said to be a powerful tool therefore denying people with disability information is actually disempowering them. • People with disabilities live in a completely different world from the one the rest of the society lives in,.....a world of shattered hopes, a world of relentless misery, a world of thwarted dreams • Inadequacy of legislation to protect those people with disabilities when they seek for employment or educational opportunities	20
D	**Conclusion** It is the summary of the body.	3
E	Total	**30**

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL502: PSYCHOLOGY OF PEACE AND CONFLICT MANAGEMENT

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Citing examples from real life situations, discuss how the theory of planned action attempts to explain the disparity between attitudes and behaviour. [40]

Optional Questions: Answer any TWO questions

2. Critically examine the decision making procedures in a group. Cite relevant examples. [30]

3. Discuss the merits of positional bargaining over integrative bargaining. Cite relevant examples. [30]

4. "Conflict transformations are viewed as progressive approaches in handling disputes at different levels of conflict". Comment. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL503: PEACE, GENDER AND CONFLICT RESOLUTION

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Article 28 of the SADC Declaration on Gender and Development addresses the issues of peace building and conflict resolution. Discuss using relevant examples the prescription to this declaration. [40]

Optional Questions: Answer any TWO questions

2. Discuss using relevant examples the four poles of reconciliation as outlined by Lederach. [30]

3. Women and gender relations were normally under following categories, social, economic, political and psychological. Discuss the above in relation to Zambia citing relevant examples. [30]

4. A good number of the scholars are of the opinion that the continent needs the shift of the aid effectiveness debate towards the development effectiveness agenda. Critically analyse the above statement in relation to some of the agreed principles.

   (a) Budgeting for gender equality
   (b) Mutual accountability
   (c) Alignment
   (d) Managing for results [30]

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IN COLLABORATION WITH

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL514: PEACE EDUCATION AND THE MEDIA

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. The United Nations is an international organisation found after the World War II in 1945. Using specific examples what has been the successes and challenges of the UN in relation to:

   (a) Monitoring of world peace
   (b) Development of good relations between and among countries
   (c) Promoting cooperation in solving world problems [40]

Optional Questions: Answer any TWO questions

2. Critically discuss the notion of human rights and development in peace education. [30]

3. Discuss the improvement you would like to see towards building information dissemination in the Zimbabwean media industry. [30]

4. Analyse the concept that since most religions have peace entrenched in their holy books, religion can easily be used as an instrument for peace education among young persons as well as other followers. Discuss. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL515: ETHICS OF PEACE AND CONFLICT MANAGEMENT

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. With reference to examples, outline the relationship between "direct and structural violence" and negative and positive peace. [40]

Optional Questions: Answer any TWO questions

2. Oil has been a major source of conflict in Africa. Discuss. [30]

3. Critically discuss the concept of strategic non violence towards ending violent campaigns. [30]

4. Critically discuss cosmopolitanism theory, political realism theory and the international theory showing to what extent they can be used to shape future of peace ethics. [30]

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MASTER OF SCIENCE IN PEACE, LEADERSHIP AND CONFLICT RESOLUTION

MSPL517: AFRICAN PHILOSOPHIES OF PEACE AND JUSTICE

April 2017

Time: 3 Hours

INSTRUCTIONS
Answer **question one** and **any other two** questions.
Credit will be given for answers that are clear, concise and coherent.
Credit will be awarded for good presentation.

Questions

Question 1: Compulsory

1. Evaluate the extent to which retributive justice is effective in promoting peace building in Africa. [40]

Optional Questions: Answer any TWO questions

2. Discuss the impact of armed conflict on children. Cite relevant examples in any African country of your choice. [30]

3. To what extent can you cay the bashingantahe institution has been instrumental in solving disputes in Burundi? [30]

4. All religions have their accepted dogma or articles of belief, that followers must accept without question. Discuss this assertion. [30]