THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

2019/2020 ACADEMIC YEAR

POST GRADUATE

GSB 5011   CRITICAL THINKING AND SCIENTIFIC WRITING COURSE

GSB 5021   RESEARCH METHODS

GSB 5031   FINANCE FOR MANAGERS

GSB 5041   CORPORATE GOVERNANCE AND BUSINESS ETHICS

GSB 5052   ECONOMICS: FIRM AND GLOBAL PERSPECTIVES

HRM 6021   COMPENSATION AND PERFORMANCE MANAGEMENT

MAF 5022   STRATEGIC MANAGEMENT ACCOUNTING

MAF 6011   CRITICAL PERSPECTIVES IN ACCOUNTING

MAF 5120   CORPORATE FINANCE

MBA   INTERNATIONAL BUSINESS FINANCE

                    FINANCIAL REPORTING AND ANALYSIS COURSE

MBS 5012   QUANTITATIVE METHODS FOR BUSINESS

MBS 5022   STRATEGIC MANAGEMENT

MBS 6021   PROJECT MANAGEMENT

MSC 6031   OPERATIONS STRATEGY FOR INDUSTRY (OSI)

THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

2020 ACADEMIC YEAR

FINAL EXAMINATION

MASTER OF SCIENCE & MASTER OF BUSINESS ADMINISTRATION

BLENDED AND EVENING MAY 2020 COHORTS

GSB 5011: CRITICAL THINKING AND SCIENTIFIC WRITING COURSE

TIME: THREE (3) HOURS

DATE: 08 SEPTEMBER 2020

INSTRUCTIONS:

1. THIS EXAMINATION PAPER CONTAINS SEVEN QUESTIONS. QUESTION ONE IS COMPULSORY THEN YOU CAN ANSWER ANY OTHER FOUR QUESTIONS IN WHICH EVER ORDER.
2. EACH QUESTION CONTAINS 20 MARKS.
3. MAKE SURE THE STUDENT NUMBER IS CLEARLY INDICATED ON ALL BOOKLETS TOGETHER WITH THE QUESTIONS ATTEMPTED.
4. THE ANSWER FOR EACH QUESTION SHOULD BEGIN ON A NEW SHEET.
5. WHERE SPECIFIC INFORMATION IS NOT GIVEN, MAKE AND STATE YOUR ASSUMPTIONS.
6. MARKS WILL BE LOST FOR ILLEGIBLE, UNTIDY AND UNORGANISED PRESENTATION.
7. THE EXAMINATION IS STRICTLY CLOSED BOOK.
8. TOTAL MARKS FOR THIS EXAMINATION IS 100 BUT *CONTRIBUTES 60% TOWARD THE FINAL ASSESSMENT FOR THIS COURSE.[FOR EVENING GROUP]* AND 100% FOR BLENDED GROUP

QUESTION ONE [COMPULSORY QUESTION]

Extract from:

M. Mambwe, et al, Construction Subcontracting Policy Framework for Developing Local Contractors Capacities in Zambia, Journal of Construction Business and Management (2020) 4(1). 60-70 63.

While there are ethical issues to be considered in the construction industry, the Transparency International (2005) notes that the industry is classified as the most fraudulent industry worldwide. Studies carried out in various countries such as United States of America (USA) (FMI/CMAA, 2004; Jackson, 2013), Australia (Vee & Skitmore, 2003), South Africa (Pearl, et al., 2005), and Hong Kong (Fan & Fox, 2005) provide evidence that the construction industry is plagued with ethical issues due to its substantial capital investments (Adnan, et al., 2012). Additionally, Adman et al. (2012) stated that unethical practices can take place at every phase of a construction project, during planning and design, pre-qualification and tender, project execution and operation and maintenance. Such practices have been seen to result in projects which when completed, are considered unnecessary, unsuitable, overlay complex components, overpriced or delayed as postulated by Hamzah et al. (2010) Akintan and Morledge (2013) and Dainty et al. (2001). Within the Zambian construction industry, unethical issues arise from SME's tendency of selling their subcontracted portions back to main contractors (Muya & Mukumbwa, 2013).

1.1   Using the critical thinking principles of Intellectual Skills Essential to Close Reading, identify the first 10 main outcomes of close reading skills. (10 marks)

1.2   Read closely the paragraph extracted from the journal. Using the principles of Critical Thinking Intellectual Skills Essential to Close Reading, extract the gist of the paragraph in two sentences, each of which should not exceed 10 words. (10 marks)

[20 Marks]

QUESTION TWO

Journal

       International Journal of Public Sector Management

       Corporate governance and accountability of state-owned enterprises: Relevance for science and society and interdisciplinary research perspectives

       Giuseppe Grossi, Ulf Papenfu , Marie-Soleil Tremblay

       ISSN: 0951-3558

       Publication date: 11 May 2015

Book

Balanced Scorecard: for State-owned Enterprises: Driving Performance and Corporate Governance

Johnson, Christian C.; Beiman, Irv;

Thompson, John December 2007

Policy Paper

The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence

Policy Research working Paper

September 2004

https://doi.org/10.1596/1813-9450-3404

Article from conference proceedings

Comparison of the Clients, Consultant and Contractors Perspectives of Pre-Tender Unit Cost Factors in Zambia

Chipulu Chipulu, Erastus Mishengu Mwanaumo, Balimu Mwiya

27-30 September 2018

Protea Hotel, Livingstone, Zambia

Conference theme: *Creating an enabling infrastructure investment environment in Africa*

Conference: The Development and Investment in Infrastructure (DII) Conference Series

Editors: Mwanaumo E, Muleya F, Musonda I and Chiom Okoro

Using the four articles provided above, Show how you can record each of them in-text and in the references using Harvard referencing style. (4x5 mark)

[20 Marks]

QUESTION THREE

4.1   Identify atleast 10 Questions you can ask to discipline your thinking. (10 Marks)

4.2   Argue on what constitutes a Textual Analysis.   (5 marks)

4.3   What would you say are the components of an effective argument?   (5 marks)

[20 Marks]

QUESTION FOUR

| 5.1 | Distinguish Between Inferences and Assumptions | (10 Marks) |
| 5.2 | Discuss the five Critical thinking steps you need to take. | (2x5=10 marks) |

[20 Marks]

QUESTION FIVE

Universal intellectual standards are standards which must be applied to thinking whenever one is interested in checking the quality of reasoning about a problem, issue, or situation. To think critically entails having command of these standards.

Discuss the following essential standards of thinking.

| 6.1 | Breadth | 2 marks |
6.2	Logic	2 marks
6.3	Precision	2 marks
6.4	Relevance	2 marks
6.5	Depth	3 marks
6.6	Fairness	3 marks
6.7	Clarity	3 marks
6.8	Accuracy	3 marks

[20 Marks]

QUESTION SIX

Key Elements of the typical Discussion section and that of Literature review (introduction of the study) have similar content. Contrast them, providing details of their significant contrast?

[20 Marks]

QUESTION SEVEN

7.1	Identify atleast 8 Questions you should be asking in order to discipline your thinking.	($^1/_2$ x 8 = 4 Marks)
7.2	Distinguish Between Inferences and Assumptions.	(4 Marks)
7.3	Argue on what constitutes a Textual Analysis.	(4 marks)
7.4	What constitutes an effective argument? (Provide the components)	(4 marks)
7.5	Discuss the five Critical thinking steps you need to take.	($^1/_2$ x 8 = 4 Marks)

[20 Marks]
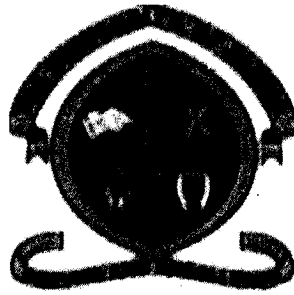
THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

POSTGRADUATE SESSIONAL EXAMINATIONS

RESEARCH METHODS – GSB 5021

MAY 2020 COHORT (BLENDED AND EVENING MODES)

DATE: 10 SEPTEMBER 2020   DURATION: 3 HOURS

INSTRUCTIONS

- Answer **ALL** the questions in **SECTION A**
- Choose **THREE** questions from **SECTION B**
- Use clearly labelled diagrams to illustrate your examples

SECTION A: COMPULSORY QUESTION

Read the following case study and answer **ALL** the questions below.

Your friend is doing his Master's dissertation. Because many companies have recently started to engage in sustainability activities, she is interested in knowing how consumers award sustainability with a more favourable attitude and/or behaviour. She has seen a recent study from the US conducted by Hartmann et al. (2013) and would like to know if the consumers in Zambia are similar. Hartmann et al. conducted an experiment with two groups to test the effect of companies' sustainability activities on consumers' attitude and behaviour. After the "treatment" the two groups of respondents filled out a questionnaire with a number of questions about their attitude and their behaviour and some control variables. Hartmann's study was based on a representative sample (in terms of age, gender and employment situation) of 1000 US inhabitants.

Your friend wants to replicate this study in the Zambian context and is thinking about the sample size. She is doing some part-time work at Greenpeace. So she approached her line manager about using employees as a sample since they are all consumers at the same time and they should be experts when it comes to sustainability activities, but her manager was reluctant to give permission. Nevertheless, she e-mailed the experimental treatment and the questionnaire to some colleagues (using the work e-mail) and has succeeded in getting thirty questionnaires completed through this method. Since these answers only represented the first group of the experiment, she felt that this did not give her a large enough sample, so she tried approaching people sitting in coffee bars at lunch time and made a face-to-face interview with them to fill up the second group. She succeeded in getting a further thirty-five questionnaires completed this way. Finally, she posted her questionnaire on Facebook and encouraged her friends to fill it in trying to add more respondents for experimental group one and some for experimental group two. She had forty completed questionnaires through this source. So overall she has 105 usable questionnaires 51 in group one and 54 in group two. She has input the data from all of these on to an Excel spread sheet to later transfer it to SPSS.

Here are some of the answers she got. And by the way your friend thought the initial questions from Hartmann et al. were too academic, so she adapted them to make them shorter and easier to answer for the respondents. The number of responses are received to each answer are in brackets (N=105).

1. Do you think sustainability is important?

Group 1:	Yes (51)	No (0)
Group 2:	Yes (49)	No (5)

2. Would you be willing to pay more for products that have sustainable attributes?

Group 1:	Yes (38)	No (3)	Blank (10)
Group 2:	Yes (35)	No (15)	Blank (2)

3. For those respondents, who answered yes to question 2: How much would you be willing to pay more?

Group 1:	Group 2:
1% more (28)	1% more (27)
2% more (3)	2% more (3)
3% more (2)	3% more (1)
5% more (0)	5% more (2)
10% more (2)	10% more (0)
Blank (3)	Blank (2)

Your friend was pleased to have completed her data collection. However, when she had a talk with her supervisor she was told that her data collection was inadequate. Certainly if she wanted to compare her data to those in the US survey by Hartmann et al she would need to re-do her survey. Also she found that the answer she got, does not really give her a clear picture, everybody thinks that sustainability is important, so companies should definitely do something about it, but she was also surprised that so many did not answer some of the questions. Showing her results to a colleague at Greenpeace, the colleague said that she is not surprised about the results.

a) Why do you think your friend's supervisor thought her data collection was inadequate? [5]
b) What errors do you feel she made in identifying and accessing her sample? [5]
c) Why do you think her supervisor said that she could not compare her data with those in the Hartmann et al. survey? [5]
d) Explain the procedure your friend should use in conducting this experiment. [10]
e) What statistical procedure can be used to analyse data of this experiment? [5]
f) What kind of scale was used? [5]
g) Why do you think some respondents have left out to answer some questions? [5]

[Total Marks= 40]

SECTION B (Answer Any 3 questions from this Section)

QUESTION 2

The development and implementation of policies by the Governments is guided by research. As a result, research has taken a key role in many governance and management practices and activities. Uto Research Academy (URA) is engaged in a number of research projects with public and private institutions. The role of URA is to train research assistants and conduct research for these institutions.

Using a schematic diagram, present to the public and private institutions the research process.

[20]

[Total Marks = 20]

QUESTION 3

The process of data analysis is an important stage in research methodology. This stage should be considered during the process of designing a literature review matrix. As a qualitative research analyst;

    a) Demonstrate with the aid of a diagram, the process of data analysis in qualitative research. [10]

    b) Outline five types of themes in exploratory analysis method. [5]

    c) Describe the role of constant comparative method [5]

[Total Marks = 20]

QUESTION 4

Neo Research Centre (NRC) is conducting a study on the factors that influence youths to participate in Sustainable Development Programmes. The research study will be conducted using the qualitative research approach in which different research strategies will be used. For this project, you have been appointed as the Lead Research Associate.

    a) Outline four research strategies applicable for this research approach. [4]

    b) Using examples, briefly explain each outlined research strategy to your research assistants. [16]

[Total Marks = 20]

QUESTION 5

An educational researcher is interested in the relationship between students' participation in two after school programs and academic achievement. She states the following hypothesis in the description of her study:

H.1: Children who participate in an after school program that emphasizes critical thinking skills will score higher on measures of academic achievement and self-esteem than students who participate in a program that emphasizes rote memorization.

a) Outline the variables in this study [4]
b) Propose good names for these variables [6]
c) Identify the independent variable(s) and dependent variable(s). [4]
d) Describe how each variable varies (i.e., whether the variable is categorical or continuous). [3]
e) Provide justification for why each variable varies the way you describe? [3]

[Total Marks = 20]

QUESTION 6

The Graduate School of Business has proposed dates for proposal presentations and you are one of the presenters. The presentation duration is scheduled for 10 minutes. Using a topic of your choice, illustrate precisely the ingredients of your research proposal. [20]

[Total Marks = 20]

END OF EXAMINATION
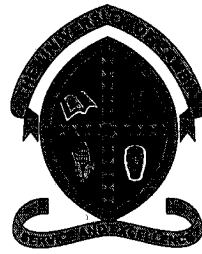
THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

Masters Final Examination

Friday, 11th September, 2020

GSB 5031: FINANCE FOR MANAGERS

Instructions

Time Allowed: **3 hours**

There are two sections in this paper, A and B. Section A is compulsory.

Section B consist of four questions and you are required to attempt any two questions.

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

SECTION A: COMPULSORY (ANSWER BOTH QUESTIONS)

QUESTION ONE

A Zambian manufacturing company is considering investing in a machinery worth K6.5million to produce a soft drink called 'KiKO' with a market life of four years. The production variable costs are K6 per unit and other overhead variable costs are K2 per unit. The annual incremental fixed costs are K1.65milion. The scrap value of the machinery is estimated to be K3million after tax at end of year four. The company expects to produce and sell 300,000 units per year. The estimated selling price for 'KiKO' is K25 per unit. The selling price and variable expenses are expected to increase annually by 8% and 6% respectively starting from the second year. The project minimum expected rate of return by investor is 12% whereas the average industrial cost of capital is 10%. Corporate tax is 30% per year.

Required

a) Calculate the NPV of the project and advise whether the investment is financially acceptable.

(12 marks)

b) Calculate the Internal Rate of Return (IRR) of the project and advise whether the investment is financially acceptable.

(7 marks)

c) State two (3) disadvantages of Payback Period and two (3) advantages of Accounting Rate of Return.

(6 marks)

[Total: 25 marks]

QUESTION TWO

COV Ltd and T19 Ltd are both engaged in retailing, but they seem to take a different approach. One of them prides itself on personal service and the other on competitive prices. The following financial information relates to the two companies:

Ratio	COV Ltd	T19 Ltd
Average settlement period for receivables	65 days	24 days
Average settlement period for payables	55 days	49 days
Gross profit margin	45%	20%
Net profit margin	15%	15%
Return on capital employed (ROCE)	30%	24%
Return on equity (ROE)	40%	30%
Inventories turnover period	58 days	29 days

Required:

a) Using the information above, analyse the performance of the two companies and indicate which one prides on personal service and the one which prides on competitive prices.   *(13 marks)*

b) Explain any seven (6) fundamental assumptions underlying the preparation of financial statements and their implication.

(12 marks)

[Total: 25 marks]

SECTION B: CHOOSE ANY TWO QUESTIONS

QUESTION THREE

a) DMJ Industries Ltd makes baskets. The fixed costs of operating the workshop for a month total K8,000. Each basket requires materials that cost K75. Each basket takes one hour to make, and the business pays the basket makers K120 an hour. The basket makers are all on contracts such that if they do not work for any reason, they are not paid. The baskets are sold to a wholesaler for K300 each.

   i)   Calculate the breakeven point for the business in units and revenue. *(4 marks)*

   ii)   Calculate the margin of safety (%) and comment. *(4 marks)*

   iii)   Discuss the usefulness to a manager of knowing the breakeven point. *(7 marks)*

b) Assuming DMJ Industries has spare capacity in that its basket makers have some spare time. An overseas retail chain has offered the business an order for 500,000 baskets at a price of K210 each.

   i) Without considering any wider issues, should the business accept the order? (Assume that the business does not rent the machine). *(3 marks)*

   ii) Discuss other factors that should be taken into account before the offer from the overseas is accepted.   *(7 marks)*

                                                                          [Total: 25 marks]

QUESTION FOUR

SUN Plc is considering a project requiring investment of K250, 000 in an equipment with a life of five years and a residual value of K40, 000. Annual net cash flows will be K105, 000, K98, 000, K65,000, K51, 000 and K20, 000 for the five years respectively. According to the company policy, a project with the payback period of 2.5 years or less is acceptable. The company has a target accounting rate of return (ARR) of 10%.

Required

i)   Calculate the ARR based on average investment and advise whether the investment is financially acceptable.   (12 marks)

ii)   Calculate the payback period and advise whether the investment is financially acceptable.
                                                                (7 marks)

iii)   Explain the concept of time value of money.   (6 marks)

                                                                [Total: 25 marks]

QUESTION FIVE

DoDG holding Plc sales three (3) products in three (3) different market sectors in Zambia. In a recent meeting, the Chief Financial Officer and Chief Marketing Officer discussed the pricing aspect of these products.

Product A: The market for this product is highly competitive and the product is ordinary. The major competitors add a profit margin of 15% on the production costs to determine the selling price. The average production costs are K250 per unit which is considered to be very high.

Product B: DoDG Plc controls over 98% of the market share for this product and its competitors are very small. The production costs are K350 per unit and the Chief Financial Officer has advised that a make-up of 30% on full cost should be added.

Product C: The market research recently conducted for this product indicated that most customers are interested in the quality and taste of the product. The average production costs are K250 per unit. Some customers are will to be charged 35% margin of the production costs and others 40% make-up on full cost.

Required

a) Recommend with reasons the appropriate pricing approach that DoDG Plc can adopt for pricing each of the three (3) products. (12 marks)
b) Determine the selling price of each of the three (3) products. (6 marks)
c) Discuss whether management accounting information is more important to an organisation compared with financial accounting information. (7 marks)

[Total: 25marks]

QUESTION SIX

a) Explain the bird in the hand theory and signalling theory in relation to the dividend policy. (6 marks)

b) Explain four types of dividend policies that a listed company can adopt. (8 marks)

c) Explain any two (2) ways in which a company may protect itself against foreign currency risk. *(4 marks)*

d) Explain the benefits of budgeting to you as a manager of an organisation. (7 marks)

[Total: 25 marks]

END OF PAPER

$$IRR = L\% + \frac{NPVL}{NPVL-NPVH} (H\% - L\%)$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where   r = discount rate

     n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15
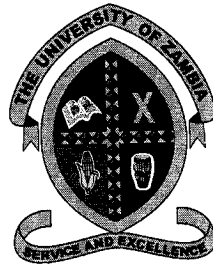
THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

CORPORATE GOVERNANCE AND BUSINESS ETHICS

GSB 5041

FINAL EXAMINATION

Monday, 7TH SEPTEMBER, 2020 　　　　　TIME 09:00 – 12:00 Hours

INSTRUCTIONS

1. This examination paper is divided into TWO Sections. Section A is compulsory and carries 50 marks.
2. Candidates should attempt TWO questions from Section B, all of which carry 25 marks each.
3. You should allow yourself approximately 90 minutes in total to answer the questions in Section A,
4. You should allow yourself approximately 45 minutes for each of the questions attempted in Section B.
5. Candidates are not permitted to bring any material into the examination
6. Candidates must not turn this page until the invigilator tells them to do so

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

Section A – This ONE question is compulsory and must be attempted

The National Football Federation (NFF) is the governing body of the game of football in the country of Eastland and is tasked with administering the rules of the game. The NFF is not a listed company and so is not subject to listing rules. However, as the regulator of the game, the NFF is expected to adopt governance arrangements which are in line with best practice for listed companies. Football is the most popular sporting activity in Eastland and all the national league football matches are televised. The right to televise games is also sold to other countries meaning that Eastland football games are seen by many people who enjoy the game around the world, giving the NFF a very high public profile.

The NFF is also responsible for all regulatory aspects of the game of football and one of its core aims is 'to govern the game effectively and maintain integrity'. The role of the football referee is critical in achieving this aim and being a referee is considered to be a key role by the NFF, as well as being important to the continued popularity of the game of football. A football referee is the person responsible for enforcing the laws of the game during each football match and is the final authority of all decisions on the football pitch, giving the referee a significant amount of discretion as to the interpretation of the laws of the game. The amount of authority and responsibility they have is equivalent to that of senior managers in a listed company. For this reason the referee role within the NFF is full time and prestigious.

The main board at the NFF delegates responsibility for referees to a referee subcommittee whose brief is to emulate the role and responsibility of board committees in a listed company. This means the committee is expected to follow best practice governance guidelines relating to the responsibility of the nomination, remuneration and audit committees in governance and apply the guidelines to the recruitment, remuneration and control of football referees and refereeing. Referees are supported by two assistant referees who are empowered to advise the referee in certain situations such as the ball going out of the field of play. However, the assistant referees' decisions are not binding and the referee has authority to overrule his assistants. This is one of the reasons why refereeing decisions are sometimes controversial.

Referees have autonomy in their choice of assistants for each game. The NFF believes that working with officials you are familiar with stimulates a better team spirit and the confidence to make the correct decisions and not to let your colleagues down. This should motivate the officials towards better performance during the game. The names of the officials for each match are normally released 28 days before any match takes place and this information is readily available to external parties. The referee subcommittee applies very general guidelines on what is required of a referee, believing that if you have a passion for the game you can become a referee. Referee appointments are often via word-of-mouth recommendations and are influenced by social connections and personal influence rather than meeting objective selection criteria. After an initial induction training course, which is delivered at local level and is not regulated by the NFF, there is no formal on-going training programme. Any changes to the laws or regulations of the game are distributed from the NFF to the local level of the football association whose responsibility it is to make sure individual referees are aware of the updates.

Although the NFF sees the role of a referee as prestigious, this is not reflected in their current pay structure. The reward package of a referee is substantially lower than equivalent senior management in listed companies. Many of the referees have expressed their resentment on the disparities to the NFF, but this has never been addressed. Referees are facing the lowest level of year on year pay increases in Eastland at just 0·1%. Equivalent positions in listed companies, and footballers playing in the national league in Eastland, are expected to receive on average a 15% increase year on year. Referees are paid around one-tenth of the average wage of the footballers playing in the national league. Despite the apparent disparity in

earnings, many of the referees live in very expensive houses and live lavish lifestyles, well beyond their apparent means.

The NFF has faced a number of criticisms in the press in recent months. One criticism refers to the corruption of football referees. The referees have been accused of match fixing. Match fixing generally refers to influencing the final result of the game. One form of match fixing is where the referee favours one side throughout the match in exchange for a fee so that the outcome of the game is effectively agreed before the match starts. The referee can influence the outcome by adding on more extra time than justified, awarding penalties unfairly or disallowing legitimate goals. The referee has complete autonomy over the game which means that any decision made during the game is not questioned and the referee's decision is final. National league football clubs cannot appeal against any decision made by the referee. The media has also criticised the lack of use of readily available technology within the sport of football in Eastland. Technology used in many other sports is increasing rapidly but the sport of football has been slow to incorporate the use of technology. The technology could be used to enable the referee to make the correct decisions.

The NFF believes there is no value in technology and suggests that it will reduce the viewing experience for spectators who, it believes, are more concerned about respecting the game's traditions. A goal decision system is used in other parts of the world to rule on whether the ball has crossed the line when a goal is awarded. This supports better decision making, but this is not currently used in Eastland. The media highlighted the NFF's failure to govern the game effectively and its inability to maintain integrity in its operations, which the NFF promotes as core values. In an effort to address the criticisms, the NFF has recently appointed a Football Regulation and Administration Director. The Administration Director will oversee areas of discipline and governance within the NFF, and the game of football, which includes responsibility for football match refereeing.

The media believes that as a governing body the NFF is weak and has organisational shortcomings which are leading to control failures and that the NFF is tolerant of breaches in governance and turns a blind eye to corrupt practices. This is contributing to the poor performance of referees and their inability to make the correct decisions.

The new Football Regulation and Administration Director went on television to explain that in his new role he would be drawing on his previous experience of board positions of listed companies. This will influence his approach to governance and ethics at the NFF. He said that there appears to be a culture of carelessness at the NFF and that parts of the organisation are too autonomous, without any effective internal or external oversight. He supports the NFF's view that the role of a referee should be considered as responsible as senior managers of a listed company, due to the great responsibility they bear. He recognised the failings of the referee subcommittee and is concerned that it is composed of ex-footballers with little prior management experience. He stated that the NFF could learn from the governance required of listed companies. He believes that more rules related to conduct on and off the field will be needed and that his priority is to review the governance, ethics and internal controls within the NFF and the role of the referee subcommittee in overseeing the changes.

Required:

(a) **Explain the important role which board committees have in governance and critically assess the governance arrangements of the referee subcommittee in recruiting, remunerating and controlling referees.** **(10 marks)**

(b) **Discuss the conditions which currently exist at the NFF which make the referees and their officials vulnerable to corruption.** **(8 marks)**

(c) Critically evaluate the general purposes of an internal control system and recommend control measures which could be implemented to ensure the overall control environment and the refereeing of football matches at the NFF is improved. **(12 marks)**

(d) Prepare briefing notes for the newly appointed Football Regulation and Administration Director in readiness for the next board meeting. The notes should:

   (i) Explain the importance of independence in refereeing decisions to football supporters. **(4 marks)**

   (ii) Assess the damaging effect any suspicion of bribery and corruption of match officials can have on the NFF, and the wider reputation of the game of football. **(6 marks)**

   (iii) Discuss the benefits and contents of a professional code of ethics which could be used by referees at the NFF. **(6 marks)**

Professional marks will be awarded in part (d) for clarity, persuasiveness, tone and flow of the briefing notes. **(4 marks)**

(50 marks)

Question 2

Mr. White Nchito is a Deputy Managing Director in a large corporation, Moon Limited. As part of his duties, he supervises fifteen managers; fourteen of these managers are men. Only one of the managers is a black man, and one is a white female.

Mr. Nchito is replacing one of the white, male managers. He has advertised the position both in house and outside, as required by his company's hiring policies. After reviewing all of the applications, he believes that Mr. Steve Ziko, an employee of the company for 12 years, is the most qualified applicant. However, in the pool of applicants there are three qualified women, and two qualified black men.

Required

a) Morally what should Mr. Nchito do? **(5 marks)**

b) Is it fair to hire Steve, even though this will still mean that the managers will have definite gender and race inequity? **(5 marks)**

c) Is it ethical for Mr. Nchito to hire someone less qualified just to agree with a policy or rule of equal opportunities in employment? **(5 marks)**

d) Should Mr. Nchito give up and let the other manager's vote on who should be hired? **(3 marks)**

e) Evaluate possible organizational justice implication of your responses to a),b),c) and d) above. **(7 marks)**

(Total 25 marks)

Question 3

Paul Banda is the chairperson of the Nomination Committee of POBIT Plc and is also chairperson of the Audit Committee. He thinks that the composition of the Board should be changed. In his view, the Board should consist mainly of Non-Executive Directors (NEDs), and there is no requirement for Executive Directors on the Board except for the Chief Executive Officer (CEO) and Finance Director. The approaching retirement of the CEO, in Paul's view, presents an excellent opportunity to reduce the number of Executive Directors by promoting the Operations Director, currently a Board member, to the position of CEO. The new Operations Director need not be offered a Board position. Paul is also concerned about the lack of diversity on the Board, and believes that most of the current NEDs should be replaced, and that there should be an increase in the number of female Board members.

The Chairperson of the Board, Mr. Sitali Nyambe has different views. He thinks that the current balance of the Board, with a small majority of independent NEDs, is suitable. In his view, the Operations Director would not make a suitable CEO. He also believes that it is inappropriate to ask NEDs to resign before the end of their three-year appointment period, and that it would be madness to appoint women to the board just for the sake of being seen to be progressive.
Paul and Sitali have had heated arguments about their differing views. Paul believes that poor-performing NEDs should be told to resign and that, as chairperson of the Nomination Committee, he should have more authority than Sitali on matters of Board appointments and succession. Mr. Nyambe believes that Paul should not be chairperson of two Board committees, and that a suitable way forward would be for himself to replace Paul as chairperson of the Nomination Committee.

Mr. Nyambe has asked for your opinion, as Company Secretary, about the differences of opinion between himself and Paul.

Required

Prepare a report for Mr. Sitali Nyambe, the Board Chairperson, in which you:

a) Explain the role of the Nomination Committee Chairperson, and suggest whether it is the Nomination Committee chairperson or the Board Chairperson who should have authority to deal with matters concerning the composition of the Board and board succession matters. **(9 marks)**

b) Recommend measures that might be taken to review and change the composition of the board. **(11 marks)**

c) Advise on whether it would be appropriate, and within best practices of Corporate Governance, for the Chairperson of the Board to replace Paul as Chairperson of the Nomination Committee. **(5 marks)**

(Total: 25 marks)

Question 4

Business University needed to purchase a networking system. James Banda pressed hard for the 3-COM network which CompTech Limited endorsed and supported. ICT General made an excellent point that Novell was the system used in the industry as a standard. When James Banda learned that CompTech could bid Novell, he agreed and bids were let for Novell's Netware.

Three very high priced bids came back from companies ICT General had never heard of; CompTech Limited bid K46, 000 and BIG BYTE bid K20, 000. James Banda suggested that the low bid be thrown out as low bids often are. ICT General was frustrated, claiming the hardware shouldn't cost more than K14,000 - K15,000 at the most, proved it with ad prices, but CompTech Limited got the bid, this time through a renowned Epple franchise's new salesman, John.

A clause in the bid required the equipment to be operational in thirty days. Three months later the CompTech Limited installers contacted ICT General asking for help. ICT General found that CompTech Limited would have to develop special drives. ICT General reported this to the CCVU purchasing agent who called CompTech Limited Corporate Office (about the 30-day clause), they sent out two representives and fired the Epple store manager on the spot. John put his arm around the Store Manager, escorted him to CCVU HR office, and informed the HR officer that Computer Services had a new employee. The HR officer questioned the hiring; he soon left Business University Limited. The former Epple, CompTech Limited franchise Manager remained with Business University. The system finally came on line, but has had many problems during its operation.

Required

a) Evaluate whether the information presented in the case study raises questions about John's ethical philosophy? **(4 marks)**
b) If so, who should be concerned? **(2 marks)**
c) James Banda was apparently in a difficult situation. Should he have acted differently? **(3 marks)**
d) What lessons do you think ICT General has learnt from CCVU about ethics? **(4 marks)**

e) What actions should ICT General take? **(3 marks)**
f) Discuss what ethical action(s) the HR Officer could have taken? **(4 marks)**

g) Recommend the course of action any member of the CCVU faculty should take? **(5 marks)**

(Total 25 marks)

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

MAY 2019 COHORT SUPPLEMENENTARY/ DEFFERED EXAMINATION

ECONOMICS: FIRM AND GLOBAL PERSPECTIVES (GSB 5052)

TIME ALLOWED: THREE (3) HOURS

DATE: 9TH SEPTEMBER, 2020

INSTRUCTIONS TO THE CANDIDATE

1. *Enter your computer (GSB) number on the answer booklet. Do NOT write your name.*

2. *You must not start writing your answers in the booklet until you are told to do so by the invigilator*

3. *Mark allocations are shown in brackets.*

4. *Attempt all questions in Section A and <u>Choose One (1) question</u> in Section B*

5. *Candidates should show calculations and well labelled graphs were appropriate*

SECTION A (COMPULSORY)

QUESTION ONE

a) With the aid of a well labelled demand or supply diagram (s), explain the following; *(Hint: Indicate whether there is a movement along the demand/ supply curve or shift of the demand/ supply curve. Also indicate whether there is a change in quantity demanded/ supplied or change in demand/ supply)*

   i.   When the Tuition fees MBA increases from K15,000 to K20, 000.[3 marks]

   ii.   There is a common belief that consuming Ginger can help to reduce the risk of contracting COVID-19 *(Hint: the demand or supply curve you should focus on is Ginger here).* [3 marks]

   iii.   What happens to maize supply this year due to floods in some part of the country [3 marks]

b) With the aid of the diagram, define and explain the following;

   i.   Producer surplus [2 marks]

   ii.   Consumer surplus [2 marks]

   iii.   Price floor *(Hint: indicate whether a surplus or shortage will arise)* [4 marks]

   iv.   Price ceiling *(Hint: indicate whether a surplus or shortage will arise)* [4 marks]

c) With the aid of a diagram, explain the relationship between Price Elasticity of Demand and Total Revenue [4 marks]

QUESTION TWO

a) Explain your understanding of economies of scale and reasons as to why a firm can experience economies of scale. [4 marks]

b) With the aid of a diagram, explain your understanding of the kinked demand curve. [3 marks]

c) List the three(3) approaches of measuring GDP[3 marks]

d) Distinguish between GDP and GNP [3 marks]

e) What is a Multiplier and briefly explain how it works? [3 marks]

f) Define the following;

   i.   Inflation [2 marks]

   ii.   Consumer Price Index (CPI) [2 marks]

   iii.   GDP deflator [2 marks]

g) List the three (3) limitations of the CPI [3 marks]

QUESTION THREE

a) What is a Business Cycle and draw a graph for a Business Cycle? [3 marks]

b) List three (3) business cycle models [3 marks]

c) What is money? [1 marks]

d) List three (3) functions of money [3 marks]

e) Distinguish between M1 and M2 [2 marks]

f) List five (5) objectives of a modern Central Bank [5 marks]

g) Draw a well labelled graph (diagram) for each of the following; *(Hint: do not explain anything)*

    i. Demand Pull Inflation [2 marks]

    ii. Cost Push Inflation [2 marks]

    iii. Deflationary Gap [2 marks]

    iv. Inflationary Gap [2 marks]

SECTION B (ANSWER ANY ONE (1) QUESTION FROM THIS SECTION)

QUESTION FOUR

a) Define the following;

    i. Comparative Advantage [1 mark]

    ii. Absolute Advantage [1 mark]

    iii. Terms of Trade [1 mark]

    iv. Import quota [1 mark]

    v. Voluntary Export Restraint (VER) [1 mark]

    vi. Optimum Tariff [1 mark]

    vii. Foreign Exchange Option [1 mark]

    viii. Preferential Trading Agreements [1 mark]

    ix. Spot exchange rates [1 mark]

    x. Forward exchange rates [1 mark]

    xi. Ad Valorem Tariff

    xii. Specific Tarriff

b) With the aid of a diagram, explain the following;

    a. Profit making perfectly competitive (7 marks)

    b. Profit making Monopolist (6 marks)

QUESTION FIVE

a) Briefly explain the following;

    i.   Economic Development [2 marks]

    ii.   Economic Growth [2 marks]

    iii.   Rostow's Linear-Stages Model [10 marks]

b) List and explain the three (3) motives for holding *money (Hint: ensure you explain relationship with interest rates and the level of income)* [6 marks]

c) List five (5) functions of the Bank of Zambia [5 marks]

QUESTION SIX

a) With the aid of a diagram, briefly explain the following;

    i.   Elasticity along a linear demand curve [8 marks]

    ii.   The relationship between Elasticity along a linear demand curve and Total Revenue [11 marks]

b) List any three (3) determinants of price elasticity of demand [6 marks]

END OF SUPPLEMENTARY/ DEFFERED EXAMINATION
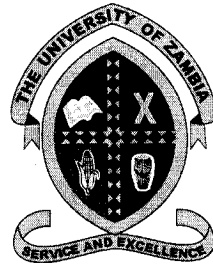
THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

Post Graduate Examinations

Monday 7th September, July, 2020

HRM6021: Compensation and Performance Management

Instructions Format

1. Time Allowed: 3 hours

2. There six questions in this paper. Each question carries 25 marks. Answer Four (4) Questions, questions

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

Question one

Broad banding is the term applied to having extremely wide salary bands, much more encompassing than with traditional salary structures. Explain the merits and demerits of broad banding

Question two

What are the strengths and limitations of the balanced score card model?

Question three

In performance management it is said that you can't manage what you can't measure and you cannot measure what you cannot define.' Do you agree or disagree and why?

Question four

When establishing a pay incentive plan, a number of considerations should be taken into account. What are these considerations? Explain the relevance of payroll outsourcing.

Questions five

Pay differentials can lead to equity tension among employees. Explain the relevance of transparency in the management of compensation. What factors determine pay levels and pay differentials in reward management?

Question Six

a) Why should organisation align the reward strategy to the organisational/ business strategy?
b) Explain the concept of total reward and it significance (bring out relevant practical examples).

Question Seven

Explain the importance of assessing the performance of your employees. Why do managers shun it?

Good luck
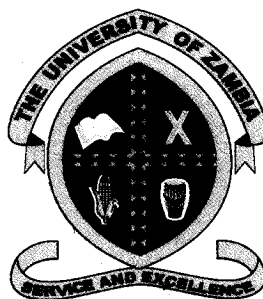
THE UNIVERSITY OF ZAM BIA
GRADUATE SCHOOL OF BUSINESS

MSc ACCOUNTING AND FINANCE

MAY 2019 COHORT BLENDED/EVENING

SESSIONAL EXAMINATION

DATE: THURSDAY 10TH SEPTEMBER 2020

MAF 5022: STRATEGIC MANAGEMENT ACCOUNTING

EXAM TIME: 09:00 HOURS

VENUE: GSB

DURATION: THREE (3) HOURS

INSTRUCTIONS:
1. The Paper has a Total Number of Five (5) Questions Comprising Sections A and B.
2. Answer a Total of FOUR (4) Questions.
3. Section A is *COMPULSORY*. From Section B Answer *ANY TWO (2)* Questions.
4. Marks Allocation Indicates the Depth of the Answer Expected.

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

SECTION A – COMPULSORY

QUESTION ONE

Tubile Ltd is a company engaged solely in the manufacture of sweaters, which are bought mainly for sporting activities. Present sales are direct to retailers, but in recent years there has been a steady decline in output because of increased foreign competition. In the last trading year (2018) the accounting report indicated that the company produced the lowest profit in 10 years. The forecast in 2019 indicates that the present deterioration in profit is likely to continue. The company considers that a profit of K800,000 should be achieved to provide an adequate return on capital. The managing director has asked that a review be made of the present pricing and marketing policies. The marketing director has completed this review, and passes the proposals on to you for evaluation and recommendation, together with the income statement for the year ending 31 December 2018.

Tubile Ltd income statement for year ending 31 December 2011

	K	K	K
Sales revenue			
(100,000 sweaters @ K100)			10,000,000
Factory cost of goods sold:			
Direct materials	1,000,000		
Direct labour	3,500,000		
Variable factory overheads	600,000		
Fixed factory overheads	2,200,000	7,300,000	
Administration overhead		1,400,000	
Selling and distribution:			
Overhead:			
Sales commission (2% of sales)	200,000		
Delivery costs (variable per unit sold)	500,000		
Fixed costs	400,000	1,100,000	9,800,000
Profit			200,000

The information to be submitted to the managing director includes the following two proposals:

(i) To proceed on the basis of analyses of market research studies which indicate that the demand for the sweaters is such that a 10 per cent reduction on selling price would increase demand by 40 per cent.

(ii) To proceed on the basis of a view by the marketing director that a 10 per cent price reduction, together with a national advertising campaign costing K300,000 may increase sales to the maximum capacity of 160 000 sweaters.

Required

A. The calculation of break-even sales value based on the 2018 accounts. (7 Marks)

B. Calculate the contribution per unit of proposal **(i)** and the number of units Tubile Ltd would require to sell at K90 each to earn the target profit of K800,000. (8 Marks)

C. A profit statement for proposal **(ii)** using contribution amount in **B**. (10 Marks)

QUESTION TWO

Sales of product B over the seven year period from 2011 to 2017 were as follows.

Year	2011	2012	2013	2014	2015	2016	2017
Sales of B ('000 units)	22	25	24	26	29	28	30

Required

A. Calculate the coefficient of correlation and comment on the observed data. **(10 Marks)**

B. Calculate the trend line of sales, and forecast sales in 2018 and 2019. **(15 Marks)**

SECTION B

QUESTION THREE

A company has been making a machine to order for a customer, but the customer has since gone into liquidation, and there is no prospect that any money will be obtained from the winding up of the company. Costs incurred to date in manufacturing the machine are K50,000 and progress payments of K15,000 had been received from the customer prior to the liquidation. The sales department has found another company willing to buy the machine for K34,000 once it has been completed. To complete the work, the following costs would be incurred.

(i) Materials: these have been bought at a cost of K6,000. They have no other use, and if the machine is not finished, they would be sold for scrap for K2,000.

(ii) Further labour costs would be K8,000. Labour is in short supply, and if the machine is not finished, the work force would be switched to another job, which would earn K30,000 in revenue, and incur direct costs of K12,000 and absorbed (fixed) overhead of K8,000.

(iii) Consultancy fees K4,000. If the work is not completed, the consultant's contract would be cancelled at a cost of K1,500.

(iv) General overheads of K8,000 would be added to the cost of the additional work.

Required

With the help a relevant cost summary, assess whether the new customers offer should be accepted.

(25 Marks)

QUESTION FOUR

Competitive analysis in strategic management is an assessment of the strengths and weaknesses of current and potential competitors. This analysis provides both an offensive and defensive strategic context to identify opportunities and threats. Profiling combines all of the relevant sources of competitor analysis into one framework in the support of efficient and effective strategy formulation, implementation, monitoring and adjustment.

Competitor analysis is an essential component of corporate strategy. It is argued that most firms do not conduct this type of analysis systematically enough. As a result, traditional environmental scanning methods commonly used places many firms at risk of dangerous competitive blind spots due to a lack of robust competitor analysis.

Required

In the context of strategic management accounting;

A. Explain The strategic rationale of competitor profiling and three main objectives

(10 Marks)

B. Discuss six main factors considered when carrying out competitor profiling (15 Marks)

QUESTION FIVE

It is estimated that direct labour is subject to a learning curve effect of 85 per cent. 2,000 labour hours are needed to produce the first unit.

No. of Order	No. of Units Per order
1	2
2	4
3	6
4	12
5	24
6	48

Required

A. Analyse the learning curve effect on data using mathematical method. (15 Marks)

B. The company has just completed orders such that cumulative production is 6 units and that an enquiry has been received for an order of 10 units. Calculate the incremental

hours for the 10 units. (10 Marks)

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

MSc Accounting & Finance Sessional Examination

Monday 7th September, 2019

MAF 6011: CRITICAL PERSPECTIVES IN ACCOUNTING

Instructions

Time Allowed: **3 hours**

There are six (6) Questions in the Examination Paper

Attempt a total of five (5) questions

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

QUESTION 1

a) Discuss FIVE (5) factors affecting measurement process.   *(10 marks)*

b) Briefly explain the following terminologies
   i. Accounting policy vs Accounting choice
   ii. Beneish M-Score Model
   iii. Direct vs Indirect Measurements
   iv. Value vs. Price
   v. Professional vs. Regulatory body

(10 marks)

[Total 20 Marks]

QUESTION 2

a) Accounting theory can be defined as the basic assumptions, definitions, principles, and concepts—and how we derive them—that underlie accounting rule making by a legislative body. Discuss whether this statement meet the definition of a theory.   (8 marks)

b) Political factors are an adverse influence upon the accounting standard-setting function. Discuss this statement.   (7 marks)

c) One of the three elements of business valuation is Normalization of Financial Statements: Explain the meaning of the term normalization of financial statements.   (5 marks)

[Total: 20marks]

QUESTION 3

a) The story of Enron Corp. is the story of a company that reached dramatic heights, only to face a dizzying fall. Its collapse affected thousands of employees and shook Wall Street to its core. At Enron's peak, its shares were worth $90.75; when it declared bankruptcy on December 2, 2001, they were trading at $0.26. To this day, many wonder how such a powerful business, at the time one of the largest companies in the U.S, disintegrated almost overnight and how it managed to fool the regulators with fake holdings and off-the-books accounting for so long. As a consequence of the scandal, new regulations and legislation were enacted to expand the accuracy of financial reporting for public

companies. One piece of legislation, the Sarbanes–Oxley Act, increased penalties for destroying, altering, or fabricating records in federal investigations or for attempting to defraud shareholders.

Do you think that changes brought about by accounting standards by failures of publicly traded companies such as ENRON should be classified under political factors or economic decisions? Support your position. (12 marks)

b) Discuss the consequences of low financial reporting quality. (8 marks)

[Total: 20marks]

QUESTION 4

a) Before the value of a business can be measured, the valuation assignment must specify the reason for and circumstances surrounding the business valuation. Explain these reasons and circumstances surrounding the business valuation. *(10 marks)*

b) Do you think that changes brought about by accounting standards by failures of publicly traded companies such as ENRON should be classified under political factors or economic decisions? Support your position. *(10 marks)*

QUESTION FIVE

a) Accounting practitioners have criticized some proposed accounting standards on the grounds that they are difficult to implement because of measurement problems. They, therefore, conclude that the underlying theory is inappropriate. Assuming that the critics are correct about the implementational difficulties, discuss whether or not you agree with their thinking. (6 marks)

b) Using the capture theory and life cycle theory, provide a brief critique on laws and actors involved in the regulation of accounting in Zambia. (10 marks)

c) Explain the relationship between accounting information and valuation. (4 marks)

[Total: 20marks]

QUESTION SIX

a) In the last decade and half, we have witnessed the worst corporate accounting standard scandals such ENRON, WorldCom, TYCO e.t.c. Using theories and/or concepts, discuss the incentives for managers to manipulate accounting figures. (8 marks)

b) Accounting rule making should only be concerned with information for investors and creditors. Discuss this statement. (6 marks)

c) There are main two accounting research perspectives which are qualitative research and quantitative research. With examples and adequate references from critical accounting literature, discuss their differences. (6 marks)

[Total: 20marks]

END OF PAPER
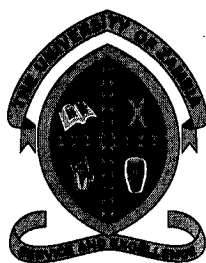
THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

MBA Finance/ MSc Accounting & Finance

Supplementary Examination

Wednesday 10th September 2020

MAFF 5120: CORPORATE FINANCE
Total Marks=100

Time Allowed: Reading Time: 5 minutes, Writing time: 3 hours

Instructions

1. Do not open paper until instructed by the supervisor
2. During reading and planning time only the exam paper can be annotated. You must not write in your answer booklet until instructed by the supervisor.
3. Show all your workings and present neat work
4. Answer all questions in Section A for a maximum 40 marks and answer any three questions in Section B, for a maximum of 60 marks.
5. The financial and formulae tables should not be removed from the exam room
6. Where market risk premium is not given use 6%.

SECTION A Compulsory -40 Marks

QUESTION 1

You have been engaged by Mulobezi Trades Plc, one of the leading companies in Zambia to assess the financial viability of the proposed bookstore in Kaunda Square area of Lusaka. The company plans to spend K1.7 million in 2020 on store equipment, fixtures and fittings. These investments are expected to have a life of four years, at which point they will have no salvage value. The project will also make use of other resources as follows:

- The store will use a van currently owned by the firm. Although the van is not currently being used, it can be rented out for K20,000 a year for four years. The book value of the van is K100,000 and it is being depreciated straight line (with four years remaining for depreciation).

- Two employees of the firm, each with a salary of K20,000 a year, who are currently employed by the Milling Division, will be transferred to the store. The Milling Division has no alternative use for them, but they are covered by a union contract that will prevent them from being fired for two years (during which they would be paid their current salary).

- The store shall be built on land which was bought by the company 5 years ago at a cost of K30,000 (Current market value K150,000). The company had plans of constructing a hotel on the land, however, the project was abandoned after it was found not to be financially viable.

The revenues in the first year (2021) are expected to be K1.6 million, growing 20% in year two, and 10% in the two years following. The operating costs will be 50% of the revenues in each of the four years.

The working capital, which includes the inventory of books needed for the service will be 10% of the revenues; the investments in working capital have to be made at the beginning of each year. At the end of year 4, the entire working capital is assumed to be salvaged. Mulobezi's cost of capital is 20%.

Required:

Using Net Present Value (NPV) investment evaluation technique, advise Mulobezi whether it should go ahead and open the store. **(20 Marks)**

1

QUESTION 2

a.) In corporate finance, the objective when making investing, financing and dividends decisions is to maximize firm value. Some stakeholders have argued that this objective is 'utopian'. Do you agree with this statement? Explain. **(12 marks)**

b.) A small manufacturing firm, which has limited access to capital, has a capital rationing constraint of K150 million and is faced with the following investment projects (numbers in millions):

Project	Initial Investment	NPV
A	K25	K10
B	K30	K25
C	K40	K20
D	K10	K10
E	K15	K10
F	K60	K20
G	K20	K10
H	K25	K20
I	K35	K10
J	K15	K5

Required

i.   Which of these projects would you accept? Why? (6 marks)

ii. What is the cost of the capital rationing constraint? (2 marks)

[Total 8 Marks]

SECTION B- 60 Marks

There are 4 questions in section, answer any 3

QUESTION 3.

a. The figure below shows the output results of the regression of M Corporation's monthly returns against the Stock index returns for five years:

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.582730945							
R Square	0.339575354							
Adjusted R Square	0.335865103							
Standard Error	0.076904771							
Observations	180							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	0.541301791	0.541302	91.52356	9.34006E-18			
Residual	178	1.052753209	0.005914					
Total	179	1.594055						
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.023011046	0.005842701	3.938426	0.000118	0.011481171	0.034540921	0.011481171	0.034540921
0.07	1.187812055	0.124159879	9.566795	9.34E-18	0.942797321	1.432826788	0.942797321	1.432826788

Required:

i. What is the intercept (alpha) and slope (beta) of the regression? (2 marks)

ii. If you bought stock in M Corp today, how much would you expect to make as a return over the next year? [The six-month T. Bill rate is 6%] (1 mark)

iii. Looking back over the last five years, how would you evaluate M Corp's performance relative to the market? (The risk-free rate during the period was also 6% on an annual basis) (4 marks)

iv. Assume now that you are an undiversified investor and that you have all of your money invested in M Corporation. What would be a good measure of the risk that you are taking on? How much of this risk would you be able to eliminate if you diversify? (2 marks)

b. Explain a firm's investment, financing and dividend decisions choices at different stages in the growth life cycle. You should give reasons for each of the choices (12 marks)

[Total 20 Marks]

QUESTION 4

a.) You are the owner of a small hardware store, and you are considering opening a gardening store in a vacant area in the back of your present store. You estimate that it will cost you K50,000 to set up the new store and that you will generate K10,000 in after-tax cash flows from the store for the life of the store (which is expected to be ten years). The one concern you have is that you have limited parking; by opening the gardening store you run the risk of not having enough parking for customers who shop at your hardware store. You estimate that the lost sales from such occurrence would amount to K3,000 a year and that your after-tax operating margin on sales at the hardware store is 40 percent.

Required:
If your discount rate were 14 percent, would you open the gardening store? (8 marks)

b.) You own a rental building in the city and are interested in replacing the heating system. You are faced with the following alternatives:

      i.A gas heating system, which will cost K5,000 to install and K1,000 a year to run and

      will last twenty years.

      ii.An oil heating system, which will cost K3,500 to install and K1,200 a year to run and

      will last fifteen years.

Required:
If your opportunity cost is 10 percent, which of these three options is best for you? (8 marks)

c.) Explain the meaning of reinvestment risk? (4 marks)

[Total 20 Marks]

QUESTION 5

a.) You have been asked to assess the net present value of a project analysis done by analysts at Mulobezi Trading Ltd, a firm that operates in both retailing and apparel production. The project, which is in the apparel business, has a 10-year life with equal annual cash flows over the period and an initial investment of K 1 billion. You notice two problems with the analysis:

- The analyst used a cost of capital of 10% (which is the company's cost of capital) in computing the net present value of K 100 million. The cost of capital for the apparel business is 12%. The analyst expensed the entire investment in year 0; you believe that you need to depreciate the investment straight line over 10 years to a salvage value of zero. The company tax rate is 30%.

Required

Estimate the correct net present value of the project.   (10 Marks)

b.) You have been engaged by Maamba Milling Plc, a major producer and supplier of mealie-meal, in Maamba District of Zambia, to estimate the company's cost of capital. Table 1 contains information about the company, whilst Table 2 has information on other milling companies in the country.

Table 1: Selected financial information Mamba Milling Plc

Description	Rate
Debt to equity ratio	20%
Debt to capital ratio	10%
Pre-tax cost of Debt	15%
Tax rate	40%

Table 1: The selected financial information for Milling Companies in Zambia

Company	Levered Beta	Tax rate	Debt to equity Ratio
Mushe Milling Ltd	0.98	40%	30%
Choma Milling Ltd	0.57	40%	25%
Kasama Milling Ltd	0.26	40%	23%
Kachana Millers Ltd	1.68	40%	30%

Ten- year Treasury bonds issued by the Government of the Republic of Zambia had a yield of 12%. Moody's sovereign rating for Zambia is Caa, with a related default spread of 2%. The market equity risk premium is estimated at 10%.

Required:

Estimate Maamba Milling's cost of capital. (10 marks)

[Total 20 Marks]

QUESTION 6

You are analyzing the dividend policy of Mulobezi Ltd, a major agricultural trading company, and you have collected the following information from the past five years.

Year	Net Income (Million)	Capital Expenditure (Million)	Depreciation (Million)	Noncash Working Capital (Million)	Dividends (Million)
2015	K240	K314	K307	K35	K70
2016	K282	K466	K295	K(110)	K80
2017	K320	K566	K284	K215	K95
2018	K375	K490	K278	K175	K110
2019	K441	K494	K293	K250	K124

The average debt ratio during this period was 40 percent, and the total noncash working capital at the end of 2014 was K10 million.

Required:

a. Estimate how much Mulobezi could have paid in dividends during this period. (5 marks)

b. If the average return on equity during the period was 13.5 percent, and Mulobezi had a beta of 1.25, what conclusions would you draw about their dividend policy? (The average Treasury bond rate during the period was 7 percent, and the average return on the market was 12.5 percent during the period.) (5 marks)

c. Explain the three schools of thought on dividend policy (10 marks)

[Total 20 marks]
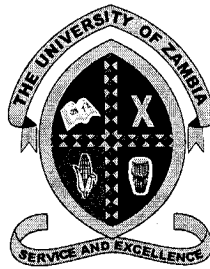
THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

MBA Finance Sessional Examination

Monday 21ˢᵗ September 2020

INTERNATIONAL BUSINESS FINANCE

Instructions

Time Allowed: **3 hours**

There are five (5) Questions in the Examination Paper

Attempt a total of four (4) questions

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

QUESTION 1

  (a) Define Balance of Payments   (4 marks)

  (b) Explain Balance of payment accounting   (4 marks)

  (c) Explain the importance of Balance of payment data   (9 marks)

  (d) Explain the different types of Balance of payment accounts   (8 marks)

(Total 25 Marks)

QUESTION 2 ✓

  (a) Explain Corporate governance   (4 marks)

  (b) Describe the different types of corporate governance regimes   (8 marks)

  (c) Describe the structure of corporate governance   (6 marks)

  (d) Describe any corporate governance scandals of the recent past   (7 marks)

(Total 25 Marks)

QUESTION 3 ✓

  (a) Explain the foreign exchange market   (3 marks)

  (b) Explain the main functions of the foreign exchange markets   (6 marks)

  (c) Describe cross exchange rates   (6 marks)

  (d) Describe the main methods of managing foreign exchange risk economic exposure (10 marks)

(Total 25 Marks)

QUESTION 4 ✓

  (a) Describe international banking   (5 marks)

  (b) Discuss the main functions of an international bank   (6 marks)

  (c) Describe offshore banking center   (7marks)

  (d) List IMF recognized offshore banking centers   (7 marks)

QUESTION 5 ✓

(a) Describe the international money market (5 marks)

(b) Discuss the main instruments found on the international money markets (9 marks)

(c) Describe the international capital markets (5 marks)

(d) Describe the main factors affecting international equity returns (6 marks)

(Total 25 Marks)
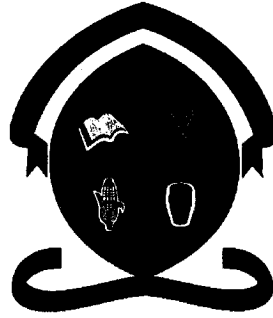
UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS
Financial Reporting and Analysis Course

Supplementary Session Examination

Detail	Date	Time
Date of Exam	Friday 11th September, 2020	09:00 Hours
Answer all Questions numbered 1 to 5		

Friday 11th September, 2020

QUESTION NUMBER 1 : (Part 1a to 1e) – 25 Marks

1. Financial Statements

Good Milile operates a chain of Departments across the country of Kambia. The following summarized trial balance has been extracted from the books of Good Milile.

	K'000	K'000
Retail Sales		27,300
Cost of Retail Sales	16,250	
Administration Expenses	250	
Distribution costs	2,500	
Trade receivables	800	
Interest paid	350	
Income tax under-provided for year to 31st March 2016	30	
Non- Current assets-cost or valuation	27,000	
Non-Current assets-depreciation		4,200
Revaluation reserve		8,000
Inventory at 31st March 2017	850	
Bank	100	
Trade payables		1,800
Long term loans		2,300
Share capital		4,000
Retained earnings		1,130
Dividends paid	600	
Total	**48,730**	**48,730**

Notes

(i)   The company revalued its land during the year. This was the first time that such a revaluation had taken place. The land had cost K9 million and had not been depreciated. The valuation was conducted by Valier and Co, a firm of chartered surveyors.

(ii) Depreciation of K3.7 million has been charged during the year and is included under the appropriate cost headings on the trial balance.

(iii) The directors paid a dividend of K600,000 during the year ended 31st March, 2017.

(iv) Taxation for the year has been estimated at K2.1 Million

You are required to;

(a)   Prepare the Statement of comprehensive income and loss for the year ended 31st March, 2017. **(6 marks).**

(b)   Prepare the Statement of changes in equity for the year ended 31st March 2017. **(5 marks).**

(c)   Prepare the Balance sheet statement as at 31st March, 2017. Notes to the financial statements are not required. **(6 marks).**

(d)   To comment on the profitability of Good Milile using a minimum of three ratios. **(3 Marks)**

(e)   To comment on the liquidity of the Good Milile using a minimum of two ratios. **(5 marks)**

QUESTION NUMBER 2 : (Part 2a to 2e) – 25 Marks

Mr. UNZA Man has just enrolled at the University of Zambia to Study the Master's Degree in Business Administration (MBA) Finance. He has just attended his first lecture in Financial Reporting and Analysis and where he has heard about the conceptual framework for financial reporting. He has now come to you to seek help in putting some issues into proper context. You are required to answer for him the following questions to help him understand the topic and as follows; to

(2a) Define the nature and purpose of a conceptual framework for financial reporting. **(5 Marks).**

(2b) Outline the potential benefits and drawbacks of a conceptual financial reporting framework. **(6 Marks).**

(2c) Identify any four user groups of financial statements and explain what information user groups are likely to want from them **(8 Marks).**

(2d) Identify and explain four qualitative characteristics that make financial information useful. **(4 Marks).**

(2e) Briefly explain the objective of financial information **(2 Marks).**

QUESTION NUMBER 3 : (Part 3a to 3e) – 25 Marks

(3a) You have been invited by the Chililabombwe Chapter of Chartered Accountants to present a lecture on Group Accounts. The students have requested you to explain why it is important to distinguish pre-acquisition profits from post-acquisition profits when consolidating financial statements. **(5 Marks)**

(3b) Mpulanga Harbor Corporation Limited owns less than 50% of the ordinary shares of Starboard Limited. Explain to the students in what circumstances it will be appropriate to consolidate Starboard Limited in the books of accounts for Mpulanga Harbour Corporation Limited and in what circumstances will consolidation not to be appropriate. **(5 Marks).**

(3c) Define an associate Company and briefly explain how its results would be reported by the investing company in its consolidated accounts **(5 Marks).**

(3d) Explain briefly why adjustments need to be made in group accounts for inter- company trading and intercompany transfer of non-current assets **(5 Marks).**

(3e) Phillips Electronics is developing a new software. During 2013, expenditure incurred was K200,000 of which K180,000 was incurred before 1 December, 2013 and K20,000 between 1 December, 2013 and 31st December 2013. Phillips Electronics can demonstrate that, at 1st December, 2013 the new software met the criterial for recognition as an intangible asset. The recoverable amount of the know-how embodied in the software is estimated to be K100,000. How should be the expenditure be treated at the end of 31st December, 2013? (5 Marks).

QUESTION NUMBER 4 : (Part 4a to 4c) – 25 Marks

You are presented with the following financial statements for Ndibu River Limited.

Ndibu River Income Statement for the year ended 31st December 2018

	K'000
Profit before tax	24,305
Income tax expense	8,064
Profit for the year	16,241
Retained earnings on 1 January 2017	49,787
Debt for the year	16,241
Dividends paid	(10,500)
Retained earnings at 31st December 2018	55,528

Ndibu River Balance sheets as at 31st December

	2007		2008	
	K'000	K'000	K'000	K'000
Non current Assets				
- Motor Vehicles at Cost	53,592		67,704	
Less depreciation	23,814		29,568	
		29778		38,136
Equipment at cost	26,040		26,040	
Less depreciation	6,510		13,020	
		19,530		13,020

QUESTION NUMBER 3 : (Part 3a to 3e) – 25 Marks

(3a) You have been invited by the Chililabombwe Chapter of Chartered Accountants to present a lecture on Group Accounts. The students have requested you to explain why it is important to distinguish pre-acquisition profits from post-acquisition profits when consolidating financial statements. **(5 Marks)**

(3b) Mpulanga Harbor Corporation Limited owns less than 50% of the ordinary shares of Starboard Limited. Explain to the students in what circumstances it will be appropriate to consolidate Starboard Limited in the books of accounts for Mpulanga Harbour Corporation Limited and in what circumstances will consolidation not to be appropriate. **(5 Marks).**

(3c) Define an associate Company and briefly explain how its results would be reported by the investing company in its consolidated accounts **(5 Marks).**

(3d) Explain briefly why adjustments need to be made in group accounts for inter- company trading and intercompany transfer of non-current assets **(5 Marks).**

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Current Assets				
Inventory	34,314		30,912	
Receivables	26,334		30,156	
Less bad debt	630		840	
		25,704		29,316
Cash at the bank		4,343		18,904
Total Assets		113,669		130,288
Equity				
Share capital		42,000		46,200
Retained earnings		49,787		55,528
Long term borrowings				
(See note ii below)				
Current liabilities				
Payables	12,768		12,096	
Taxation	9,114		8,064	
		21,882		20,160
Total		113,669		130,288

Notes

i. There were no current asset disposals

ii The loan interest paid in 2018 was K672,000

iii Accrued dividends were declared before the year-end

iv There has been no over or under provision for income tax in the year ended 31st December 2017.

You are required to

(a)   Prepare a cash flow statement for Ndibu River in accordance with IAS No. 7. **(18 Marks)**

(b)   Comment on the usefulness of cash flow statements to external users **(5 Marks)**

(c)   Outline two consequences of the changes to IAS No. 7 **(2 Marks)**

QUESTION NUMBER 5 : (Part 5a to 5c) – 25 Marks

Mulungushi Village Complex Limited (MVCL) has a history of growth and success in the investment property business and much of this has been through the acquisition of smaller companies who have offered opportunities in new locations.

Chunga Investment Property (CIP) represents a potential acquisition target for the MVCL, having a track record of successfully investment businesses as represented in the financial statement represented below.

Year	2014	2015	2016
Currency	K'000	K'000	K'000
Revenue	470	550	650
Profit before tax	60	70	75
Tax	20	25	30
Profit after tax	40	45	45
Dividends paid	30	35	40
Retained profit for the year	**10**	**10**	**5**
Share capital 150,000 ordinary of K1 each	150	150	150
Retained earnings	60	70	75
Shareholders funds	**210**	**220**	**225**
Loan Note (10%) (Check Note a)	40	100	150
Capital employed	250	320	375

Note a

Additional loan notes were issued on 1 January 2015 and 2016.

You are required to:

(a)   Calculate the following ratios for all the years

(i)   Return on capital employed

(ii)   Net profit margin before interest and tax

(iii) Net profit margin after interest and tax

(iv)   Return on shareholder's equity

(v)   Interest cover

(vi)   Dividend cover

(vii) Earnings per share

(viii) Gearing ratio

(ix)   Debt equity ratio

Note: (i) to (ix) is worth 9 Marks

(b)   Prepare a report on CIP assessing the trends of financial performance and position. (10-Marks)

(c)   Outline the three company valuation approaches that can be used to value the net worth of CIP and argue under which condition is each best suited.   (6 Marks)
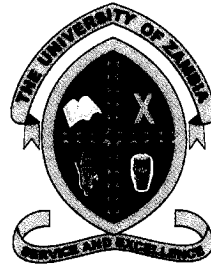
THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

MBA/MSc Deferred / Supplementary Examinations
Tuesday 8th September 2020

MBS5012 – QUANTITATIVE METHODS FOR BUSINESS

Information for Candidates
1. Time Allowed: **3 hours**
2. Total Marks: 100
3. Mark allocations are shown in brackets
4. Special Requirements: - A non-programmable scientific calculator

Instructions to Candidates
1. This Question Paper consists of FIVE Questions each carrying 25 marks
2. Choose ANY FOUR questions
3. Start the answer to each full question on a fresh page of the answer booklet.
4. Questions may be written in any order, but must be legibly numbered.
5. Write neatly and legibly, showing ALL your workings were necessary

Statistical tables are attached at the end of this paper

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

1. (a) A woman who has won a prize is offered a lump sum of K600,000 to invest now, or K350,000 to invest at the end of this year and another K350,000 to invest at the end of the following year.

    If all investments are assumed to earn 20% *pa*, which should she choose if she intends to withdraw the money after

    (i) 6 years,

    (ii) 2 years. **(3)**

    (b) A 90-day government bill was bought by an investor for K95 per K100 nominal. After 30 days the investor sold the bill to a second investor for K97.50 per K100 nominal. The second investor held the bill to maturity when it was redeemed at par.

    Determine which investor obtained the higher annual effective rate of return. **(3)**

    (c) Mr Mweene is struggling to repay his loan of K400,000 with payments of K7,200 made monthly in arrears for 6 years.

    (i) Calculate the flat rate of interest per annum. **(2)**

    (ii) Hence, or otherwise, calculate the APR of Mr Mweene's loan. **(3)**

    After exactly one year, a loan company offers to "help" Mr Mweene by restructuring his loan with new monthly payments of K4,000 made in arrears.

    (iii) Assuming the company charges the same APR as Mr Mweene's original loan, calculate the term of the new loan. **(4)**

    (iv) Calculate how much more interest in total Mr Mweene will pay on his restructured loan than on his original loan. **(2)**

    (d) A businessman wishes to borrow an amount of K3 million for a term of 5 years. The agreed rate of interest is 5% per annum effective for the first 3 years, and 7% per annum effective for the final year.

    Repayments on the loan are made annually in arrears.

    The amount of the level annual repayment is **K700,103.27**.

    (i) Draw up the loan schedule for the full three-year period. **(5)**

    (ii) Calculate what percentage of the loan has been repaid by the end of year 2. **(1)**

    (iii) Without doing any further calculations, explain how this percentage figure would alter if the rate of interest had instead been 7% for the first three years and 5% thereafter. **(2)**

2. (a) (i) State what is meant by the "conditional probability" of event A given event B. **(2)**

(ii) State Baye's theorem, given that events $B_1, B_2, \ldots, B_n$ forms a partition of a sample space S and A is any event on S **(2)**

(b) Consider an insurer that offers 2 types of policy: home insurance and car insurance. 87% of all customers have a home insurance policy, and 96% of all customers have a car insurance policy. Every customer has at least one of the two types of policies.

Calculate the probability that a randomly selected customer

(i) does not have a car insurance policy, **(2)**

(ii) has car insurance and home insurance, **(2)**

(iii) has home insurance, given that he has car insurance, **(2)**

(iv) does not have car insurance, given that he has home insurance. **.(2)**

(c) Consider the number of days to maturity of 10 short-term investments below.

$$79 \quad 62 \quad 75 \quad 68 \quad 62 \quad 73 \quad 76 \quad 81 \quad 73 \quad 61$$

(i) Make a stem-and-leaf plot for the days-to-maturity data. **(2)**

(ii) Hence, or otherwise, compute the interquartile range of the data. **(3)**

(iii) Are there any outliers in the data. **(3)**

(d) In the claims department of an insurance office various quantities are computed at the end of each day's business. On Monday, 20 claims are received for a particular class of policy. The mean claim amount is calculated to be K4,500 and the standard deviation to be K2,540. On Tuesday, the claims are reviewed and one claim which was incorrectly recorded as K13,000 is now corrected to K3,000.

Determine the mean and standard deviation of the corrected set of claims. **(5)**

3. (a) Consider each of the following variables. For each one, state whether it is quantitative or qualitative. State whether the quantitative ones are continuous or discrete. State what type of scale the continuous ones are measured on. State whether the qualitative ones are nominal or ordinal.

(i) The weight of a baby at birth, given in kilograms. **(2)**

(ii) Answers to the question "*What country were you born in?*" **(2)**

(iii) For each member of the Zambia national football team, their total number of appearances at the Africa Cup of Nations. **(2)**

(b) A statistician is examining the survey methodology of a country's national statistics department. It conducts much of its data collection by telephoning individuals selected at random and asking them questions.

    (i) Comment on whether this methodology will give a random sample. **(2)**

    (ii) Comment on whether this methodology will give a representative sample of the population. **(2)**

(c) An industry survey of people in sales management positions gave the number of years of experience in sales related positions as shown below.

	Males	Females
Sample size	90	80
Mean years	25.7	22.5
Standard deviation years	8.2	3.5

    (i) Perform a z-test to determine if the mean number of years for males in sales related positions is more than one year larger than that of females? **(6)**

    (ii) What error may have been made in the conclusion to part (i)? **(2)**

(d) Consider again the data in part (c) above.

    (i) Construct a 95% confidence interval for the difference of population means. **(5)**

    (ii) Based on this confidence interval, is the mean number of years for males in sales related positions is more than one year larger than that of females? **(2)**

4. The promoter of a touring dance show wishes to analyse how the price per ticket affects the size of its audiences. She tests two prices, K150 and K200, over 10 shows each which give rise to the following attendances.

Price										
K150	117	112	127	124	121	107	118	126	115	119
K200	108	104	98	112	108	102	96	101	107	95

(a) Calculate the mean and standard deviation of the attendance for each sample. **(4)**

(b) Perform a statistical test to determine whether the variances of the attendance are equal under the two prices. **(6)**

(c) Perform a t-test to determine whether the mean attendance is the same under the two prices. **(7)**

(d) Calculate a 95% confidence interval for the difference between the mean show revenue under each price. **(5)**

(e) Without doing any further calculations, comment on which price the promoter should choose. **(3)**

5. An analyst is instructed to investigate the relationship between the size of a bond issue y and its trading volumes (value traded) x. Consider the data for 7 bonds

x	10	20	30	40	50	60	70
y	5	10	23	34	40	54	75

with the following summary statistics:

$$\bar{x} = 40, \quad \bar{y} = 34.4, \quad S_{xx} = \sum x^2 - \frac{\left(\sum x\right)^2}{n} = 2,800, \quad S_{xy} = \sum xy - \frac{\left(\sum x\right)\left(\sum y\right)}{n} = 3,150$$

(a) (i) Construct a scatterplot of these data. **(2)**

(ii) What does the scatter plot suggest about the relationship between x and y? **(2)**

(b) A linear model of the form $y = \alpha + \beta x + \varepsilon$ is fitted to the data, where the error terms (ε) independently follow a $N(0, \sigma^2)$ distribution with the variance σ^2 being an unknown parameter.

(i) Determine the fitted line of the regression model. **(4)**

(ii) Predict y when $x = 100$. **(1)**

(c) A partially completed ANOVA table for this regression analysis is given below.

Source of variation	Sums of squares	Degrees of freedom	Mean squares	F-value
Regression	3,543.7	A	D	E
Error	110	B	C	
Total	3,653.7	5		

(i) Determine the missing values A, B, C, D and E in the table. **(5)**

(ii) Determine an estimate of the variance σ^2 based on the above table. **(1)**

(iii) Perform an F-test to test the null hypothesis that there is no linear relationship between x and y, based on the above table. **(6)**

(d) (i) Dertemine the percentage of variation in y explained by x. **(2)**

(ii) Calculate the coefficient of correlation and give an interpretation. **(2)**

END OF PAPER

FORMULA SHEET FOR MBS5012 2019 EXAMINATION

$FV = C(1 + r)^n$

$\hat{y} = \hat{\alpha} + \hat{\beta}x$

$PV = C(1 + r)^{-n}$

$\hat{\alpha} = \overline{y} - \hat{\beta}\overline{x}$

$PVA = C\left(\dfrac{1 - (1 + r)^{-n}}{r^{(p)}}\right)$

$\hat{\beta} = \dfrac{S_{xy}}{S_{xx}}$

$r^{(p)} = p\left[(1 + r)^{1/p} - 1\right]$

$S_{xx} = \sum x^2 - \dfrac{\left(\sum x\right)^2}{n}$

$\dfrac{r - r_1}{r_2 - r_1} = \dfrac{C - C_1}{C_2 - C_1}$

$S_{xy} = \sum xy - \dfrac{\left(\sum x\right)\left(\sum y\right)}{n}$

$\overline{x} = \dfrac{\sum x}{n}$

$S_{yy} = \sum y^2 - \dfrac{\left(\sum y\right)^2}{n}$

$S^2 = \dfrac{n\sum x^2 - \left(\sum x\right)^2}{n(n - 1)}$

$r^2 = \dfrac{SSR}{SST}$

$t = \dfrac{(\overline{x} - \overline{y}) - (\mu_1 - \mu_2)}{S_{\text{pooled}}\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$

$F = \dfrac{S_1^2}{S_2^2}$

$CI = \left((\overline{x} - \overline{y}) \pm t_{\frac{\alpha}{2}, n_1+n_2-2}\, S_{\text{pooled}}\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}\right)$

$F = \dfrac{MSR}{MSE}$

$S_{\text{pooled}}^2 = \dfrac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$

$Z = \dfrac{\overline{x} - \mu}{\sigma}$

$Z = \dfrac{(\overline{x} - \overline{y}) - (\mu_1 - \mu_2)}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$

$Z = \dfrac{\overline{x} - \mu}{\sigma/\sqrt{n}}$

$CI = \left((\overline{x} - \overline{y}) \pm Z_{\frac{\alpha}{2}}\sqrt{\dfrac{S_1^2}{n_1} + \dfrac{S_2^2}{n_2}}\right)$

$t = \dfrac{\overline{x} - \mu}{s/\sqrt{n}}$

STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
-3.9	.00005	.00005	.00004	.00004	.00004	.00004	.00004	.00004	.00003	.0000
-3.8	.00007	.00007	.00007	.00006	.00006	.00006	.00006	.00005	.00005	.0000
-3.7	.00011	.00010	.00010	.00010	.00009	.00009	.00008	.00008	.00008	.0000
-3.6	.00016	.00015	.00015	.00014	.00014	.00013	.00013	.00012	.00012	.0001
-3.5	.00023	.00022	.00022	.00021	.00020	.00019	.00019	.00018	.00017	.0001
-3.4	.00034	.00032	.00031	.00030	.00029	.00028	.00027	.00026	.00025	.0002
-3.3	.00048	.00047	.00045	.00043	.00042	.00040	.00039	.00038	.00036	.0003
-3.2	.00069	.00066	.00064	.00062	.00060	.00058	.00056	.00054	.00052	.0005
-3.1	.00097	.00094	.00090	.00087	.00084	.00082	.00079	.00076	.00074	.0007
-3.0	.00135	.00131	.00126	.00122	.00118	.00114	.00111	.00107	.00104	.0010
-2.9	.00187	.00181	.00175	.00169	.00164	.00159	.00154	.00149	.00144	.0013
-2.8	.00256	.00248	.00240	.00233	.00226	.00219	.00212	.00205	.00199	.0019
-2.7	.00347	.00336	.00326	.00317	.00307	.00298	.00289	.00280	.00272	.0026
-2.6	.00466	.00453	.00440	.00427	.00415	.00402	.00391	.00379	.00368	.0035
-2.5	.00621	.00604	.00587	.00570	.00554	.00539	.00523	.00508	.00494	.0048
-2.4	.00820	.00798	.00776	.00755	.00734	.00714	.00695	.00676	.00657	.0063
-2.3	.01072	.01044	.01017	.00990	.00964	.00939	.00914	.00889	.00866	.0084
-2.2	.01390	.01355	.01321	.01287	.01255	.01222	.01191	.01160	.01130	.0110
-2.1	.01786	.01743	.01700	.01659	.01618	.01578	.01539	.01500	.01463	.0142
-2.0	.02275	.02222	.02169	.02118	.02068	.02018	.01970	.01923	.01876	.0183
-1.9	.02872	.02807	.02743	.02680	.02619	.02559	.02500	.02442	.02385	.0233
-1.8	.03593	.03515	.03438	.03362	.03288	.03216	.03144	.03074	.03005	.0293
-1.7	.04457	.04363	.04272	.04182	.04093	.04006	.03920	.03836	.03754	.0367
-1.6	.05480	.05370	.05262	.05155	.05050	.04947	.04846	.04746	.04648	.0455
-1.5	.06681	.06552	.06426	.06301	.06178	.06057	.05938	.05821	.05705	.0559
-1.4	.08076	.07927	.07780	.07636	.07493	.07353	.07215	.07078	.06944	.0681
-1.3	.09680	.09510	.09342	.09176	.09012	.08851	.08691	.08534	.08379	.0822
-1.2	.11507	.11314	.11123	.10935	.10749	.10565	.10383	.10204	.10027	.0985
-1.1	.13567	.13350	.13136	.12924	.12714	.12507	.12302	.12100	.11900	.1170
-1.0	.15866	.15625	.15386	.15151	.14917	.14686	.14457	.14231	.14007	.1378
-0.9	.18406	.18141	.17879	.17619	.17361	.17106	.16853	.16602	.16354	.1610
-0.8	.21186	.20897	.20611	.20327	.20045	.19766	.19489	.19215	.18943	.1867
-0.7	.24196	.23885	.23576	.23270	.22965	.22663	.22363	.22065	.21770	.2147
-0.6	.27425	.27093	.26763	.26435	.26109	.25785	.25463	.25143	.24825	.2451
-0.5	.30854	.30503	.30153	.29806	.29460	.29116	.28774	.28434	.28096	.2776
-0.4	.34458	.34090	.33724	.33360	.32997	.32636	.32276	.31918	.31561	.3120
-0.3	.38209	.37828	.37448	.37070	.36693	.36317	.35942	.35569	.35197	.3482
-0.2	.42074	.41683	.41294	.40905	.40517	.40129	.39743	.39358	.38974	.3859
-0.1	.46017	.45620	.45224	.44828	.44433	.44038	.43644	.43251	.42858	.4246
-0.0	.50000	.49601	.49202	.48803	.48405	.48006	.47608	.47210	.46812	.4641

STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.50000	.50399	.50798	.51197	.51595	.51994	.52392	.52790	.53188	.5358
0.1	.53983	.54380	.54776	.55172	.55567	.55962	.56356	.56749	.57142	.5753
0.2	.57926	.58317	.58706	.59095	.59483	.59871	.60257	.60642	.61026	.6140
0.3	.61791	.62172	.62552	.62930	.63307	.63683	.64058	.64431	.64803	.6517
0.4	.65542	.65910	.66276	.66640	.67003	.67364	.67724	.68082	.68439	.6879
0.5	.69146	.69497	.69847	.70194	.70540	.70884	.71226	.71566	.71904	.7224
0.6	.72575	.72907	.73237	.73565	.73891	.74215	.74537	.74857	.75175	.7549
0.7	.75804	.76115	.76424	.76730	.77035	.77337	.77637	.77935	.78230	.7852
0.8	.78814	.79103	.79389	.79673	.79955	.80234	.80511	.80785	.81057	.8132
0.9	.81594	.81859	.82121	.82381	.82639	.82894	.83147	.83398	.83646	.8389
1.0	.84134	.84375	.84614	.84849	.85083	.85314	.85543	.85769	.85993	.8621
1.1	.86433	.86650	.86864	.87076	.87286	.87493	.87698	.87900	.88100	.8829
1.2	.88493	.88686	.88877	.89065	.89251	.89435	.89617	.89796	.89973	.9014
1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91309	.91466	.91621	.9177
1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.9318
1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.9440
1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.9544
1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.9632
1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.9706
1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.9767
2.0	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.9816
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.9857
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.9889
2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.9915
2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.9936
2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.9952
2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.9964
2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.9973
2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.9980
2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.9986
3.0	.99865	.99869	.99874	.99878	.99882	.99886	.99889	.99893	.99896	.9990
3.1	.99903	.99906	.99910	.99913	.99916	.99918	.99921	.99924	.99926	.9992
3.2	.99931	.99934	.99936	.99938	.99940	.99942	.99944	.99946	.99948	.9995
3.3	.99952	.99953	.99955	.99957	.99958	.99960	.99961	.99962	.99964	.9996
3.4	.99966	.99968	.99969	.99970	.99971	.99972	.99973	.99974	.99975	.9997
3.5	.99977	.99978	.99978	.99979	.99980	.99981	.99981	.99982	.99983	.9998
3.6	.99984	.99985	.99985	.99986	.99986	.99987	.99987	.99988	.99988	.9998
3.7	.99989	.99990	.99990	.99990	.99991	.99991	.99992	.99992	.99992	.9999
3.8	.99993	.99993	.99993	.99994	.99994	.99994	.99994	.99995	.99995	.9999
3.9	.99995	.99995	.99996	.99996	.99996	.99996	.99996	.99996	.99997	.9999

Table entry for *p* is the critical value *F** with probability *p* lying to its right.

Probability *p*

F*

TABLE E

F critical values

					Degrees of freedom in the numerator				
	p	1	2	3	4	5	6	7	8	9
1	.100	39.86	49.50	53.59	55.83	57.24	58.20	58.91	59.44	59.86
	.050	161.45	199.50	215.71	224.58	230.16	233.99	236.77	238.88	240.54
	.025	647.79	799.50	864.16	899.58	921.85	937.11	948.22	956.66	963.28
	.010	4052.2	4999.5	5403.4	5624.6	5763.6	5859.0	5928.4	5981.1	6022.5
	.001	405284	500000	540379	562500	576405	585937	592873	598144	602284
2	.100	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9.38
	.050	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38
	.025	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39
	.010	98.50	99.00	99.17	99.25	99.30	99.33	99.36	99.37	99.39
	.001	998.50	999.00	999.17	999.25	999.30	999.33	999.36	999.37	999.39
3	.100	5.54	5.46	5.39	5.34	5.31	5.28	5.27	5.25	5.24
	.050	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81
	.025	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.47
	.010	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.49	27.35
	.001	167.03	148.50	141.11	137.10	134.58	132.85	131.58	130.62	129.86
4	.100	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.94
	.050	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00
	.025	12.22	10.65	9.98	9.60	9.36	9.20	9.07	8.98	8.90
	.010	21.20	18.00	16.69	15.98	15.52	15.21	14.98	14.80	14.66
	.001	74.14	61.25	56.18	53.44	51.71	50.53	49.66	49.00	48.47
5	.100	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.32
	.050	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77
	.025	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68
	.010	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	10.16
	.001	47.18	37.12	33.20	31.09	29.75	28.83	28.16	27.65	27.24
6	.100	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2.96
	.050	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10
	.025	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52
	.010	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7.98
	.001	35.51	27.00	23.70	21.92	20.80	20.03	19.46	19.03	18.69
7	.100	3.59	3.26	3.07	2.96	2.88	2.83	2.78	2.75	2.72
	.050	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68
	.025	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.82
	.010	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.72
	.001	29.25	21.69	18.77	17.20	16.21	15.52	15.02	14.63	14.33

Degrees of freedom in the denominator

t Table

cum. prob	$t_{.50}$	$t_{.75}$	$t_{.80}$	$t_{.85}$	$t_{.90}$	$t_{.95}$	$t_{.975}$	$t_{.99}$	$t_{.995}$	$t_{.999}$	$t_{.9995}$
one-tail	0.50	0.25	0.20	0.15	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
two-tails	1.00	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01	0.002	0.001
df											
1	0.000	1.000	1.376	1.963	3.078	6.314	12.71	31.82	63.66	318.31	636.62
2	0.000	0.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.000	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.000	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.000	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.000	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.000	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.000	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.000	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.000	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.000	0.697	0.876	1.088	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.000	0.695	0.873	1.083	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.000	0.694	0.870	1.079	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.000	0.692	0.868	1.076	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.000	0.691	0.866	1.074	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.000	0.690	0.865	1.071	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.000	0.689	0.863	1.069	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.000	0.688	0.862	1.067	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.000	0.688	0.861	1.066	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.000	0.687	0.860	1.064	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.000	0.686	0.859	1.063	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.000	0.686	0.858	1.061	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.000	0.685	0.858	1.060	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.000	0.685	0.857	1.059	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.000	0.684	0.856	1.058	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.000	0.684	0.856	1.058	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.000	0.684	0.855	1.057	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.000	0.683	0.855	1.056	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.000	0.683	0.854	1.055	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.000	0.683	0.854	1.055	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	0.000	0.681	0.851	1.050	1.303	1.684	2.021	2.423	2.704	3.307	3.551
60	0.000	0.679	0.848	1.045	1.296	1.671	2.000	2.390	2.660	3.232	3.460
80	0.000	0.678	0.846	1.043	1.292	1.664	1.990	2.374	2.639	3.195	3.416
100	0.000	0.677	0.845	1.042	1.290	1.660	1.984	2.364	2.626	3.174	3.390
1000	0.000	0.675	0.842	1.037	1.282	1.646	1.962	2.330	2.581	3.098	3.300
z	0.000	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	3.090	3.291
	0%	50%	60%	70%	80%	90%	95%	98%	99%	99.8%	99.9%
						Confidence Level					

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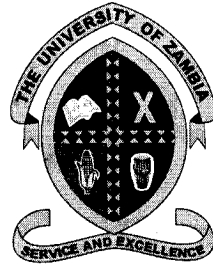
THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

Postgraduate Deferred Examination

September 2020

MBS 5022: STRATEGIC MANAGEMENT

Instructions

Time Allowed: **3 hours**

There **Four (4)** questions in this paper

You are required to answer **three (3)** questions

Section A is **compulsory**

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

SECTION A: COMPULSORY

Question One. Read the case carefully and answer the questions that follow

American Rice Invades Japan

The Japanese rice market, similar to many other Japanese markets, was closed to foreign competitors until 1993 to protect Japan's thousands of high-cost, low-output rice farmers. Rice cultivation is expensive in Japan because of the country's mountainous terrain, so Japanese consumers have always paid high prices for rice. Under foreign pressure, the Japanese government opened the market, and foreign competitors are now allowed to export to Japan 8 percent of its annual rice consumption. Despite the still-present hefty foreign tariff on rice - £1.32 per Kg – foreign rice sells for around £8 per lb bag while Japanese rice sells for nearly £11. With the recession affecting Japan, price-conscious consumers are turning to foreign rice, which has hurt domestic farmers.

In 2001, however, an alliance between organic rice grower Lundeberg family farms of California and the Nippon Restaurant Enterprise Co. found a new way to break into the Japanese rice market. Because there is no tariff on rice used in processed foods, Nippon takes the US organic rice and converts it into 'O-bento,' an organic hot boxed lunch packed with rice, vegetables, chicken, beef and salmon, all imported from the US. The new lunches, which cost about £2.30 compared to a Japanese rice bento that costs about £5, are sold at railway stations and other outlets throughout Japan. They are proving to be very popular and are creating a storm of protest from Japanese rice farmers, who have already been forced to leave 37 percent of their rice fields idle and grow less-profitable crops because of the entry of foreign rice growers. Japanese and foreign companies are increasingly forming alliances to find new ways to break into the high-price Japanese market, and, little by little, Japan's restrictive trade practices are being whittled away.

In summary, intense rivalry among competitors creates a task environment that is highly threatening and causes difficulty for managers trying to gain access to the resources an organization needs. Conversely, low rivalry results in a task environment where competitive pressures are more moderate and managers have greater opportunities to acquire the resources they need for their organizations to be effective.

Source: Contemporary Management (2007)

Question One

a) Answer the following based on the case above

i) Identify and explain any three (3) forces in the environment that are affecting Japanese rice growers. (15 marks)

ii) Explain how the two companies, Lundeberg family farms of California and Nippon Restaurant Enterprise, benefited from their alliance (6 marks)

iii) Outline any two (2) risks that are associated with alliances. (4 marks)

b) Benchmarking is the process by which companies look at the "best" in the industry and try to imitate their styles and processes.

Evaluate the rationale for benchmarking and explain any two types of benchmarking. (15 marks)

c) Define the terms, Vision and Mission. Explain why they are important in strategic planning. (10 marks)

Total: 50 marks

SECTION B: ANSWER ANY TWO (2) QUESTIONS

Question Two

Porter's five forces Model helps with the structural analysis of the competitive environment. Use an industry of your choice to explain how this model works. (25 marks)

Question Three

Diversification is a strategic option that takes the organization away from its existing products and markets. Describe the two (2) forms of diversification, and bring out four (4) advantages and two (2) disadvantages of each. 25 marks

Question Four

The strategy implementation stage is essential because successful strategy formulation does not guarantee successful implementation.

a) Explain any three (3) issues organisations have to deal with during strategy implementation. 15 marks

b) Explain the term ethical dilemma and outline any two (2) ethical principles managers have to abide by. (4 marks)

c) Describe any three (3) methods for conflict resolutions managers can use. (6 marks)

Total: 20 marks
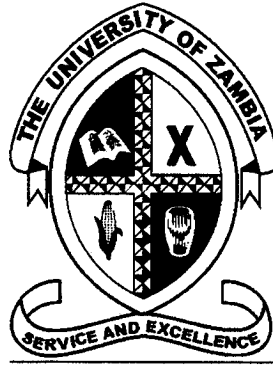
THE UNIVERSITY OF ZAMBIA

Graduate School of Business

UNIVERSITY POST GRADUATE DEFERRED EXAMINATIONS

MBS6021–PROJECT MANAGEMENT

SEPTEMBER 2020

TIME	:	Three (3) hours
INSTRUCTIONS	: :	Answer Question 1 and any other four questions
		All Questions Carry Equal Marks

QUESTION 1

1) You are completing the work defined in the project scope statement of a new software development project when a team member points out that you have an opportunity to deliver enhanced capability to the client at no extra cost, time, or risk to the project. What should you do NEXT?

a) Decline to make the changes and proceed to deliver exactly what the scope statement sets out.

b) Assess the change via the change control process and, if approved, amend the project scope statement.

c) Go ahead and make the changes, and surprise the client with the extra capability.

d) Ask the team member to keep quiet about the changes and ignore her recommendation because it presents too many risks to the project.

2) You are new to a project that has been underway for some time. One of your first jobs as project manager is to familiarize yourself with and understand the scope baseline. What documents will you require in order to do this?

a) The project scope statement, the WBS, and the WBS dictionary

b) The project scope statement, the WBS, and the risk register

c) The WBS, the change register, and the project scope statement

d) The WBS, the project management plan, and the change register

3) You are a project manager and you are working with your sponsor to define and plan a complex project. You plan to complete your initiation and planning documents sequentially to make sure the organization really understands and supports the project. What key deliverables will you produce in the correct order?

a) First the project management plan, then then project charter, and then the project scope statement.

b) First the project charter, then the requirements documentation, and then the project scope statement.

c) First the project charter, then the project scope statement, and then the requirements documentation.

d) First the project management plan, then the requirements documentation, and then the project charter.

4) What is the name of the planning document that describes how requirements will be analyzed, documented, and managed?

a) Requirements traceability matrix

b) Scope management plan

c) Requirements management plan

d) Requirements scope statement

5) Customer satisfaction means that customer requirements are met. Meeting customer requirements requires a combination of what two factors?
a) Continuous improvement and prevention over inspection
b) Conformance to requirements and prevention over inspection
c) Continuous improvement and fitness for use
d) Conformance to requirements and fitness for use

6) Modern quality management complements project management very highly, with both disciplines recognizing the importance of all the following characteristics except?

a) Customer satisfaction

b) Prevention over inspection

c) Continuous improvement

d) Total quality management (TQM)

7) Quality is planned, designed, and built into your project instead of being inspected in. What is the main reason that prevention of mistakes in quality is preferred over finding the mistakes via inspection?

a) Because finding defects via inspection should be avoided at all costs.

b) Because if you are a good project manager and perform prevention well, you won't have to deal with inspection.

c) Because the cost of preventing mistakes is generally much less than the cost of correcting them when they are found by inspection.

d) Because your quality management plan focuses on prevention.

8) How would you best describe to your client the difference between precision and accuracy?

  a) Precision means the degree to which there is conformance to requirements. Accuracy refers to fitness for use.

  b) Precision means the values of the repeated measurements are clustered and have little scatter. Accuracy means that the measured value is very close to the true value.

  c) Precision is the degree to which the project quality assurance processes are being met. Accuracy is the degree to which the product meets customer specifications.

  d) Precision is the ability to provide information to a six sigma level. Accuracy is the process of ensuring that the six sigma target is met.

9) A member of your project team seems confused about the differences between quality approaches to the project and product. How would you best explain these differences?

  a) Quality in relation to the project relates to the processes and procedures that run the project. Quality in relation to the product looks at conformance to requirements and fitness of use.

  b) There is no difference between the two.

  c) Quality in relation to the project is focused on ensuring the project control and reporting are accurate. Quality in relation to the product ensures that it stays within the upper and lower control limits.

  d) Quality in relation to the project is focused on the preparation and execution of the quality management plan. Quality in relation to the product is set solely by the customer.

10) Your project is behind schedule and you have asked your project team to work longer hours to make up the time so that the customer's needs are met as planned. As project manager, you should monitor your quality management plan for what reason?

  a) Meeting customer requirements by overworking the project team may result in increased employee attrition, errors, or rework.

  b) The customer requirements and specifications can change rapidly during periods of rework as the customer sees opportunities to make changes.

  c) Achieving customer needs is not the primary focus of the quality management plan, and you need to make sure your team is working on project quality, not product quality, at these times.

  d) The overtime cost incurred will take away the project budget assigned to the implementation of the quality management plan.

11) Your team is confused because they use terminology and words in project communications that appear to have interchangeable meanings, but other teams treat these terms as though they have specific, unique meanings. How can your team find out what the terms mean?

a) Designing a new software solution.

b) Building a new house.

c) Regularly achieving 3% growth on last year's sales figures.

d) Implementing a new business process or procedure.

12) You are delivering an introduction to a project management training session to new team members. One team member appears confused about the exact definition of a project. What is the BEST definition of a project?

a) A temporary endeavor undertaken to create a unique product, service, or result.

b) A body of work constrained by finances and time.

c) An organized effort of work by a team managed by a project manager.

d) The ongoing management of a business enterprise to achieve profitability.

13) Your team seems confused about whether the work they are doing meets the definition of a project. To help them understand the difference between projectized and operational work you give them the following examples. Which of the following is not an example of a project?

a) Designing a new software solution.

b) Building a new house.

c) Regularly achieving 3% growth on last year's sales figures.

d) Implementing a new business process or procedure.

14) You are planning to sit the PMP ® examination and as part of your study are referring to the PMBOK ® Guide for help in defining the project process groups. Which of the following is not one of the five process groups in the PMBOK ® Guide?
a) Closing
b) Checking
c) Initiating
d) Executing

15) You are the project manager on a project to develop a new piece of customer management software for an external client. Through your approved change control process you are considering a request to alter the scope of the project. While considering the impact of the request on the project scope, you must also consider the impact on other areas of the project such as quality, schedule, budget, and risk. These other areas that you are considering represent what to the project?

a) Opportunities

b) Constraints

c) Constrictions

d) Risks

16) You are in the process of developing your project closure checklist and selecting those items and actions that need to be completed to ensure your project is closed properly. A team member asks to help you do this work and asks how you know a project can be closed. A project can be considered finished under all of the following conditions except?

a) When the project manager resigns.

b) When the project objectives have been achieved.

c) When the project is terminated because its objectives will not or cannot be met.

d) When the need for the project no longer exists.

17) During the preparation of the business case for your project you outline and document several different compelling reasons why your project should proceed. These reasons include the high ROI, delivering strategic value, and an increase in business value. What is the BEST definition of business value?

a) The value of company's tangible assets, which can be liquidated to provide working capital.

b) The value added to the business by projects that are completed successfully.

c) The value of the total sum of all tangible and intangible elements of the business.

d) The value of all of the projects that the company is currently completing.

18) You are explaining to your team that all changes on your project must be documented and assessed in relation to any extra costs incurred. This is particularly important at what point in a project's timeline?

a) At the beginning of the project.

b) Towards the end of the project.

c) During the project execution.

d) It is equal throughout a project.

19) You are involved in making choices about resource allocation on your project, making trade-offs among competing objectives and alternatives, and managing the interdependencies among the different project management knowledge areas. Of which of the PMBOK ® Guide knowledge areas will it be most useful to have an in-depth understanding?

a) Develop Project Management Plan

b) Project Integration Management

c) Project Risk Management

d) Perform Integrated Change Control

20) The processes that describe the work required to ensure that the project includes all the work and only the work required to complete the project successfully are collectively known as what?
a) Project scope management
b) Project baseline delivery
c) Project specification delivery
d) Project management execution

[20 MARKS]

QUESTION 2

The Road agency is planning to build a new bridge and is considering two distinct configurations. The initial costs and annual costs and benefits for each bridge are shown in the following table. The bridges are each expected to give positive returns within 10 years and the rate of return expected 15%. Which would you choose and why.

	Alternative I	Alternative II
Initial cost	$ 6,000,000.00	$ 10,500,000.00
Annual maintenance and operating costs	$ 15,000.00	$ 10,000.00
Annual benefits	$ 1,200,000.00	$ 1,900,000.00
Annual benefits less costs	$ 1,185,000.00	$ 1,890,000.00

[15+5 MARKS]

QUESTION 3

You are in charge of organizing a dinner-dance concert for a local charity. You have reserved a hall that will seat 30 couples and have hired a jazz combo.

a) Develop a project charter for this dinner dance with all of all the elements. Assume that the event will occur in four weeks and provide your best guess estimate of the dates for milestones.

[15 MARKS]

b) What would the priorities likely be for this project?

[5 MARKS]

QUESTION 4

A business is launching a new product. The launch will require a number of related activities as follows – hire a sales manager (5 weeks), require the sales manager to recruit sales people (4 weeks), train the sales people (7 weeks), select an advertising agency (2 weeks), plan an advertising campaign with the agency (4 weeks), conduct the advertising campaign (10 weeks), design the packaging of the product (4 weeks), set up packing operation (12 weeks), pack enough products for the launch stock (8 weeks), order the launch quantity of products from the manufacturer (13 weeks), select distributors for the product (9 weeks), take initial orders from the distributors (3 weeks), dispatch the initial orders to the distributors (2 weeks).

a) By use of network analysis determine is the earliest time that the new product can be introduced to the market?

[15 MARKS]

b) Which of the activities are on the critical path?

[5 MARKS]

8

QUESTION 5

CompuX Systems is a small information systems consulting firm located in Kabulonga, Lusaka. CompuX has just been hired to design and install a local area network (LAN) for the city of Lusaka's social welfare agency. You are the manager for the project, which includes one CompuX professional and two interns from a local university. You have just finished a preliminary scope statement for the project (see below).

PROJECT SCOPE STATEMENT

PROJECT OBJECTIVE

To design and install a new local area network (LAN) within one month with a budget not to exceed K900,000 for the Lusaka Social Service Agency with minimum disruption to ongoing operations.

DELIVERABLES

- Twenty workstations and twenty laptop computers.
- Server with dual-core processors.
- Two color laser printers.
- Windows R2 server and workstation operating system (Windows 10).
- Migration of existing databases and programs to new system.
- Four hours of introduction training for client's personnel.
- Sixteen hours of training for client network administrator.
- Fully operational LAN system.

MILESTONES

1. Hardware August 22.
2. Setting users' priority and authorization August 26.
3. In-house whole network test completed September 1.
4. Client site test completed September 2.
5. Training completed September 16.

TECHNICAL REQUIREMENTS

1. Workstations with 17-inch flat panel monitors, dual-core processors, 4 GB RAM, 8X DVD+RW, wireless card, Ethernet card, 500 GB hard drive.
2. Laptops with 12-inch display monitor, dual-core processors, 2GB RAM, 8X DVD+RW, wireless card, Ethernet card, 500 GB hard drive and weigh less than 2 kg.
3. Wireless network interface cards and Ethernet connections.
4. System must support Windows 11 platforms.
5. System must provide secure external access for field workers.

LIMITS AND EXCLUSIONS

1. On-site work to be done after 8:00 p.m. and before 7:00 a.m. Monday through Saturday.
2. System maintenance and repair only up to one month after final inspection.
3. Warranties transferred to client.
4. Only responsible for installing software designated by the client two weeks before the start of the project.
5. Client will be billed for additional training beyond that prescribed in the contract.

CUSTOMER REVIEW

Director of the city of Lusaka's Social Service Agency.

You are now brainstorming potential risks associated with the project.

a) 1. Identify potential risks associated with this project. Try to come up with at least four different risks.

[4 MARKS]

b) Draw a risk register (log) and populate it with the four perceived risks. Analyse these risks and rank them.

[16 MARKS]

QUESTION 6

Your project is tasked with excavation of 30000 cubic meters of soil. According to the project management plan you need to excavate 1700 cubic meter of soil per week at a cost of K180 per cubic meter. According to the first month's progress report the project's EV was 1,000,000 and the AC was 1,200,000. According to the second month's progress report the project's EV was 2,200,000 and the AC was 2,400,000. After the 3rd month (12 weeks) you have 7000 cubic meters of soil remaining to be excavated and you total cost to date is 4,000,000. Determine the current values for the project for each of the terms below:

Term	Value
Budget At Completion	K5 400 000
Planned Value	
Earned Value	
Actual Cost	
Cost Variance	
Schedule Variance	
Cost Performance Index	
Schedule Performance Index	
Estimate At Completion	
Estimate To Complete	
Variance At Completion	

[20 MARKS]

Computer No. _____

1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e

END OF EXAMINATION PAPER

THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS

Postgraduate Supplementary/Deferred Examinations

Thursday 10th September 2020

MSC/OSM 6031: OPERATIONS STRATEGY FOR INDUSTRY (OSI)

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INSTRUCTIONS   **DURATION: 3 HOURS**

a) Ensure that you thoroughly read through the questions
b) Mobile (Cell) phones are not allowed
c) Scientific calculators are permitted
d) There are *Six (6)* Questions in this paper
e) Answer Question *One (1) (compulsory)* and any other *Three (3)* questions with clear illustrations and diagrams where necessary
f) All *Four (4)* questions carry equal marks

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DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

QUESTION ONE

Learning Curves are used to improve work productivity and quality, based on the premise that people and organisations become better at their tasks, as the tasks are repeated, time to produce a unit decreases as more units are produced, learning curves typically follow a negative exponential distribution and the rate of improvement decreases over time;

(a) By using the Arithmetic Approach (Simplest approach) determine the Hours N^{th} unit for N^{th} unit produced; 1, 2,4,8,16 and 32. The First Unit takes 150 labour-hours to be produced and present learning curve rate is 90%   **[5 Marks]**

(b) Apply the Logarithmic approach to calculate the Labour – hours for any Unit T_N, namely T_2 up to T_5, if the First Unit (T_1) took 200 labour- hours and the Learning curve rate is 75% for b = -0.415.   **[10 Marks]**

(c) With the Coefficient approach and the table given below/overleaf calculate (i) Labour – hours for T_2, T_3 & T_4, if the first (T_1) Warehouse took 450,000 hours to complete and the learning curve rate is 70%. Find the Labour – hours for the same if the first Warehouse (T_1) took 350, 000 hrs to complete and the learning curve rate being 85%. (ii) if the Labour cost is ZMK550 per hour what would be the total cost of producing units (T_1 toT_4) or all the Four (4) Warehouses in both cases? (iii) If the third Ware house takes 250,000 hours with learning factor 70% and 200,000 hours for the learning factor 85% what would be the new estimates in hours and monetary terms for the first house (T_1) in both cases
    [10 Marks]

See table below for Learning Curve- Coefficients

Unit Number (N)	70%		85%	
	Unit time	Total time	Unit time	Total time
1	1.000	1.000	1.000	1.000
2	0.700	1.700	0.850	1.850
3	0.568	2.268	0.773	2.623
4	0.490	2.758	0.723	3.346
5	0.437	3.195	0.686	4.032
10	0.306	4.932	0.583	7.116
20	0.248	6.274	0.530	9.861
25	0.214	7.407	0.495	12.402

QUESTION TWO

Operations strategy can be viewed and described from Four perspectives. Explain the following;

(a) State and briefly describe the *Four (4)* Operations strategy perspectives as employed in Operations performance   **[5 Marks]**

(b) (i)How should operations strategy reflect higher level strategy and (ii) How can operations strategy learn from day-to-day experience   **[10 Marks]**

(c) (i)How do the requirements of the market influence operations strategy? and (ii) How can the intrinsic capabilities of an operation's resources influence operations strategy **[10 Marks]**

QUESTION THREE

For any effective Operations strategy, Capacity requirements must be matched with Equipment and Labour requirements. Below are the details of Capacity in terms of demand and availability of Equipment and Labour requirements for Small and Family sized bottle productions, respectively;

Yearly forecast demand data

Year	1	2	3	4
Small	400,000	440,000	500,000	580,000
Family	330,000	380,000	440,000	470,000

Machine and Labour availability

i. *Three (3) 200,000 Units* per year Machines are available for Small-Bottle Production and *Two (2) Operators* are required per Machine, at a cost of ZMW 0.1/Operator/Unit.

ii. *Two (2) 240,000 Units* per year Machines are available for Family-Sized-Bottle Production and *Three (3) Operators* are required per Machine at a cost of ZMW 0.15/Operator/Unit.

(a) What are the *Years 1 to 4* values for Percent Capacity used, Machine, and Operator requirements? Deduce the total cost for Small sized Bottle Production in all cases? **[10 Marks]**

(b) What are the *Years 1 to 4* values for Percent Capacity used, Machine, and Operator requirements? Deduce the total cost for family sized Bottle Production in all cases? **[10 Marks]**

(c) In which Year are the Percent Capacity used, Machine and Operator requirements for Small and Family –sized Bottle Production highest and lowest and what are their calculated values? **[5 Marks]**

QUESTION FOUR

Operations strategy is not in itself an end to better Operations performance, continuous improvement is necessary;

(a) Identify and briefly explain *Four (4)* broad approaches to managing improvement of Operations strategy for better Operations performance **[10 Marks]**

(b) State and briefly describe the *Two (2)* improvement cycles that you would employ as techniques to enhance Operations strategy. **[10 Marks**

(c) List and briefly elucidate *Five (5)* specific techniques that could be used to improve strategies of Operations management by stating these common techniques for process improvements diagrammatically. **[5 Marks]**

QUESTION FIVE

Do (make) or Buy Capacity strategic decisions sometimes incorporate Vertical integration decisions.

(a) Explain Vertical integration for inter-operations arrangements in supply networks **[5 Marks]**

(b) State and explain *Two (2)* types of Vertical integration you would employ in the Operations strategy. Explain these by describing the direction, extent and balance of vertical integration for competitive advantage through the ownership of the network. **[10 Marks]**

(c) Explain the process of do (make)/buy analysis by also highlighting issues to consider when deciding on outsourcing. How does Transaction Cost Economics (TCE) come into play in terms of Frequency, Asset specific ity and Uncertainty in Operations strategy **[10 Marks]**

QUESTION SIX

As an Operations strategist for the Mining Conglomerate of Zambia, you have been assigned a task to undertake *Aggregate Production Planning (APP)* using the *Transport Method (TM)*. Below are the details of demand and capacity to move Excess stocks (Capacity) to Shops of looming stockouts (Demand). The Excess Stocks are to move from *Three (3)* to *Three (3)* Towns are as shown below:

Shoprite Shops with excess stocks to be shipped to other stores (Capacity/Units)-Supply		Shoprite Shops Requesting excess Stocks (Demand/Cost)- Demand Side					
Towns	Capacity in Units(K)	Monze Demand/Cost(K)		Mazabuka Demand/Cost		Kafue Demand/Cost(K)	
Lusaka	1500		50		40		30
Livingstone	3500	3500	80	2500	40	2500	30
Kabwe	3000		90		70		50

(a) Use the North-West Corner Transportation Analysis table, allocate and calculate the resource Capacity, Demand and Cost of Moving the Copper Ore **[5 Marks]**

(b) Apply the Intuitive Lowest – Cost Method of Transportation Analysis table to get optimal cost results better that found in (a) **[10 Marks]**

(c) Perfect your Aggregate Production (Supplying) Plan (APP) through the Stepping Stone Method of Transportation Analysis table to get Best cost results better that found in (b) **[10 Marks]**

END OF THE EXAMINATION