UNIVERSITY OF ZAMBIA
FIRST SEMESTER 2004
SUPPLEMENTARY EXAM BOOKLETS

AGS 311	:	AGROCLIMATOLOGY
BS 361	:	MOLECULAR BIOLOGY- PAPER II
BS 431	:	ADVANCED PARASITOLOGY I THEORY PAPER
BS 475	:	POPULATION ECOLOGY (PAPER 1)
CE 219		STATISTICS AND INTRODUCTION TO STRENGTH OF MATERIALS.
E 121		INTRODUCTION TO WRITING SKILLS AND PROSE FICTION
EAP 941	:	THE PHILOSOPHY OF EDUCATION
EC 925	:	INDUSTRIAL ORGANIZATION
EM 411	:	ENGINEERING MATHEMATICS V
EPS 361	:	CURRICULUM PLANNING IN SPECIAL AND INCLUSIVE EDUCATION
EPS 451	:	IDENTIFICATION, ASSESSMENT AND INTERVENTIONS IN SPECIAL INCLUSIVE EDUCATION
GEO 271	:	QUANTITATIVE TECHNIQUES IN GEOGRAPHY I
GEO 381	:	ENVIRONMENT AND DEVELOPMENT I
L 221	.	LAW OF CONTRACT
L 311	:	LAW OF EVIDENECE
L 421	:	DEVELOPMENT INFORMATION SYSTEMS AND SERVICES FOR AFRICA
L 6201	:	INTERNATIONAL HUMAN RIGHTS LAW
LIS 461	:	INTRODUCTION TO RECORDS MANAGEMENT
M	.	MULTIVARIATE ANALYSIS
PA 201	:	GOVERNMENT AND ADMINISTRATION
PA 311	:	ORGANIZATIONAL DESIGN AND MANAGEMENT
PA 955	:	STRATEGIC MANAGEMENT
PH 221	:	ANCIENT, HELLENISTIC AND MEDIAVAL PERIODS
S 111	:	INTRODUCTION TO SOCIOLOGY I
S 915	.	DISASTER PREPAREDNESS/ MANAGEMENT
SW 331	:	ANALYSIS OF SOCIAL WORK INTERVENTION

UNIVERSITY OF ZAMBIA
UNIVERSITY FIRST SEMESTER EXAMINATIONS - JUNE, 2004

AGS 311: AGROCLIMATOLOGY

TIME: 3 HOURS   **MARKS: 70**

INSTRUCTION: ANSWER ALL QUESTIONS. CALCULATED VALUES MUST BE
<u>ROUNDED OFF TO ONE TO THREE DECIMAL PLACES.</u>

1. Briefly define the following terms as applied in Agroclimatology   (*8 marks*)
a) Hygrograph
b) Absolute zero temperature
c) Weather
d) Exosphere

2. If you were given a task of setting up a meteorological station at the University farm,
list the basic requirements you can base for selecting a suitable site(*8 marks*)

3. Solar radiation from the sun passes through the space and interacts with the earth's
atmosphere, land mass and ocean. With the aid of a diagram illustrate the different
components of the earth's average annual heat balance.   (*15 marks*)

4. Given the following meteorological data measured this year (2004) at Msekera
Regional Research Station (13°38′S, 32°34′ E and altitude 1025m) located about 12 km
west of Chipata town: (*20 marks*)

Maximum air temperature	28.0°C
Minimum air temperature	15.2°C
Maximum relative humidity	90%
Minimum relative humidity	60%
Wind speed measured at 10m height	10 km hr^{-1}
Estimated extraterrestrial radiation	40.5MJ m^2 day^1
Solarimeter measured solar radiation	267.496 W m^{-2}
Solar inclination	-0.370 radians

Note: 1.0MJ m^2 day^1 = 11.6 W m^{-2}

Calculate:
a) Atmospheric pressure for Msekera
b) Actual sunshine duration in hours
c) The day and month of this measurement
d) Dewpoint temperature in degrees Celsius

5. With the aid of a well labeled diagram, illustrate how precipitation and reference
evapotranspiration can be used to determine the length of the growing season (*9 marks*)

6. a) Describe briefly the agroclimatological aspects of Zambia's region III (*6 marks*)

b) Given the following cumulative series of climatological data, estimate the probability that precipitation is more than 44mm during the month of February   (*4 marks*)

February	Precipitation (mm)
1	18
2	23
3	41
4	44
5	48
.	.
.	.
.	.
30	250

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NATURAL SCIENCES
2004 ACADEMIC YEAR FIRST SEMESTER
FINAL EXAMINATIONS

BS361: MOLECULAR BIOLOGY – PAPER II

Time: 3 (three) hours.
Answer all questions.
Answers must be precise and to the point.

Q1. Describe in as much detail as you can, two (2) examples of structural motifs in Eukaryotic transcription factors that are responsible for DNA binding.

Q2. a) What difference in gene expression between Eukaryotes and Prokaryotes is brought about by presence of the nuclear membrane in Eukaryotes?

b) Explain the process of translational initiation in the Bacteria (Prokaryotes). How does the initiator tRNA differ from the other tRNAs?

Q3. In bacterial DNA the bi-directional replication is semi-conservative and occurs on both complementary strands.
What is meant by semi-conservative replication?
Explain in as much detail as you can, the synthesis of the daughter strand known as the lagging strand.

Q4 In the Eukaryotes, the dissolution and reconstruction of the nucleus is a major feature of the perpetuation of genetic material. Briefly describe the steps involved in this process.

Q5 Describe the main types of ribonucleic acids (RNAs) found in the living cells. State the role of each of these in protein synthesis.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NATURAL SCIENCES

FIRST SEMESTER UNIVERSITY EXAMINATIONS

JUNE 2004

BS 431 ADVANCED PARASITOLOGY I

THEORY

TIME: THREE (3) HOURS

INSTRUCTIONS: Answer Five (5) Questions. Three Questions from Section A and Two Questions from Section B.

All questions carry equal marks. Illustrations (diagrams, graphs and tables) may enhance the quality of your answer.

Section A

Q1.   Define the parasite's ecological niche. Explain how a successful parasite would be able to withstand the hazards of its niche.

Q2.   Parasites show a division of Labour throughout their life cycles as characteristics of parasitic forms. Briefly explain this statement using Fasciola hepatica as an example.

Q3.   One of the certain events that are common in the life cycles of all parasites is the transmission to the next host.

(a) Name the main methods employed by parasites for successful transmission.

(b) What are the advantages of this process?

(c) Give one example each of a disease whose transmission is affected by a resting stage of the parasite and another affected by a motile stage of the parasite.

Q4. (a). Write short notes on any two of the following:

  (i) *Trichinella spiralis*

  (ii) Babesiosis

  (ii) Cestodes

  (b). Draw and indicate the structure of the following:

  (i) Oncomiracidium of *Entobdella Solaea*.

  (ii) Cysticercus of Taenia.

  (iii) Hydatid of *Echinococus*.

Q5. (a) Mention the various parasitic stages that are involved in locating their hosts in the life cycles of metazoan parasites.

  (b) Discuss the mechanism by which the infective stage of monogeneans locates its host.

Section B

Q6. (a) What is the basic difference between the following:

  (i) Coracidium and miracidium.
  (ii) A definitive host and an intermediate host.
  (iii) A paratenic host and a vector.

  (b) Define the following:

  (i) Parasitism.
  (ii) Prevalence.
  (iii) Incidence.

Q7. Discuss the uses of epidemiology in terms of community health assessment, individual decision and clinical medicine.

Q8. (a) Explain the terms infectivity, pathogenicity, endemic and epidemic.

  (b) Distinguish between descriptive and analytical epidemiology.

End of Examination

THE UNIVERSITY OF ZAMBIA

UNIVERSITY FIRST SEMESTER EXAMINATIONS – JUNE 2004

BS475

POPULATION ECOLOGY

(PAPER I)

TIME: THREE (3) HOURS

INSTRUCTIONS: ANSWER FIVE QUESTIONS AND USE
ILLUSTRATIONS WHEREVER POSSIBLE.

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1. (a) Define the following terms:
     (i)   Population dispersion;
     (ii)   Population growth rate;
     (iii)   Biotic potential
     (iv)   Carrying capacity (K).
   (b) Why is a population at the carrying capacity of environment at a very fragile state?
   (c) Why is age distribution an important population characteristic?

2 (a) Why is seed dispersal of interest to population ecologists?
   (b) Discuss the role of animals, including man, in the dispersal of seeds?
   (c) What are the likely fates which may befall seeds landing on the soil?

3. Discuss (i) self-thinning and the $^{-3}/_2$ power law;
              (ii) r- and k-selection.

4 (a) Distinguish between competition and predation.
   (b) Write the Lotka-Volterra equations for modelling the growth of two species populations undergoing competition and predation interactions.
   (c) In the Lotka-Volterra competition model what is the meaning of a situation in which $k_1 - N_1 - \alpha_{12}N_2 = 0$? In which α_{12} or $N_2 = 0$, α_{21} or $N_1 = 0$? What outcomes are predicted when $\alpha_{12} < {}^{k1}/_{k2}$ and $\alpha_{21} < {}^{k2}/_{k1}$; $\alpha_{12} > {}^{k1}/_{k2}$ and $\alpha_{21} > {}^{k2}/_{k1}$?
   (d) Why is plant-herbivore relationship (herbivory) of overwhelming economic importance?

5. (a) Distinguish between life-tables and fecundity schedules.
   (b) List the life-tables used in the interpretation of demographic processes in the life cycles of a number of plant species?
   (c) What are the basic differences between them and their advantages and disadvantages?
   (d) Why is age an unsatisfactory basis for calculating plant life-tables?

6. (a) What is dormancy in plants?
   (b) Distinguish the three types of seed dormancy in plants?
   (c) Discuss seed dormancy in annuals, biennials and trees?

7. Discuss soil seed bank and its importance in the recruitment of seeds to the growing plant population.

8. "Plants appear to posses only limited resources which are shared between the competing demands of maintenance, growth and reproduction." With reference to the above statement, discuss (i) variations in fecundity and (ii) flowering as an alternative to vegetative growth in plants as the result of partitioning of resources.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA.

UNIVERSITY SECOND SEMESTER EXAMINATION – JULY 2004

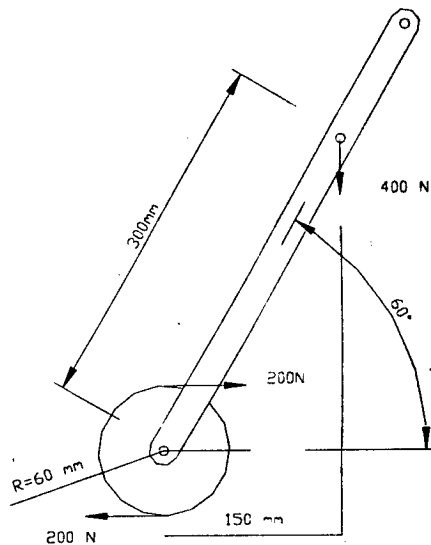## DEFERED/SUPPLEMENTARY EXAMINATIONS

CE 219 : STATICS AND INTRODUCTION TO STRENGTH OF MATERIALS.
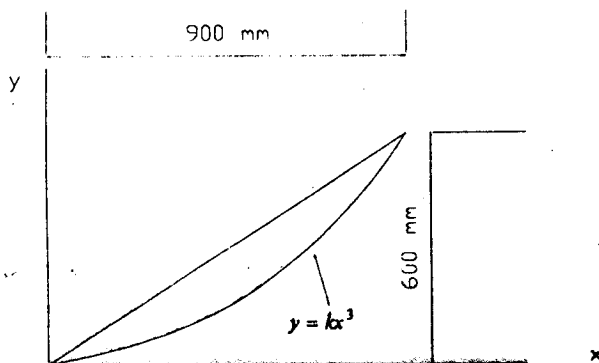
TIME: Three Hours.   **ANSWER:** Any THREE from Section A, and Any TWO from Section B.
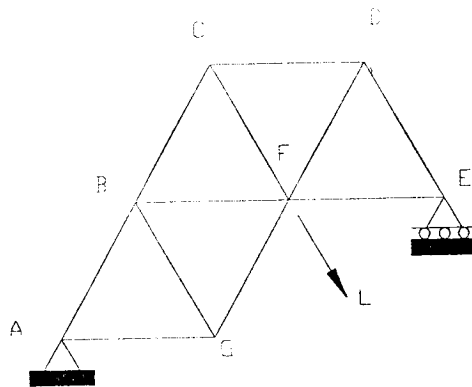

Section – A.

1. Replace the couple and force shown by an equivalent single force applied to the lever. Determine the distance from the shaft to the point of application of this equivalent force.


2. Locate the centroid of the plane area shown in the figure below.

3.(a) Determine the force in member CF of the truss shown in the figure below in terms of load L. All triangles are equilateral.


(b) Knowing the external reaction at E for the same truss, determine the force in member BF from only one additional equilibrium equation applied to one additional free-body diagram.

4. Determine the mass moment of inertia of a ring of mass m, cut from a thin uniform plate, with respect to
   (a) the axis AA' co-linear with the diameter of the ring.
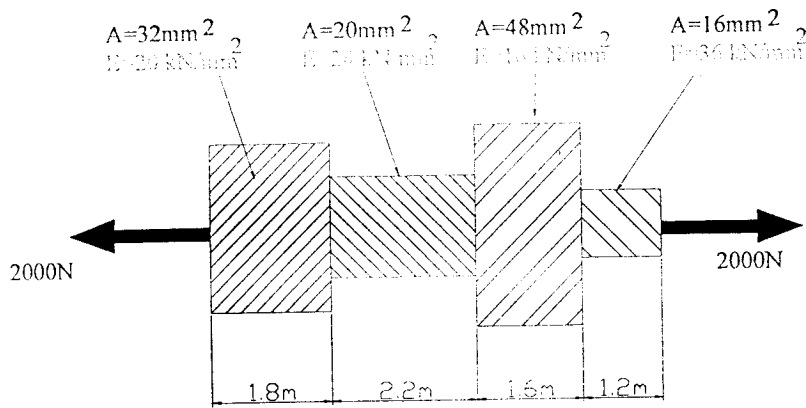   (b) The axis CC' perpendicular to the plane of the ring.
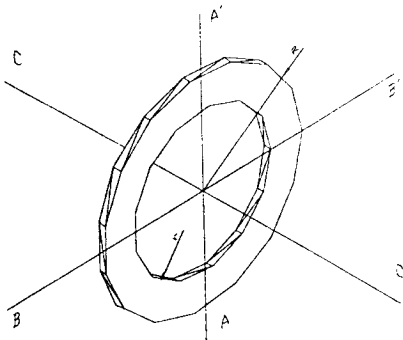
Section – B.

5. Draw the Shear Force and the Bending Moment Diagrams for the beam and loading shown.
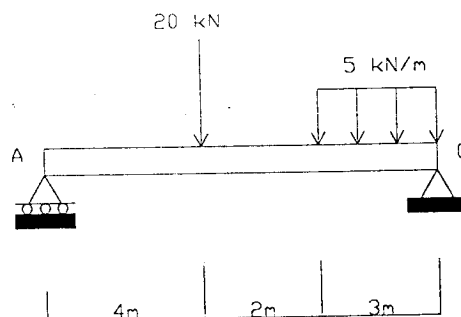
6. Evaluate the total elongation and the average strain in the member shown.

| A=32mm^2 | A=20mm^2 | A=48mm^2 | A=16mm^2 |

7. For the state of plane stress shown in the figure below, determine, with the use of the Mohr Circle:
   (a)   The principle planes
   (b)   The maximum and minimum direct stresses.
   (c)   The maximum and minimum shear stresses
   (d)   The stress components exerted on the element obtained by rotating the given element counter-clockwise through 30 degrees.

60 MPa

100 MPa

48 MPa
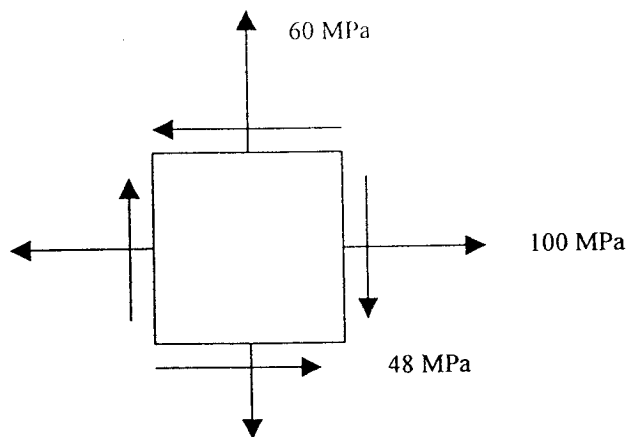
END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF LITERATURE AND LANGUAGES

FIRST SEMESTER FINAL EXAMINATIONS
2004 ACADEMIC YEAR

E121: INTRODUCTION TO WRITING SKILLS AND PROSE FICTION

DURATION: 3 HOURS

INSTRUCTIONS   -   Answer any three of the following questions.
        -     Candidates may bring into the examination room a copy of an English Dictionary.
        -     Prescribed books are <u>not</u> allowed into the Examination room.

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1. To what extent is Odysseus' suffering a result of his own faults and the faults of his men?

2. Discuss with close reference to the text the implications of "The Beautiful Ones Are Not Yet Born".

3. Discuss symbolism in Hemingway's "The Short Happy Life of Francis Macomber.

4. What are Bessie Head's major concerns in **Maru**.

5. "Adam and Eve should not be condemned for their act of eating the forbidden fruit in the Garden of Eden as their life was already predestined by the creator."
   Do you agree with this view?

6. Discuss infidelity in **The Odyssey.**

END OF DEFERRED EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND POLICY STUDIES

SECOND SEMESTER DEFERRED EXAMINATION JULY 2004

EAP941 – THE PHILOSOPHY OF EDUCATION

TIME: 3 HOURS

a) Answer any three (3) questions from the given 9 questions.
b) All questions carry equal marks i.e. 20 marks.
c) Total marks: 60.
d) You are required to read all the questions carefully before selecting which ones to attempt.
e) There is one printed page in this examination.

1. What do you understand by the term 'the philosophy of education?' Attempt an outline of what you think is the current philosophy of education in Zambia and indicate the main obstacles in its way.

2. In what ways can the concept of morality and ethics be applicable to the Zambian teaching fraternity in education? State how the government of the Republic of Zambia has tried to operationalise these two concepts over the years and, with what success?

3. What is teaching? Discuss one model of teaching of your choice and show how it can be applied in the Zambian situation.

4. To what extent is the state obliged to provide education to all its citizens? Critically analyse the major aspects of such provision of education while at the same time indicating their consequences for better or for worse.

5. How has Zambia handled the issue of foreign aid in education over the 1989 – 1999 period? Show the extent to which that foreign aid has gone contrary to Zambia's philosophical expectations.

6. Examine the concept of globalisation in relation to the provision of education in recent years. Why do you think globalisation may present a few named problems in the provision of education?

7. Is the liberal view of the nature of education compatible with Zambia's goals for development? How could this view be possibly modified to suit Zambia's developmental goals?

8. Critically indicate what you consider to have been the lasting impact of the philosophy of humanism on Zambia's education system? How has this influenced development?

END OF EXAM.

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

**2004 UNIVERSITY SECOND SEMESTER DEFERRED
FINAL EXAMINATIONS**

EC 925: INDUSTRIAL ORGANIZATION

TIME: THREE HOURS

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY FOUR QUESTIONS

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1. A Policy Analyst at the Ministry of Trade and Industry has the following
distribution of business among commercial banks in Zambia

Distribution of Business among Commercial Banks, 1987
            (Billion kwacha)

Unit	Total Assets	Total deposit liabilities
Barclays Bank	278.9	183.2
ZNCB	254.3	168.5
Standard	156.9	112.1
Stanbic	101.7	68.2
Finance Bank	81.9	49.1
Citi Bank	71.3	50.1
Indo – Zambia	57.6	27.6
Union Bank	53.7	22.5
Other	185.7	77.8

Source: Bank of Zambia

(a) Calculate the 2-firm, 3-firm and 4-firm concentration ratios for total assets and total
deposit liabilities.
(b) What can you conclude about the two ratios?

2. Anti-trust policy in the United States has been based on the notion that market performance is related to market structure. In most cases, it is presumed that an industry composed of many firms performs better than if the industry were monopolized. State the reasoning on which such a policy is based and evaluate it critically.

3. Explain how the "minimum efficient scale" of a firm can determine the structure of the market, making it naturally competitive or a natural monopoly.

4. An efficiently designed patent system can stimulate the invention and development of new products and processes. For this, society has to pay a price! What is this price? How does society still gain from an efficiently designed patent system?

5. What do we mean by marginalist pricing and full –cost pricing. What are the arguments in support of full-cost pricing?

6. Ultimately, a good market structure is one which gives you good market performance. While comparing a competitive market and a monopolistic market, discuss any four performance indicators.

END OF FINAL EXAMINATION

THE UNIVERSITY OF ZAMBIA

SCHOOL OF NATURAL SCIENCES

2004 ACADEMIC YEAR FIRST SEMESTER
DEFERRED EXAMINATIONS

EM411: ENGINEERING MATHEMATICS V

TIME: **THREE (3) HOURS**

INSTRUCTIONS: **(i)**   **ANSWER ANY FIVE (5) QUESTIONS**
                         (iii) **INDICATE THE NUMBER OF EACH QUESTION
ANSWERED ON YOUR MAIN ANSWER BOOK.**

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1. Let G and Ω be open subsets of the complex plane $\mathbb{C}$. Suppose f: $G \to \mathbb{C}$ and g: $\Omega \to \mathbb{C}$ are continuous functions such that $f(G) \subset \Omega$ and $g(f(z)) = z$ for all $z \in G$. If g is differentiable and $g'(z) \neq 0$, show that f is differentiable and $f'(z) = 1/g'(f(z))$

2. A trough of length L has a cross-section in the shape of a semi-circle with radius r. When filled with water to within a distance h of the top, the volume of the water is

   $V = L\{0.5\pi r^2 - r^2 Sin^{-1}(h/r) - h(r^2 - h^2)^{\frac{1}{2}}\}$

   Suppose L = 3.048m, r = 0.3048m and V = 0.3512m^2, use fixed point iteration to find the depth of the water in the trough.

3. The functions $\phi_1(x) = 1/\sqrt{2}$, $\phi_2,(x) = \left(\sqrt{3}/\sqrt{2}\right)x$ and $\phi_3(x) = \left(\sqrt{5}/\sqrt{8}\right)\left(1 - 3x^2\right)$ form

   an orthonormal set on $\left[-1,1\right]$. Let f: $\left[-1,1\right] \to \mathbb{R}$ be defined by $f(x) = \sin\dfrac{\pi}{2}x$.

   Find the Fourier constants of f(x) relative to the functions ϕ_1, ϕ_2 and ϕ_3 in $\left[-1,1\right]$.

4. A rocket is launched from the ground. Its velocity is registered during the first 80 seconds and is given in the table below.

t (sec)	0	10	20	30	40	50	60	70	80
v(m sec^{-1})	0	308.15	633.20	977.75	1343.43	1733.83	2151.30	2601.20	3087.03

Find the acceleration and height of the rocket at time t = 80 seconds.

5   Suppose λ_1, is the dominant eigenvalue of a matrix A with associated eigenvector $\overline{v}^{(1)}$ and that λ, has multiplicity one. Define $\quad \overline{x} = \dfrac{1}{\lambda_1 v_i^{(1)}} \left(a_{i1,} a_{i2,} ...., a_{in} \right)^{t},$

Where $v_i^{(1)}$ is a coordinate of $\overline{v}^{(1)}$ which is non-zero and the values a_{i1}, a_{i2}, ..., a_{in} are the entries the ith row of A.

(a)   Show that $\overline{x}^{t} \, \overline{v}^{(1)} = 1$

(b)   Show that the ith row of $B = A - \lambda_1 \, \overline{v}^{(1)} \, \overline{x}^{t}$ consists entirely of zeros.

6   (a)   Use Taylor's method of order two to approximate the solution to the initial value problem $y' = \sin t + e^{-t}$, $o \le t \le 1$, $y(0) = 0$, with $h = 0.5$

(b)   Suppose $p(x)$, $q(x)$ and $r(x)$ are continuous functions on $[a,b]$ and $q(x) > 0$ on $[a,b]$. Consider the linear boundary - value problem $y'' = p(x) y' + q(x) y + r(x)$, $a \le x \le b$, $y(a) = \alpha$, $y(b) = \beta$. Write down two initial -value problems which both have unique solutions, a linear combination of which gives the unique solution to the boundary value problem.

7   Horner's method is used to evaluate an arbitrary nth degree polynomial. It is described as follows: Let $P(x) = a_n x^n + a_{n-1} x^{n-1} + ... + a_1 x + a_0$, $b_n = a_n$
If $b_r = a_r + b_{r+1} x_0$, for $r = n-1, n-2, ..., 1, 0$, then $P(x_0) = b_0$ Write an algorithm for Horner's method.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

2004 ACADEMIC YEAR FIRST SEMESTER

EPS 361: CURRICULUM PLANNING IN SPECIAL AND INCLUSIVE EDUCATION

TIME: THREE (3) HOURS

MARKS: 50

INSTRUCTIONS

1. THIS PAPER COMPRISES SECTIONS A AND B.

2. EACH SECTION HAS ITS OWN SPECIFIC INSTRUCTIONS.

3. USE THE ANSWER- BOOKLETS PROVIDED FOR YOU.

SECTION: A (20 Marks)

- There are ten short answer questions and are all compulsory.
- Each correct answer carries two marks.

1. Why is it important to observe consistency with reference to defining the term curriculum?

2. How do you compromise both formal and hidden curricula?

3. What do objectives of the curriculum include?

4. What is the essence of selecting learning experience?

5. Explain briefly the significance of rational planning as supported by Kerr and Tyler (1949).

6. What is the common stand of both objectives and process models of curriculum planning?

7. Explain briefly the main problem that teachers of children with special needs are usually confronted with when implementing the curricula.

8. Outline two critical questions that one should consider when formulating aims in special education.

9. What are the effects of under demanding and over demanding the curricula on the part of learners?

10. Evaluation of the curriculum should not operate at the end point only. what are your comments on this statement?

SECTION B. (30 Marks)

- Section B has five essay type questions.
- You are expected to attempt only three questions but question one is compulsory. Therefore, Choose other two from questions 2 –5.
- Ten marks are awarded for each correct answer.

1. The disabled child has been recommended for mainstream placement. Discuss the pre- requisites necessary for this child's school learning environment.

2. Discuss the positive results emanating from curriculum evaluation.

3. No one curricular model would meet all needs, but should be combined in designing a balanced curriculum for special needs. What is your stand on this issue?

4. It is increasingly being experienced that teaching children with learning disabilities calls for diverse strategies. Identify and discuss three of these strategies.

5. (a) What is a differentiated curriculum? (3 marks)

(b) Identify the problem that special education curriculum designers may face and suggest how you can overcome this problem.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

2004 ACADEMIC YEAR FIRST SEMESTER

FINAL EXAMINATION (**DEFERRED**)

EPS 451: IDENTIFICATION, ASSESSMENT AND INTERVENTIONS IN SPECIAL/ INCLUSIVE EDUCATION

TIME: THREE (3) HOURS

MARKS: 50

INSTRUCTIONS

ANSWER 3 QUESTIONS IN ALL. QUESTION ONE IS COMPULSORY AND CARRIES 20 MARKS. THE REMAINING TWO QUESTIONS CARRY EQUAL MARKS.

1. (a) Identify and analyze the main features of an Individualized Educational Programme (I.E.P). (10 Marks)

   (b) Design an I.E.P for a child with specified mathematical problem in early childhood education. (10 Marks)

2. (a) What do you understand by a differentiated curriculum? (3 Marks)

   (b) What are the main challenges that you as an early childhood special education curriculum designer may face and suggest how such problems should be solved (12 Marks)

3. Discuss the concept of ' Inclusive Education' including reasons, promises and challenges it poses in the provision of qualitative education to children with special needs in Zambia? (15 Marks)

4. (a) Critically discuss any two of the following reading approaches:

   (i)   Multi-sensory (VAKT).
   (ii)   Rebus
   (iii)   Reversal
                                                          (10 Marks)
   (b) Why is it necessary for a teacher to provide different intervention activities for a 7-year and 16- year child with a reading problem? (5 Marks)

5. Describe and critically examine the identification process of children with special needs in Zambia. (15 marks)

THE UNIVERSITY OF ZAMBIA
UNIVERSITY FIRST SEMESTER DEFERRED EXAMINATIONS – JULY 2004

GEO 271: QUANTITATIVE TECHNIQUES IN GEOGRAPHY I

TIME   :   Three hours

ANSWER   :   Any four questions

NOTE   :   All questions carry equal marks. Use of a Philips University
                        Atlas is allowed. Candidates are encouraged to use illustrations
                        wherever appropriate.

1.   Distinguish the Scientific method of research from the non-scientific one.

2.   Justify why measurement scales are important in research.

3.   Discuss the various characteristics that a well chosen research problem should
      satisfy.

4.   What is the essence of coding data once it has been collected from the field?

5.   Explain the merits and demerits of Project Impact evaluation.

6.   Describe the contents of a research proposal.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NATURAL SCIENCES
2004 ACADEMIC YEAR FIRST SEMESTER DEFERRED EXAMINATIONS
GEO 381: ENVIRONMENT AND DEVELOPMENT I

TIME: THREE HOURS

INSTRUCTION: ANSWER QUESTION <u>ONE</u> AND ANY OTHER <u>THREE</u> QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

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1. Write short explanatory notes on ALL of the following:
   a. Conflict as a result of erosion of vertical and horizontal legitimacy.
   b. Resource marginalisation.
   c. The life situation approach to poverty analysis.
   d. Differentiate between instrumental and intrinsic values of the environment.
   e. Autopoietic systems.

2. Is the mere coexistence of rural poverty, large populations and environmental degradation is a sufficient reason to establish a cause and effect relationship between poverty and the environment. Elucidate

3. Define 'state-building', and show how the process constrained human-environment interactions in colonial Africa.

4. Use the concept of the BOMA (i.e. British Overseas Military Administration) centre to show the historical legacy of colonialism on the environment in Africa.

5. 'Carrying capacity is elastic.' Discuss

6. "Environmental rights are human rights", Yvonne Dausab (2004). Discuss.

END OF EXAMINATION

TIME: THREE (3) HOURS

INSTRUCTIONS: ANSWER QUESTION ONE (1) AND ANY OTHER THREE QUESTIONS

1. Andrea is a promising young architect. Ben contacts her and tells her of his desire to build, in his words, "a stunning country home". He wants her to submit a design for this project. Andrea does so. Ben admires her design, asks her to provide finished plans and also asks her to take on the responsibility of managing the construction of the home. Andrea has only worked on several small commissions before this and Ben's project is a major opportunity for her.

   Andrea prepares a contract for this project, using a standard form provided by the Architects Association. She inserts a sum of K20 million as the price for her design and K30 million as the project management fee and taxes, and faxes this to Ben. Ben calls her and tells her the following. "I want you to go ahead with the design and management. I think you will enjoy this project. The price of the design and the management is reasonable. But, I don't sign contracts." Andrea tries to convince Ben that it would be better that both signed the contract but Ben is adamant. Andrea is in a quandary. She believes that she would be better off with a signed contract but also realizes that this is a golden opportunity to create a reputation for herself and gain valuable management experience.

   Andrea goes ahead with the project and finds it a rich and rewarding experience. However when the house is almost complete Ben calls her, thanks her for her work and then informs her that he believes it is now appropriate for an experienced architect to take over the project. He also tells her that he was happy with her work, would be happy to recommend her to his friends and that he hoped that she had enjoyed the project. When Andrea mentions the price for design and management Ben laughs and asks her whether she realistically believed that he would enter into a contract involving such sums with such an inexperienced architect. Ben tells her that he believes that he had done her a favour and that the experience she gained and the living monument to her skills would be more than adequate recompense for the work that she had provided.

Andrea is shattered by the news. She knows that any reputation that she may have gained from designing the house and managing the project is at risk because of the installation of a new architect.

Andrea had entered the design in the "Young Architects Award", a prestigious competition for those designing and managing a completed project. (her inability to complete the project makes her ineligible for the award). She then learns that the winner of the competition had submitted a similar but less sophisticated design than her own. The award carried a prize of $100,000 plus the opportunity to work for one year with Tom, one of Zambia's leading architects. This would have allowed Andrea to expand her skills as well as making contact with a whole network of architects, builders and wealthy clients.

Andrea is contemplating legal action and comes to you for advice.

2. In March 2000 the Dean of the School of Law of the University of Lusaka decided to implement a programme to assist law students currently enrolled in the Law School. Under this programme the dean intended to set up a prize, "The Contract Colossus Award", to be awarded to the best student in Contract law in any particular year. He intended to mark all the examination scripts himself in order to ensure consistency for the purpose of awarding the prize. In furtherance of the programme the Dean wrote to all students enrolled in Contract Law in 2000. The letter was in the following terms:

" 1st April 2000

Dear Students of Contract Law

Re: The Contract Colossus Award

Owing to the dearth of contract scholars in Lusaka, the Law School has decided to grant an award each year to the best student enrolled in Contract Law at the University of Lusaka. It is hoped that the award will create an incentive for students to study especially hard in contract law. The successful student will receive a full fees waiver in respect of his or her remaining years in the Law School, in addition to a K2,000,000.00 free living allowance per annum in respect of those years, provided, however, that the student is enrolled full time at the University of Lusaka during the tenure of his or her studies. The award shall be made solely on the basis of the final mark achieved by the student for the course.

Yours sincerely,........"

Mubanga, a student enrolled in contract law at the University of Lusaka , upon reading the Deans letter, began to study extremely hard in that particular course (indeed to the extent of neglecting her other courses). From that moment forward Mubanga spent day and night trying to fathom the deepest mysteries of contract law. Mubanga read every case ever decided on contract law (three or four times), came to terms with the mysteries of the law of estoppel and the law relating to contractual mistake. She purchased a large contract law collection for her own library and spent many hours in her lecturer's office exploring ideas floated in the classroom. Mubanga achieved an unprecedented 98% for her first assignment in contract law and 100% for her second assignment. Increasingly she was ostracized by her fellow students in the course.

On the day before the final examination in contract law, Mubanga overheard some upset law student in the student cafeteria saying that the Dean of law had announced that he was immediately withdrawing all programmes for the advancement of law students currently enrolled in the Law School. Mubanga panicked but did not bother to confirm this information with the Dean. Instead, she studied even harder on the night before her final examination in contract law.

Pretend that you are Mubanga and that you have just sat your final examination in contract law. Write a letter to the Dean of Law School setting out what you consider to be the legal rights and obligations of the parties to any action that might arise out of the above facts.

3. Mwanza is a decorator and general repair man. He is approached by Chilufya, a property developer who offers him K10 million to paint and decorate a small terraced house by the end of July.

    While Mwanza is on the job, Chilufya's wife visits the house and admires Mwanza's work. She says that if Mwanza completes the job early, then she is sure there will be a bonus in it for him. Mwanza asks her how much would the bonus be. She replies that "she is sure that she could persuade her husband to pay a sum of K1 million in such circumstances". She also says that the work is so professional that she will herself pay him K500,000 once the work is completed.

    Mwanza finishes the job two days early. He seeks the original fee agreed with Chilufya and the two additional sums. Chilufya and his wife now refuse to pay these additional sums.

    Advise Mwanza.

4. (a) As clearly as possible and with the aid of case law outline the tests applied by the courts to determine whether or not a statement is a term of the contract.

    (b) What is the rule in Pinnels case?

5. How far is it true to say that the implied term device is simply judicial intervention in disguise? Use decided eases to illustrate your answer.

6. Helen had lived with her parents in Lusaka until they were both killed in a car accident in 1995. Helen was then 22, and in order to sustain herself, she took a job as a hostess in a lodge in Livingstone. Helen's only remaining relative was her aunt, Irene, who greatly disapproved of Helens job. After Helen moved to Livingstone Irene wrote to her on a number of occasions, suggesting she come back to Lusaka, but each time Helen's reply was that she was earning more money than she could ever earn in Lusaka, that she had a pleasant flat and that she enjoyed living by herself

In January this year Irene wrote again to Helen, this time saying that if Helen came back and lived with her in Lusaka she would give Helen half a share in her house. As the house is worth over K500 million, Helen agreed to return, she gave up her flat, resigned her job and returned in February, and has been living with her aunt since. Irene has still not had the necessary documents prepared for giving Helen the half share in the house, and Helen grows increasingly apprehensive of her aunts intentions.

Helen comes to you for advice on whether she can enforce her aunts promise. Give reasons for your answer.

7. George is a proprietor of an up market boutique dealing in exclusive designer products based in Kitwe. He solicited and obtained orders from Thoko an undergraduate student at UNZA of extravagant tastes acting through her colleague Mwansa who is also an undergraduate student at CBU. Mwansa obtained clothes and accessories in excess of K10million on Thoko's behalf over a two month period. Thoko was at the time she began dealing with George amply supplied with clothing, however she lacked a laptop and a back pack both of which were supplied by George at a cost of K8million. During the period that these transactions were taking place, Thoko's father, James, who was also George's customer was kept fully informed of Thoko's purchases by George.

George who has been trying for some time to get Thoko to pay what she owes but without success, comes to you for advice. He informs you that Thoko's friend Mwansa had informed him that she had last seen Thoko at her 18th birthday party two days ago. Advise George on the options available to him.

THE UNIVERSITY OF ZAMBIA

School Of Law

Law of Evidence L311- Deferred Examination: July 2004

Instructions

Answer Q1 and any three (3) others.

Time: Three (3) hours.

Start each answer on a fresh page.

Question 1 carries 18 marks; All others carry 14 marks each.

Q1. The phrase 'burden of proof' consists of two interrelated but quite distinguishable responsibilities. One of these is that the party who desires the court to give judgement as to the legal right or liability dependent on facts which he assets, has the burden or onus to adduce the existence or non-existence of particular facts in issue to the requisite standard of proof. The other responsibility obliges a party to produce some evidence to enable the trier of fact acting reasonably to find the existence or non existence of particular facts in issue. Here the party is said to have the evidential burden or the burden of adducing evidence or the burden of going forward.

Discuss.   18 marks.

Q.2   Explain the effect in law, of the Judges Rules.
                                          14 marks.

Q.3   In RUBENI v THE PEOPLE the appellant was convicted of murder. He had pleaded that the killing was an accident. On appeal, it is contended that the trial judge should have admitted evidence of a conversation between

the appellant and his father, which took place two days after the event in which he told his father the defence would be 'accident'.

What are the chances of success of the appeal? Support your answer with cases.   14 marks

Q.4   Where a person who is an accomplice gives evidence on behalf of the prosecution, the rule is that the judge has the duty to warn herself/himself that although s/he my convict on that evidence, it is dangerous to do so unless it is corroborated.
Discuss the scope and effect of this rule, illustrating your answer with cases.
                                                              14 marks

Q.5   Solo sued Banda of the Mtendele neighbourhood in which the both lived, alleging that Banda's dog ,Tina, bit and injured his 10 year old daughter ,Jenala, on the arm. Banda, while acknowledging the injuries on Jenala's arm, said they were caused by barbed wire which Jenala ran into while running away from a pack of dogs which included Tina. There was no other direct evidence about the bite from any other witness. At the trial, Jenala was examined at length by the judge concerning her competence to testify. Some of the questions and answers were as follows:

    Question: Do you know about telling the truth?

    Answer: He wont love me.

    Question: Who wont love you?

    Answer: God wont love me.

Following the examination, the court received Jenala's evidence in which she said " Banda's dog bit me". The court ruled in her favour and Banda appeals, arguing that Jenala's evidence was wrongly received.

a) What are the chances of success of the appeal?
b) Discuss the position of the law with respect to other special categories of witnesses.
                                                              14 marks.

Q.6   A presumption operates by determining that a particular conclusion as to the truth of a presumed fact follows as a consequence of a basic fact being proved.
Comment on the purpose and effect of presumptions.   14 marks

Q.7   When considering whether a witness is competent or compellable, it is necessary to distinguish four (4) closely related concepts.

Discuss any two (2) of the concepts and illustrate their significance in decided cases.   14 marks

END

S 421: DEVELOPMENT INFORMATION SYSTEMS AND SERVICES FOR AFRICA.

NSTRUCTIONS:
**NSWER: FOUR QUESTIONS: SECTION ONE (1) IS COMPULSORY WHILE YOU CAN
NSWER ANY THREE IN SECTION TWO (2).**

ME: 3 HOURS

CTION ONE (COMPULSORY) 40 %

The Export Board of Zambia management is concerned with the issues women and their export
siness opportunities and they have invited you to come up with an information provision service
at is meant to promote export opportunities for them.

iscuss with reference to development information systems the process you would undertake to
me up with such a service.

CTION TWO (ANSWER ANY THREE) 20 % EACH

Despite information explosion through Information and Communication Technologies, most
Zambians are not better informed. Discuss why this is so.
Why is information consider critical in the socio-economic development of a Country like
Zambia.
Why is it important to use systems approach when it comes to Development
in formation Systems management?
Discuss with reference to good governance, freedom and human rights issues
how information becomes a "missing link" in sustainable socio-economic
development of Zambia

ND OF EXAMINATION

UNIVERSITY OF ZAMBIA

SCHOOL OF LAW

L421

FIRST SEMESTER EXAMINATION

INSTRUCTIONS

1. TIME: **THREE (3) HOURS**

2. **ANSWER QUESTION ONE (1) AND THREE (3) OTHERS**.

3. STUDENTS ARE ALLOWED TO BRING TO THE EXAMINATION ROOM AND CONSULT CLEAN AND UNMARKED COPIES OF THE REGISTRATION OF BUSINESS NAMES ACT CAP 389, THE PARTNERSHIP ACT, 1890 AND THE COOPERATIVE SOCIETIES ACT NO.20 OF 1998

QUESTION 1 (22 MARKS)

Ingenious Kafupi, Wiseman Shikashiwa and Spectator Kalaki are Accountants and run an accounting firm by the name and style of KSK & Associates. Among other things, their Partnership Deed contains the following clause: -

"If any partner shall commit or be guilty of a serious breach of his duties the other partners may by written notice expel him from the partnership subject to an appeal to an arbitrator."

An anonymous letter was received by Spectator Kalaki that Wiseman Shikashiwa was using the firm's name to acquire business for which he was not accounting to the other partners. Relying on this rumour, Spectator Kalaki served a notice of expulsion (with a copy to Ingenious Kafupi) on Wiseman Shikashiwa who has now come to you for legal advice, and in particular that you should commence legal action against Spectator Kalaki, having heard that you are a legal luminary in the law of partnerships.

(a) Advise whether or not Wiseman Shikashiwa can succeed to challenge his expulsion and why.

(b) Which would be the appropriate forum for putting up the challenge?

QUESTION 2 (16 MARKS)

The Republic of Gunduzani, a former British colony is a newly independent State having recently attained its independence through armed struggle two years ago. The country is impoverished and so are its inhabitants. There is a some hope, however, in the Eastern Province of the country under the Kingdom of Nkwabilo which was spared from the devastation of the armed struggle. Apart from this, the land is quite fertile and King Nkwabilo's subjects in the village of Kwanga numbering in excess of fifty have been able to grow

more than enough food and are now desirous of selling the surplus to the provincial capital which is 50km away. Unfortunately, they have no means of taking their produce to town. They are aware that if they pooled their resources and associated together they would be able to find a solution to their transport problems. Village Headman Kwanga has approached you for legal advice.

Advise Village Headman Kwanga on the best business activity his subjects should undertake in order to address their problem and why you consider it the most appropriate.

QUESTION 3 (16 MARKS)

Outline the procedures for the formation and registration of: -

    (a)   a Business Name

    (b)   a Partnership

    (c)   a Cooperative Society

QUESTION 4 (16 MARKS)

The historical origin of Cooperative Societies can be traced to the Rochdale Equitable Pioneers Society which was established on 21st December, 1884 near Manchester in Lancashire during the Industrial Revolution. Discuss what has come to be known as the *"Rochdale Cooperative Principles."*

QUESTION 5 (16 MARKS)

Discuss the circumstances and procedures for: -

(a) the termination of a Sole Proprietorship

(b) the winding up of Partnerships

(c) the winding up of Cooperative Societies

QUESTION 6 (16 MARKS)

Cooperative Societies and Partnerships are both business associations of more than one individual but their *raison detrè* is different. Discuss.

QUESTION 7 (16 MARKS)

With the aid of decided cases, discuss the duties of partners in a partnership.

LIS 461: INTRODUCTION TO RECORDS MANAGEMENT

INSTRUCTIONS:
ANSWER: FOUR QUESTIONS: QUESTION ONE (1) AND TWO (2) ARE
COMPULSORY.

TIME: 3 HOURS
SECTION ONE (COMPULSORY) 30 %
    1 Write short notes on **Ten (10)** of the following concepts:

        (a) Transmittal list.
        (b) Mail management.
        (c) Records disposal.
        (d) Semi-active records.
        (e) Functional classification.
        (f) Registry.
        (g) Electronic records.
        (h) Disaster management and recovery.
        (i) Records of primary value.
        (j) Electronic mail management.
        (k) Decision support systems (DSS).
        (l) Record management programme cycle.

SECTION TWO (COMPULSORY) 30%

    2 The Zambia State Insurance Corporation have appointed you as their
    Records Manager to start a records management programme in their
    organization.

    Discuss what you would consider as priority when starting the programme.

**SECTION THREE: ANSWER ANY TWO (2) QUESTIONS FROM THIS   SECTION.
20 % EACH.**

    3 What qualities must a record have for it to be considered as evidence of the
    transactions that took place in the organization?

    4 Discuss the issues that arise in the management of electronic records.

    5 Discuss how the introduction of Information and Communication
    Technologies has affected the records management cycle and subsequently
    records management work.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF LAW

FIRST SEMESTER EXAMINATIONS JUNE 2004

L6201: INTERNATIONAL HUMAN RIGHTS LAW

INSTRUCTIONS

1. **TIME:** THREE (3) HOURS (plus 5 minutes to read the paper).

2. **ANSWER: FOUR** (4) QUESTIONS ONLY.

3. You are allowed to bring into the examination room copies of International Human Rights instruments.

Question 1

Discuss the main sources of international law, indicating their hierarchy, if any.

[25 Marks]

Question 2

What do you understand by torture, inhuman and degrading treatment? What measures is the state required to take in order to curb or prevent torture, inhuman and degrading treatment?

[25 Marks]

Question 3

(a) Does the division of human rights into categories have any significance?

[8 Marks]

(b) What are perceived to be the differences between the different categories of rights?

[9 Marks]

(c) Are these distinctions tenable?

[8 Marks]

Question 4

Musonda is a forty-six-year old man married with six children. He works for a factory which produces clothes in the state of Bangweulu in Africa, which is a state party to the International Covenant on Civil and Political Rights (ICCPR) and has ratified the Optional Protocol to the ICCPR. Recently, Musonda and five of his work mates were accused by Company management of stealing company equipment worth US $500,000. They all denied the charge. They were subsequently handed over to the police who kept them in custody for 30 days without charge. Subsequently, Musonda was beaten and subjected to electric shocks on his private parts in the course of "police investigations". Furthermore, police went to Musonda's house and detained his wife and children. Everyday, Musonda would hear his children next door crying in pain from police beatings. Police told him that as soon as he confessed, his family would be released. Consequently, Musonda confessed. The confession led to the recovery by the police of the missing equipment. His wife and children were then released after spending ten days in custody.

But when Musonda was brought to court, he retracted his confession and told the judge that he confessed only because he was beaten and feared for the safety of his family. Police succeeded in getting the confession admitted in evidence on the ground that Musonda gave it freely and voluntarily even though he was beaten.

After the parties had made their final submissions, the court took six years to deliver the final judgement because the judge who handled the case was busy with other cases, and he also took long leave for two years.
Musonda was convicted and sentenced to 40 years imprisonment with hard labour effective from the day the judgement was delivered. His appeal to the Supreme Court was unsuccessful.

Musonda would like to send a communication to the Human Rights Committee. He asks for your help in preparing his case. Prepare a memorandum discussing relevant issues. Your discussion should, *inter alia*, cover admissibility issues, the merits and the demerits of his case, as well as remedies available, if any.

[25 Marks]

THE UNIVERSITY OF ZAMBIA

FIRST SEMESTER DEFERRED EXAMINATIONS

JULY 2004

M 461 - MULTIVARIATE ANALYSIS

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: 1. ANSWER ANY FIVE (5) QUESTIONS
2. MATHEMATICAL TABLES WILL BE PROVIDED AND USE OF CALCULATORS IS ALLOWED

---

1. a) Define the following:
   (i) random vector X
   (ii) population variance -covariance matrix.

   b) (i) Show that if $v^{\frac{1}{2}}\rho v^{\frac{1}{2}} = \Sigma$ then

   $$\rho = \left(v^{\frac{1}{2}}\right)^{-1} \Sigma \left(v^{\frac{1}{2}}\right)^{-1} \quad \text{where } v = \text{diag}(\sigma_{11}, \sigma_{22}, ..., \sigma_{pp}),$$

   hence or otherwise find ρ when

   $$\Sigma = \begin{pmatrix} 16 & 1 & 4 \\ 1 & 81 & -9 \\ 4 & -9 & 625 \end{pmatrix}$$

   ii Show that if $Y = a^T x$ with a p-dimensional vector of constants and that X is determined by $N_p(\mu, \Sigma)$ then Y is determined by $N(a^T\mu, a^T\Sigma a)$

   c) The varieties $X^T = (x_1, x_2, x_3)$ and $Y^T = (y_1, y_2, y_3)$ are distributed independently according to the bivariate normal populations with respective parameters

   $$\mu_x = \begin{pmatrix} 2 \\ 2 \\ 2 \end{pmatrix}, \quad \Sigma_x = \begin{pmatrix} 3 & 2 & 1 \\ 2 & 4 & 1 \\ 1 & 1 & 2 \end{pmatrix}, \quad \mu_y = \begin{pmatrix} 3 \\ 4 \\ 2 \end{pmatrix}, \quad \Sigma_y = \begin{pmatrix} 4 & 2 & 0 \\ 2 & 4 & 2 \\ 0 & 2 & 4 \end{pmatrix}.$$

   Determine the distribution of $\begin{pmatrix} X-Y \\ X+Y \end{pmatrix}$.

2. a). Define the following:
   i) eigen value of a square matrix A.
   ii) a trace of a square matrix A

b). Let **X** have a variance -covariance matrix

$$\Sigma = \begin{pmatrix} 4 & 0 & 0 \\ 0 & 9 & 0 \\ 0 & 0 & 1 \end{pmatrix},$$

Find:
i). Σ^{-1}
ii). the eigen values and eigen vectors of Σ
iii). the eigen values and eigen vectors of Σ^{-1}

c) i) The joint density of a random sample $x_1, x_2 \ldots \ldots \ldots, x_n$ from a p-dimensional normal population with mean μ and covariance Σ is expressed as

$$f(x) = \frac{1}{(2\pi)^{\frac{np}{2}} |\Sigma|^{\frac{1}{2}}} e^{\frac{-1}{2} \operatorname{tr}\left[\Sigma^{-1}\left(\sum_{j=1}^{n}\left(x_j - \bar{x} \right)\left(x_j - \bar{x} \right)^{T} + n\left(\bar{x}-\mu \right)\left(\bar{x}-\mu \right)^{T} \right) \right]}$$

find the maximum likelihood estimator of μ based on the observed sample $x_1, x_2, \ldots \ldots x_n$.

ii) For the random sample $X = \begin{pmatrix} 2 & 5 \\ 5 & 5 \\ 2 & 4 \\ 6 & 10 \end{pmatrix}$ from a bivariate normal

population, find the maximum likelihood estimates of the 2 x 1 mean vector μ and the 2 x 2 covariance matrix Σ.

3 a). Define the following:

    i) independence of two random vectors

    ii) the expected matrix of a random vector $\mathbf{X}$

b) i). Given that $\mathbf{X}$ is distributed $N_2(\mu, \Sigma)$, find the conditional distribution of X_1 given that $X_2 = x_1$.

ii). If X is distributed as $N_5(\mu, \Sigma)$, find the distribution of $\begin{pmatrix} X_2 \\ X_4 \end{pmatrix}$.

iii) Let $\mathbf{X}$ be distributed as $N_3(\mu, \Sigma)$ and variance- covariance matrix given by

$$\Sigma = \begin{pmatrix} 4 & 1 & 0 \\ 1 & 3 & 0 \\ 0 & 0 & 2 \end{pmatrix}$$

    Determine whether the following are independent:

    α) X_1 and X_2 β) (X_1, X_2) and X_3

c). **i)** Let $\mathbf{a}$ and $\mathbf{c}$ be any 2 x 1 vectors. State and prove the cauchy-swahrz inequality.

ii). Verify the cauchy-swahrz inequality for $a^T = (2\ -1\ 4\ 0)$ and $c^T = (-1\ 3\ -2\ 1)$

4 a) Define the following terms:
   i). a positive definite matrix
   ii). Hotelling's - statistic for a p-dimensional normal population test of
       H_0: $\mu_0 = 0$ versus H_1 : $\mu_0 \neq 0$.

b).
   i). Show that the Hotelling's T^2-statistic is invariant under the
       transformation of the form $Y = CX + D$ with C being non -singular.
   ii). Find the mean and variance-covariance matrix for the linear function
       $Y = CX + D$ where $C = \begin{pmatrix} 2 & 1 \\ 1 & -3 \end{pmatrix}$, $D = \begin{pmatrix} 2 \\ 3 \end{pmatrix}$.

c).
   Show that if A is a square matrix then
   $|A| = |A_{22}| |A_{11} - A_{12} A_{22}^{-1} A_{21}|$ for $|A_{22}| \neq 0$

   Hence find the $|A|$ given that $A = \begin{pmatrix} 2 & 0 & 4 & 0 \\ 0 & 3 & 0 & 5 \\ 5 & 0 & 1 & 0 \\ 0 & 4 & 0 & 1 \end{pmatrix}$

5 a). Let the data matrix for a random sample of size n=4 from a bivariate normal population be

$$X = \begin{pmatrix} 3 & 3 \\ 7 & 10 \\ 7 & 3 \\ 8 & 2 \end{pmatrix},$$

   i). Evaluate the observed T^2, for testing $H_0 : \mu^T = (9,5)$.

   ii) Evaluate the Wilks lambda.

   iii). Specify the distribution of T^2.

   iv). Using i) and ii), test H_0 at the $\alpha = 0.05$ level of significance.

   v). Comment on the result.

b). The scores obtained by 20 students on three tests X_1, X_2 and X_3 gave the following results:

$$\overline{X} = \begin{pmatrix} 4.64 \\ 45.4 \\ 9.965 \end{pmatrix}, \quad S = \begin{pmatrix} 2.879 & 10.002 & -1.810 \\ 10.002 & 199.798 & -5.627 \\ -1810 & -5.627 & 3.628 \end{pmatrix},$$

$$S^{-1} = \begin{pmatrix} 0.589 & -0.022 & 0.258 \\ -0.022 & 0.006 & -0.002 \\ 0.258 & -0.002 & 0.402 \end{pmatrix}$$

   i) Construct the 95% confidence interval for mean $\overline{x}_1$

   ii). Construct the simultaneous 95% T^2 - interval for the mean $\overline{x}_1$

   iii). Construct the simultaneous 95% Benferroi interval for $\overline{x}_1$

   iv). Compare the three sets of results.

6. Lusaka Water and Sewerage Company (LWSC) plants are required by law to monitor their discharges into rivers and streams on a regular basis.
Concern about the reliability of data from one of these self-monitoring programs led to a study in which samples of effluent were divided and sent to two laboratories for testing. One-half of each sample was sent to the Environmental Council of Zambia (ECZ) and the University of Zambia (UNZA).

Measurements of biochemical oxygen demand and suspended solids were obtained for 11 samples from the two laboratories. The differences in the chemical analysis done by ECZ and UNZA is given by d_{1j} for biochemical oxygen demand and d_{2j} for suspended solids as shown:

d_{1j}	-27	17	-19	9	-10	-4	-18	-22	-19	-4	4
d_{2j}	15	60	-7	-2	11	-1	42	10	12	-4	10

(i) Calculate the mean difference $\bar{d} = \begin{pmatrix} \bar{d_1} \\ \bar{d_2} \end{pmatrix}$ and the sample variance S_d.

(ii) Test if there are any differences between the two chemical analyses at 90% confidence level.

(iii) Calculate the 90% confidence intervals for each of the mean differences.

b). Samples of sizes $n_1 = 45$ and $n_2 = 55$ were taken of homeowners with and without air conditioning respectively.
Two measurements of electrical usage (in kilowatt hours) were considered. The first is a measure of total on-peak consumption (x_1) and the second is a measure of total off-peak consumption (x_2).

The resulting summary statistics are:
$$n_1 = 45, \bar{x}_1 = \begin{pmatrix} 204.4 \\ 556.6 \end{pmatrix}, s_1 = \begin{pmatrix} 13825.3 & 23823.4 \\ 23823.4 & 73107.4 \end{pmatrix}$$

$$n_2 = 55, \bar{x}_2 = \begin{pmatrix} 130.0 \\ 355.0 \end{pmatrix}, s_2 = \begin{pmatrix} 8632.0 & 19616.7 \\ 19616.7 & 55964.5 \end{pmatrix}$$

i). Calculate the S_{pooled} .
ii). Construct the 95% confidence intervals for the differences $\mu_{1i} - \mu_{2i}$ for i = 1,2.
iii) Comment on the results found in ii).

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

PA 201: GOVERNMENT AND ADMINISTRATION

DEFERRED EXAMINATION

INSTRUCTION: Answer **ANY THREE** of the following questions paying attention to correct grammar and concrete illustrations.

1. Provide a rationale why the Zambia government uses the committee system in the process of decision-making.

2. Explain the concept of separation of power and to what extent is it not in use in Zambia?

3. Distinguish between deconcentration and devolution in administration by giving practical examples in your area and why decentralization is preferred.

4. What is your understanding of indirect rule and provide an annotated structure of colonial administration in Northern Rhodesia

5. What were the major features of Max Weber's ideal type bureaucracy and why is it considered superior to traditional bureaucracy?

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

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END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
PA 311: ORGANIZATIONAL DESIGN AND MANAGEMENT
2004 ACADEMIC YEAR: FIRST SEMESTER DEFERRED EXAMINATIONS
DURATION: THREE (3) HOURS.
INSTRUCTIONS: ANSWER ONLY THREE QUESTIONS

1. Under what conditions is an organization likely to prefer a) a mechanistic structure, b) an organic structure, c) elements of both?

2. How can the principles of bureaucracy help managers to design the organization hierarchy?

3. What are the advantages and disadvantages associated with the matrix structure?

4. What are the main findings of the contigency theory? What conditions in the environment might affect the way organizations design their structures?

5. Define and provide examples of a) an imitation strategy b) an innovation strategy. What structural forms are closely related to each one of these strategies?

6. Discuss the obstacles to change in organizations. How do organizations overcome these obstacles?

---------------------------------- The End ----------------------------------

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
POLITICAL AND ADMINISTRATIVE STUDIES

2004 ACADEMIC YEAR FIRST SEMESTER DEFERRED EXAMINATIONS

PA955:   STRATEGIC MANAGEMENT

TIME: THREE (3) HOURS

INSTRUCTIONS: SECTION A IS COMPULSORY. ANSWER TWO QUESTIONS FROM SECTION B. WRITE IN CONCISE CLEAR GOOD ENGLISH.

SECTION A (20 MARKS)

Read the **BLOCKBUSTER VIDEO case study** very carefully, and then proceed to answer the questions on this section.

Have you heard about Blockbuster Video, a Multinational Enterprise (MNE) that has taken a global approach to markets?

Organisations operate in a turbulent global environment. This situation calls upon managers to think afresh about their strategic plans and practices. The rapid changes can quickly make yesterday and today's winning strategies redundant. Thus, we see companies wrestling with changing customer values and orientations; increased global competition; economic stagnation and a host of other economic, political and social problems. Key trends/events and forces are also changing the landscape and challenging strategists. This change has made Blockbuster Video take up expansion strategies at local and international level.

Blockbuster Video, by far the biggest video rental chain in the United States with about 4000 U.S. stores, announced in 1995 that it would open 1000 stores in the Asia-Pacific region by the year 2000. Most of Blockbuster's domestic growth occurred between 1987 and 1992; during that time the number of its stores increased from 238 to 2989. This increase was partially the result of growth in the video rental market as more people rented tapes for home entertainment on their newly acquired VCRs. Much of it came at the expense of thousands of mom-and-pop-type stores that stocked a small supply of tapes along with their other merchandise.

Blockbuster's primary growth strategy has been to attract customers by offering a large selection of tapes. It rents these videos in very large stores that can accommodate 7000-13,000 tapes representing 5000-8500 different titles. By expanding rapidly, Blockbuster has been able to gain economies of scale to offset the more than $100 million it spends per year on advertising. It buys vast numbers of tapes, which gives it buying clout with the film studios that sell tapes.

To finance its growth in the United States, Blockbuster has relied on acquisitions in exchange for Blockbuster stock, has franchised about half of its stores rather than obtaining ownership, and has raised equity capital for company-owned stores. Philips Electronics of the Netherlands became one of Blockbuster's largest equity sources when it invested $149 million in two stages for a 7.9 percent ownership in the company. Although this amount falls far short of giving Philips a controlling interest, Philips still owns enough shares to have a say in some of Blockbuster's practices; for example, the stores have been used to test-market Philips's compact disc interactive (CDI) technology.

Despite its impressive growth, by 1992 Blockbuster had acquired only a 13-percent share of the $11 billion U.S. home video market. Although there was room to grow in the United States, the company announced plans to focus on expanding abroad during the 1990s.

The shift in market emphasis from domestic to foreign resulted for three reasons: the maturing of the U.S. market for sales of VCRs, the threat of competition from pay-per-view movies, and the growth in retail sales of videotapes for home use – the sell-through market – as opposed to rentals. Blockbuster was slow to enter the sell-through market; hence retailers such as Kmart got a head start on gaining market share. Further, because film distributors typically sell rental tapes for about $65 and sell-through tapes for about $14, many more retailers can afford to compete against Blockbuster for tape sales than for tape rentals.

Initially, Blockbuster's major foreign expansion was to the world's higher-income, industrial areas – Canada, Europe, and Japan. This was a logical move, since the market for video rentals is limited by the number of VCRs owned by consumers, a number that varies widely among countries. Among countries with high incomes, the percentage of TV-owning households having VCRs varies substantially (for example, 47.5 percent for Italy versus 74.5 percent for the United Kingdom). The new emphasis on the Asia-Pacific area is the result of rapid economic growth in the area, which has led to more VCR ownership. For example, the number of VCRs in China grew from 1.2 million in 1990 to 14.8 million in 1994. Within lower-income countries, most households with VCRs use them to record television shows rather than to view rented videotapes. Two other factors limit the market in lower-income countries: the low cost of movie tickets, which makes videotapes a higher-cost rather than a lower-cost alternative, and competition from stores that rent cheap and unauthorized videotapes, which are sometimes copied directly from television-movie channels in the United States.

In 1991, Blockbuster bought a chain of twenty-five Major Video stores in Canada for conversion into Blockbuster stores. This move brought the company

additional economies of scale because much of the Canadian population lives within reception range of TV broadcasts from the United States and hence within range of Blockbuster's advertising. Blockbuster also set up franchise operations in Chile, Mexico, Australia, Spain, Venezuela, and Ireland. The move into Ireland was largely in response to a move into the U.S. market by Xtra-vision, Ireland's largest video chain. By 1990, Xtra-vision had fifty U.S. stores under the Videosmith and Video Library names.

In 1991, Blockbuster decided to enter Japan. It decided on a 50/50 joint venture in order to gain know-how about the market from a knowledgeable Japanese partner, Fujita Shoten. (Fujita Shoten's chairman had established an earlier 50/50 joint venture with McDonald's, which now has about 800 restaurants in Japan. Fujita Shoten also has a stake in Toys 'R Us Japan). Blockbuster planned to expand through franchising its outlets and expected to have a thousand Japanese stores by the year 2000. In deciding to move into Japan, company executives saw the following conditions that afforded opportunities for Blockbuster:

- There were no major video rental chains in Japan. The largest rental chain, the Culture Convenience Club, had only small-scale outlets.
- There were only 1800 movie theaters in Japan, fewer than one tenth the number in the United States. Japanese film studios that limited distribution of foreign films to about 100 theaters controlled them. Despite distribution problems, however, U.S. films had 60 percent of the Japanese film market.
- Existing video stores catered mainly Japanese males under 25 years of age by renting tapes of pornographic and violent films. Blockbuster would target an older and more family-oriented market and would rent no adult videos.

Blockbuster's management reasoned that there was a big, unfulfilled demand for U.S. videos and that it could introduce these more rapidly into the Japanese market than Japanese competitors could (at the time, the wait for U.S. releases was about a year).

When Blockbuster entered Japan, it planned to earn 12-15 percent of its income from game rentals, as it does in the United States. However, it was unable to meet this goal. Japanese law requires permission from the author of copyrighted material before anyone can sell or rent the material. Of the two giants in the video game industry, Sega Enterprises gave its permission but Nintendo refused.

Because space is so limited and expensive in Japan, Blockbuster had to reduce the size of its stores. However, redesigning the stores' interiors allowed them to carry about 8000 titles and 10,000 tapes. Aside from its ban on adult videos, Blockbuster allows each country's managers to decide which tapes to buy for their stores. All tape purchases are made locally through distributors representing film studios. This arrangement is necessary because the local distributors can perform certain tasks more easily, such as arranging for subtitles or dubbing, dealing with local censorship issues, converting films to the tape format (for example, VHS, Beta, or Secam) preferred in that country, and acquiring local films to meet local demand. On this last point, Hollywood productions dominate markets worldwide; however, where there is a strong local

SHORT LOAN COLLECTION

film industry, such as in the United Kingdom and France, there is market demand for more tapes made from local films.

Blockbuster also used its foreign experience to help it grow in the United States. For example, in 1992, the company acquired a 50-percent interest in the Virgin Retail Group, whose stores sell recorded music. This U.K. company owns megastores in the United Kingdom, France, Germany, Italy, Australia, the Netherlands, and Australia. The operations continued to be managed by Virgin, and there were plans for major expansion into the U.S. market. The first store, in Los Angeles, was modeled after Virgin's megastores, which offer 200 listening booths, a stage for live performances, and specialty rooms so classical music lovers needn't mix with heavy metal fans.

QUESTIONS

(i)   What specific strategy is at Blockbuster Video? On the basis of the case study, characterize the company's strategic style and bring out the key elements of Blockbuster strategy.

(ii)   Why do you think Blockbuster has used various operating forms i.e. company-owned operations, joint ventures, and franchises for different foreign markets it has entered?

        What are the advantages and disadvantages of Blockbuster's expanding abroad rather than concentrating its efforts on the U.S. markets?

(iii)   It is clearly stated in the case study that Blockbuster bought video store chains abroad that already had well-known names. Why do you think the company should change these stores to Blockbuster stores?

(iv)   Countervailing forces influence the conditions in which companies operate in their options for operating internationally. A company's quest for maximum profits is inhibited by different conditions in foreign countries. What factors other than those presented in the case might inhibit Blockbuster's expansion into the global market?

(v)   What is franchising? Briefly contrast it with a merger. Among the two, which mode of expansion will you recommend for Blockbuster?

SECTION B (30 MARKS)

1.   To operate within a company's external environment, managers must have not only knowledge about business operations but also a working knowledge of the basic social sciences: political science, law, anthropology, sociology, psychology, economics and geography.

        Justify how the social science knowledge may equip a strategist with the skills to monitor and analyse the trends in the external environment.

2. "Customers, by their choices they make grant companies a future or condemn them to extinction…" (Phillip Condit, Chairman and CEO, Boeing Company).

    In view of the above statement by Mr. Phillip Condit, critically discuss why companies define quality product/service as one that conforms to predetermined standards that satisfy customers' demands.

3. Write a readable essay on Charles Lindblom's incrementalism as an alternative to the strategic planning model. In so doing, show why it is suitable for public organisations.

END OF EXAMINATION
JULY, 2004

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND OF SOCIAL SCIENCES

2004 ACADEMIC YEAR FIRST SEMESTER
DEFERRED FINAL EXAMINATIONS

PH 221: ANCIENT, HELLENISTIC AND MEDIEVAL PERIODS

TIME: THREE HOURS

ANSWER: FOUR QUESTIONS (Two questions must be chosen from Section A, question 5 from Section B, and one question from Section C.)

SECTION A: ANCIENT PERIOD

1. Heraclitus and Parmenides were two of the pre-Socratic philosophers who discussed the problem of being and change.
   a) What did the ancient philosophers understand by 'the problem of being and change'?
   b) Discuss the ideas raised by each philosopher individually.
   c) State what you consider to be their individual influence upon the classical philosophers (Socrates, Plato and Aristotle).

2. Plato was a keen follower of Socrates.
   a) What did he understand by the 'Universal Forms'?
   b) Explain how Plato used the forms to show how absolute knowledge can be acquired?
   c) Discuss the view that the truth of Plato's theory of knowledge rests upon the acceptance of the immortality of the soul.

3. Aristotle criticized the Platonic view of two worlds.
   a) Explain the Platonic duality.
   b) Explain the method of contradiction that Aristotle uses.
   c) Briefly explain how Aristotle attempts to solve the problem of change by using principles of act and potency.

4. Plotinian metaphysics has been said to begin with a 'holy trinity'.
   a) Clearly define the nature and function of each of the three members of the Plotinian trinity.
   b) According to Plato, the soul has three principles of action (or groups of functions).
   (i) Describe these three dimensions of the soul.
   (ii) Do you see any connection between the trinity of Plotinus and the three dimensions of Plato? Discuss.

SECTION B: HELLENISTIC PERIOD

5. a) State and explain the main problem of the Hellenistic period after the death of Aristotle.
   b) Discuss the philosophic solution that arose as a result of this problem.
   c) State the major differences between Cynicism and Stoicism.
   d) Clearly define what consequences Stoicism had for the later social and political philosophy.

SECTION C: MEDIEVAL PERIOD

6. a) Clearly state the role played by the Cathedral schools in the development of Scholasticism.
   b) Give six characteristics of Scholasticism.
   c) Explain the problem of universals as expressed in the debate between the nominalists and the realists.
   d) Show how St. Thomas resolved the problem of universals as expressed by his position of moderate realism.

7. St. Augustine reasoned that we are too weak to discover truth by reason alone.
   a) In what way did the medieval worldview of the church differ from the classical worldview of Plato and Aristotle with respect to their understanding of reality.
   b) Give a critical discussion on what role philosophical thinking still had to play in the medieval period.
   c) Explain St. Augustine's view of creation as distinct from the classical Greek view.
   d) Show how St. Augustine employed neo-Platonism to explain his later conception of evil.

END OF EXAMINATION

UNIVERSITY OF ZAMBIA

2004 ACADEMIC YEAR FIRST SEMESTER DEFERRED EXAMINATIONS

S 111: INTRODUCTION TO SOCIOLOGY I

TIME: THREE HOURS

INSTRUCTIONS: PLEASE ANSWER ALL QUESTIONS.

SECTION A: MULTIPLE CHOICE (*4 marks each*)

1.   The process by which different cultures borrow each other's cultural trails is known as

    (a)   Internationalisation
    (b)   Acculturation
    (c)   Cultural conformity
    (d)   Cultural diffusion

2.   Concerning acceptance of culture

    (a)   Ideal culture is totally accepted by all groups in society
    (b)   Only real culture is totally accepted by everybody in society
    (c)   Both ideal and real cultures are totally accepted by everyone in society
    (d)   Both ideal and real culture are not totally accepted in society

3.   Which of the following is true of sanctions

    (a)   Sanctions are guidelines of social behaviour
    (b)   Sanctions encourage people to conform to norms
    (c)   Sanctions are specific rules or set of rules about what people should do, say or not say or do in a given situation
    (d)   Sanctions are broad abstracts or shared standards of what is right and worthy of respect

4.   Which of the following is associated will the emerging self theory?

    (a)   C. H. Cooley
    (b)   S. Freud
    (c)   G. Mead
    (d)   Ervin Goffman

5.   The term ID and the super ego are closely linked to

    (a)   Charles Cooley
    (b)   Robert Merton
    (c)   Mead
    (d)   None of the above

6.   Which of the following is not true of most types of collective behaviour?

    (a)   Actions are unstructured
    (b)   Actions are spontaneous
    (c)   Actions are disciplined

(d)   Actions are unpredictable

7.   Special types of disorderly crowds are known as

(a)   Conventional crowds
(b)   Convergence crowds
(c)   Acting crowds
(d)   Orgiastic crowds

8.   Which of the following is closely associated with contagion theory?

(a)   Blummer
(b)   R. K. Merton
(c)   Le Bon
(d)   Ervin Goffman

9.   Which of the following represents ethnocentrism?

(a)   Anything goes, there are no established standards
(b)   Judging other people's culture is wrong
(c)   Premarital pregnancy culture is wrong
(d)   None of the above

10. Which of the following represents cultural relativism?

(a)   Judging other people's culture is wrong
(b)   Starving in the midst of hundreds of cattle does not make sense
(c)   Paying lobola is the same as selling one's daughter
(d)   Eating dogs and cats is horrifying

11. Which of the following is true about cultural shock?

(a)   It can occur even within the same country
(b)   All people experience it
(c)   It is some kind of frustration disorientation and suspicion
(d)   All the above

12. One reason why people are ethnocentric is because

(a)   There is a tendency among people to compare their real culture with another people's ideal culture.
(b)   There is a tendency for people to compare their culture with another people's ideal culture.
(c)   All the above
(d)   None of the above

13. According to cultural relativism

(a)   There is a universal standard by which difficult cultures can be evaluated as either being bad or good.
(b)   No culture is better than other cultures
(c)   Cultures should not be seen in their own terms
(d)   Culture relativism discourages people to be tolerant against other people's culture

14. Which of the following is true about Sapir Whorf thesis?

(a) It holds that to be unsocialised is to be inhuman
(b) It shows the importance of language
(c) It shows the importance of socialisation
(d) Both (a) and (c) above

15. Which of the following is considered as the most important source of cultural change?

(a) Individual variations
(b) Physical environment
(c) Technology
(d) Migration

16. Cultural lag is

(a) Changes in the non-material culture
(b) Changes in the material culture
(c) Lagging behind of culture
(d) None of the above

17. Which of the following is true?

(a) The Id is the same as the superego
(b) The Me is the same as the superego
(c) The Ego is the same as the I
(d) The Me is the same as the ID

18. Which of the following is true of socialisation?

(a) Effective socialization is only important for the individual
(b) Effective socialization is more important for society
(c) Effective socialization is more important for adults
(d) None of the above

19. Which is true of childhood socialization?

(a) Childhood socialization usually takes place in a situation that is specifically geared for teaching and learning.
(b) Childhood socialization tends to be more emotional
(c) Both (a) and (b) above
(d) None of the above

20. Impression Management is also referred to as

(a) Non-observance
(b) Face work
(c) Societal reaction approach
(d) Both (a) and (b) above.

SECTION B: TRUE OR FALSE (*20 marks*)

1. Deviance is always criminal?

2. Gustave Le Bon is referred to as the grandfather of Convergency Theory.

3. Innovators are those people who reject both goals and prescribed means of achieving the goals.

4. A vagabond is an example of a ritualist.

5. Sociologists are not able to conduct experiments in the laboratory sense. In this regard they are not able to produce plausible theories.

6. Early theories of Deviance were based on the importance of social environment in deviant behaviour.

7. Uniformity in socialisation is always possible.

8. Cultures passed on from one generation to another are revised versions.

9. Mores are a type of sanctions.

10. To delineate cause and effect researchers use surveys.

SECTION C

Write a few notes on the following:-

1. Operational definition.

2. Latent functions

3. Cultural change

4. Ethnocentrism

5. Experiments

6. Dramaturgical approach

7. Significant others

8. Social change

9. Deviance

10. Collective behaviour

SECTION D

Identify and discuss the major advantages and disadvantages of experiments as regards social research.

END OF EXAMINATION

UNIVERSITY OF ZAMBIA

2004 ACADEMIC YEAR FIRST SEMESTER DEFERRED EXAMINATIONS

S 915: DISASTER PREPAREDNESS/MANAGEMENT

TIME :   **THREE HOURS**

INSTRUCTIONS

1.   Question (01) Section A is compulsory
2.   Attempt any three questions from Section B
3.   All questions carry equal marks

SECTION A

1.   Disaster planning (appreciation) involves deductive reasoning and revolves
      around a range of variables. Discuss in detail any five areas.

SECTION B

2.   Leadership plays a crucial role in crisis management, discuss with examples what
      attributes and desirabilities are key in the efficient management of disasters.

3.   Man made disasters are said to be predictable and preventable, and yet their
      occurrence have increased in both degree and scope over time. If you were a member
      of the resource staff from the Disaster Management Team giving some input on the
      subject at a seminar/workshop. What information would you provide the participants as
      being the salient causal factors, and what measures would you suggest for their
      mitigation.

4.   Gender perceptions have been found to generate vulnerabilities in various groups
      and committees. Discuss this assertion in line with some research findings their have
      been done by the World Health Organisation.

5.   Sustainability is a significant concept in the overall disaster recovery programme.
      Discuss six principles and the tools utilized to assist commits achieve resilience.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

2004 ACADEMIC YEAR FIRST SEMESTER DEFERRED EXAMINATIONS

SW 331:   ANALYSIS OF SOCIAL WORK INTERVENTION

TIME: THREE HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

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1. Discuss, using clear examples, Perlman's assumption that "not only do external (objective) and internal (subjective) aspects of the problem co-exist, but either one may be the cause of the other".

2. Rationalize one of the basic tenets of the normative re-educative strategy that "re-education is a normative change as well as a cognitive and perceptual change".

3. Waligomaika Steel Works is a manufacturing Company owned by a prominent Chingola businessman, Mr. Globalization Banda. In the last four years since its formation, the company has recorded massive profits in the range of $2 - $5 million per annum. In the first quarter of this year, however, the company has a recorded an unprecedented loss of $4,500,000. Added to this are the now frequent work stoppages by his workers. Mr. Banda is very depressed and does not know what to do. You are an organizational change agent, and Mr. Banda comes to you to seek assistance on how he can stabilize his organizational turbulences and return to his profitable days. Using Lippit and Watson's three internal diagnostic orientations, what would you do to assist him to solve his problem?

4. "Transmitted change occurs without deliberate guidance while transformed change occurs when individuals, groups, or organizations change themselves or others through conscious action". Justify the need for social workers to take a keen interest in transmitted change although their main concern is with transformed change.

5. Compare Florence Hollis' psychosocial treatment method recognizing both internal psychological and external social causes of dysfunctioning with Helen Perlman's assumption that a person at any stage of life is a product of nature and nurture.

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END OF EXAMINATION