

UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF PSYCHOLOGY

EXAM: PSG 3210: PSYCHOMETRICS AND ASSESSMENT

DATE: 13-06-17

VENUE: LT1

TIME: 09 -12 HOURS

INSTRUCTION: There are four (4) sections in this examination. Answer all questions in section A and B. Any 6 short essays and 2 long essays from the given choices in section C and D.

SECTION A: Multiple Choice Questions – Answer all questions in this section

1. The difference between a test and measurement is;
 - A. Test assigns numbers to properties or attributes
 - B. Measurements are devices or techniques used to quantify behavior
 - C. Measurements assess only characteristics of human beings
 - D. Tests are devices used to quantify behavior and measurements involve assignment of numbers to attributes
2. The difference between a scale and classification is
 - A. A scale is a device used to quantify behavior and classification involves assigning numbers to properties
 - B. Scaling refers to assigning numbers while classification is defining properties or events
 - C. Scaling refers to defining properties and events while classification is assigning numbers
 - D. Scaling involves activities that humans engage in
3. Evidence of testing in ancient China can be traced as far back as
 - A. 2000 BCE
 - B. 1000 BCE
 - C. 3000 BCE
 - D. None of the above
4. China started testing first before the USA and Europe
 - A. True
 - B. False
 - C. True for Europe but not USA
 - D. No evidence
5. The normal curve also known as bell curve is believed to have been discovered by
 - A. Charles Darwin
 - B. Francis Galton
 - C. J.E. Herbert
 - D. Wilhelm Wundt

6. The first intelligence test was developed by Alfred Binet in
 - A. Austria
 - B. German
 - C. France
 - D. USA
7. In the formula to calculate Intelligence Quotient (IQ), the denominator is
 - A. Mental age
 - B. Be chronological age
 - C. Number of years in school
 - D. All of the above
8. Testing for recruits for World War 1 focused on
 - A. Emotional intelligence
 - B. Intelligence quotient
 - C. Emotional and intellectual functioning
 - D. Resilience
9. The man the USA army hired to develop a recruiting test called army alpha was
 - A. Sir Francis Galton
 - B. Alfred Binet
 - C. Robert Yerkes
 - D. L.M. Terman
10. A personality test that became famous for screening soldiers after world war 1 was the
 - A. Woodworth test
 - B. Projective test
 - C. Rorschach inkblot test
 - D. Thematic Apperception Test
11. Darwin's influence on the field of psychological assessment arises from his attention to
 - A. establishing norms
 - B. individual differences
 - C. the normal curve
 - D. age differences in mastery of particular cognitive tasks
 - E. the challenge of communicating with non-literate adults using non-verbal tests
12. Galton's influence on influence on the field of psychometrics arises from his attention to
 - A. individual differences
 - B. establishing norms
 - C. the challenge of communicating with non-literate adults using non-verbal tests
 - D. the normal curve
 - E. age differences in mastery of particular cognitive tasks

13. Binet's main contribution to the field of psychological assessment arises from his attention to
 - A. Age differences in mastery of particular cognitive tasks
 - B. establishing norms
 - C. individual differences
 - D. a and c
 - E. none of the above
14. An important new contribution by Terman's Stanford-Binet intelligence test to the field of psychological assessment arose from its attention to
 - A. age differences in mastery of particular cognitive tasks
 - B. the challenge of communicating with non-literate adults using non-verbal tests
 - C. establishing norms
 - D. individual differences
 - E. the normal curve
15. An important new contribution to the field of psychological assessment attributed to the US Army recruitment Tests developed by Yerkes and others in the first World War arises from their attention to
 - A. establishing norms
 - B. individual differences
 - C. the normal curve
 - D. age differences in mastery of particular cognitive tasks
 - E. the challenge of communicating with non-literate adults using non-verbal tests
16. Projective tests, such as the Thematic Apperception Test (TAT) and the Rorschach Ink Blot Test have a rationale grounded in
 - A. Freud's psychoanalytic theory
 - B. Piaget's theory of genetic epistemology
 - C. Sternberg's theory of intelligence
 - D. Skinner's behaviorism
 - E. Chomsky's theory of language
17. Interest inventories have an important application in
 - A. intelligence testing
 - B. personality assessment
 - C. clinical psychology
 - D. forensic psychology
 - E. career guidance and counseling
18. Special Papers I and II in the Composite Grade 7 examination set by the Examinations Council of Zambia are regarded as measures of
 - A. scholastic aptitude
 - B. academic achievement
 - C. general intelligence

- D. practical intelligence
- E. social intelligence

SECTION B. Fill in the blacks – Answer all questions in this section

1. Arrange the following events in order of their influence on psychological testing starting with the first event and ending with the last event;
 - i. World War 1
 - ii. Intelligence testing
 - iii. Francis Galton's work
 - iv. Charles Darwin's work
 - v. Han Dynasty civil service recruitment system
2. Measurement that shows stability overtime implies that _____ Reliability has been achieved.
3. The degree to which evidence and theory support the interpretation of test scores is referred to as _____
4. What _____ is _____ test _____ approbation?

5. State five of the top Ranked tests
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
6. As a test developer, you have been asked to assess test-retest reliability. What three contributing factors are key to ensure that this kind of reliability is not compromised?
 - a. _____
 - b. _____
 - c. _____
7. In item analysis, three aspects are important, namely;
 - a. _____
 - b. _____
 - c. _____
8. Because the degree of experience with paper and pencil varies widely in the Zambian population of preschool and school age, the Panga Munthu Test (PMT) was developed as a more appropriate medium for assessing rural Zambian children's cognitive competence in representing the human body. The medium of clay was selected in preference to the medium of wire, _____ in order to reduce the likelihood of _____
9. The concept of a normal score on any given test depends on the _____ sampled when the test was standardized. Because a broad range of ages is often present in a given

- Zambian primary school class (especially in rural areas) two sets of norms were published for the Panga Munthu Test (PMT): by age and by _____
10. Ngenda's (2011) study of preschool age children's performance on the Panga Munthu Test (PMT) also administered to the same children a test of verbal knowledge of parts of the human body and a test that required them to make a clay model of a dog. The correlations among scores on the three tests were interpreted as evidence of _____ of the PMT.
 11. One frequently used statistical technique for evaluating the reliability of a test is to administer it on two separate occasions to the same sample of respondents. The correlation between scores by the same individuals on the two occasions is known as an index of _____
 12. Pearson's correlation coefficient (r) provides several complementary types of information about the association between two interval scale variables. Name two of them:

SECTION C: Short Essays – Answer any six questions from the following choices.

1. Describe with examples the difference between a test and a measurement
2. Describe the influence of Charles Darwin in the development of psychological testing
3. Describe how the emergency of experimental psychology influenced psychological testing
4. Briefly describe how you would measure internal consistency on a one time test.
5. With illustrations, discuss the relevance of language in Test adaptation and validation
6. With examples, discuss the Taxonomy of Validity
7. What is Alternate-Forms Reliability? Discuss its assessment and application.
8. Benefits of standardized tests relative to other methods of psychological assessment.
9. Development of the Panga Munthu Test.

SECTION D. Long Essay – Answer any two questions from the following choices

1. Describe the assessment process and then differentiate between an ordinary psychological report and a clinical report format
2. As a person in charge of Test development in the organization, you have been asked to make a presentation on the six steps of Test Adaptation and Validation. With illustrations
3. Suppose you were contracted as a consultant to advise a Zambian company with about 100 employees on the best way to select candidates for a job as Human Resource Manager. Apart from looking at their educational qualifications and experience laid out in their curriculum vitae, the company wishes you to provide a direct assessment of their aptitude for the job. What two tests would you choose? Explain how you would justify the use of each test to the management of the company.

ALL THE BEST

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF PSYCHOLOGY
2016 ACADEMIC YEAR EXAMINATIONS

PSG 3315: SOCIAL PSYCHOLOGY

TIME: THREE (3) HOURS

DATE: 12/06/2016

INSTRUCTIONS

THIS EXAMINATION HAS THREE SECTIONS; A, B AND C.
ANSWER ALL QUESTIONS IN SECTION A.
ANSWER ANY FIVE (5) QUESTIONS IN SECTION B.
ANSWER ANY TWO (2) QUESTIONS IN SECTION C.

SECTION A: MULTIPLE CHOICE QUESTIONS

Answer all questions on the question paper. Each question carries ½ mark.

Part A: Circle your answer of choice.

1. Patrick is in his first year of his university studies. His family has a history of alcoholism so he has avoided taking alcohol in the past, but his new friends pressure him to drink at social events. He is afraid of social rejection so he decides to drink, but still privately feels that drinking is problematic. What terms best describe the change in Patrick's behaviour?
 - a. Normative conformity and internalization.
 - b. Normative conformity and compliance.
 - c. Informational conformity and internalization.
 - d. Informational conformity and compliance.
2. Nicholas, a quiet young man, went to a music concert. The large crowd began to scream and stomp their feet when the musicians came on stage. Nicholas joined in as he lost his sense of self awareness. This is an example of
 - a. dehumanization.
 - b. deindividuation.
 - c. depersonalization
 - d. mass hysteria.

3. Stereotypes are to _____ as prejudices are to _____.
- behaviour; beliefs
 - beliefs; behaviour
 - cognitions; behaviour
 - beliefs; attitudes
4. A teenager is out with her friends at the mall. 'Although she doesn't believe in shop lifting, when they all take cosmetics and put them in their pockets, she does as well. As a result, she will most likely experience _____.
- cognitive dissonance
 - cognitive congruity
 - attitude inoculation
 - attitude incongruity
5. After Mrs. Phiri lent her neighbor a cup of salt, she felt comfortable asking her for some washing powder for her laundry. This is due to her ascribing to _____.
- social exchange theory
 - ingratiation
 - the reciprocity norm
 - social capital
6. Ambivalent attitudes _____.
- include both positive and negative components
 - predict behaviour very well
 - tend to be very weak
 - are not easily acceptable in memory
7. What allowed the two groups in Muzafer Sherif's Robbers' Cave study to finally get along?
- The formation superordinate goals.
 - The formation of subordinate goals.
 - The misperception effect.
 - Exposure to non-prejudiced models.
8. Information about a person that doesn't fit the stereotype of the group to which the person belongs will usually lead people to _____.
- explain the information in terms of dispositional attributions
 - add the information to the existing stereotype
 - see the group in less prejudiced way
 - explain the information as an exception
9. When Roy sees people begging for money on the street, he refuses to give them money because they are the ones that got themselves into the situation. They need to get themselves out of it. They are lazy and don't really want to work for a better life. If they

claim that their life circumstances put them on the street, they are just using excuses. What social psychology principle is Roy demonstrating?

- a. Other-race effect
 - b. Mere exposure effect
 - c. Fundamental attribution error
 - d. Bystander effect
10. Mwenya is about to take a maths test. Before she begins she reflects on the stereotype that women are not as good at maths as men are and then she worries that she might accidentally confirm this negative stereotype. This worry distracts her during the test and her performance suffers because of it. This scenario best illustrates the power of _____.
- a. stereotype threat
 - b. self-fulfilling threat
 - c. stereotypic prophecy
 - d. circular logic prophecy
11. Which of the following best summarises the results of Milgram's study of obedience, in which teachers were ordered to administer "shock to a learner"?
- a. None of the teachers obeyed to the highest shock level.
 - b. None of the teachers obeyed to the midpoint level of shock.
 - c. Most teachers refused to go on after the learner first complained about the pain.
 - d. Most teachers obeyed to the highest level of shock.
12. The earliest demonstration that mere presence of others has an impact on individual behaviour was an experiment on the phenomenon of _____.
- a. prejudice
 - b. discrimination
 - c. conformity
 - d. social facilitation
13. Taonga's friend Natasha just started on a new job. She invites Taonga for lunch after the first week on the job and complains about her boss. This surprises Taonga, because she has never heard her complain about a boss before, and she rarely complains in general. Which one of Harold Kelley's covariation information does Natasha's behaviour portray?
- a. Consistency
 - b. Consensus
 - c. Dissonance
 - d. Distinctiveness

14. Social psychology research findings on persuasion show that credible communicators are more likely to induce attitude change than non-credible ones. Credibility is _____.
- the same as liking
 - the same as attractiveness
 - perceived as expertise and trustworthiness
 - the same as honesty
15. Which of the following people is least likely to conform to group pressure?
- A university student
 - A person from an individualistic culture
 - A person from a collectivistic culture
 - A person whose attention has been drawn to a group norm
16. Cynthia's friends all say a recent PSG 3315 test was difficult. Cynthia thinks the test was easy. When asked what she thought, Cynthia agrees with her friends. This outcome illustrates
- normative influence
 - private conformity
 - reciprocity norms
 - informational influence
17. The bystander effect is influenced by all the following except _____.
- the number of bystanders
 - the personalities of bystanders
 - whether the bystanders appear calm
 - whether the situation is ambiguous
18. The social learning theory of aggression emphasizes all the following except that _____.
- aggressive responses are learned from the family, the subculture, and the media
 - aggressive acts are learned through modelling
 - most aggression results from frustration
 - when aggressive responses are reinforced, they are more likely to continue
19. Which of the following aspects of health is social psychological theory and research finding practical application?
- Etiology of ill-health
 - Prevention of ill-health
 - Management of ill-health
 - All of the above

20. Some of the research interests of social psychologists in the specialization of psychology and law include the following except _____.
- bystander effect
 - child-witness memory
 - line-up biases
 - eyewitness testimony

PART B: True or False. Tick your answer.

	Statement	True	False
1.	People are usually drawn to those who are more opposite than similar to themselves.		
2.	According to Vrij et al (2012), lying is harder to do and requires more thinking than telling the truth.		
3.	Rick refuses a phone request for a K240 donation to sponsor four orphans from Kasisi orphanage, but agrees to give K60. This illustrates foot-in-the-door technique.		
4.	Prosocial behaviour is actually a form of altruistic behaviour.		
5.	According to the frustration-aggression hypothesis, frustration often leads to aggression.		
6.	As the number of bystanders at an emergency increases, the probability that the victim will receive help decreases.		
7.	One of the neurological explanations of altruism is that helping others relieves negative feelings.		
8.	Social psychologists generally believe that aggression stems from an aggressive instinct.		
9.	Social psychology research suggests that media violence is probably related to increased aggression.		
10.	Social psychological research tends to support the notion that a person can drain off aggressive energy by watching others behave aggressively in sports or on television.		

SECTION B: SHORT ESSAYS.

Answer any five (5) of the following questions. Each question carries 5 marks.

1. What is bystander effect, and what factors have been suggested to explain why it occurs?
2. A small group of environmentally-aware students from the PSG 3315 class are concerned with the amount of plastic carrier bags thrown around campus that students bring in with their shopping. They decide to campaign for campus to become “plastic-free”.
Use your knowledge of conformity and minority influence to discuss the factors that will determine how successful the small group of students will be.
3. Although we are often advised not to judge a book by its cover, research findings in social psychology indicate that as social perceivers we all make judgements or form impressions about others based on their physical appearance.
 - (a) Summarise Willis and Todorov’s (2006) study on the nature of this process.
 - (b) Describe documented evidence that shows support for our tendency to form impressions about others based on their physical appearance.
4. John’s roommate made a comment that he knew which presidential candidate his friends voted for in the last elections based on their attitudes towards each candidate. Like many people, he assumed that attitudes predict our behaviour in all situations. Briefly discuss how attitude strength moderates the attitude-behaviour link.
5. Compliance is said to be the most influential form of social influence.
 - (a) What is compliance? Briefly describe Cialdini’s principles on which techniques used for gaining compliance are based.
 - (b) Name and explain **one** technique using an example and identify the principle on which it is based.
6.
 - (a) Outline Solomon Asch’s classic study on conformity, clearly stating what he found in the study.
 - (b) In further studies, Asch studied the effects of shattering group unanimity by having one of the confederates break with the others. What did the results of these studies show and what did they suggest?
7. With the help of an example, explain what the self-serving bias is as well as the most accepted explanation of its origins.

SECTION C: LONG ESSAYS.

Answer any two (2) of the following questions. Each question carries 10 marks.

1. With reference to modelling theory and the psychoanalytic concept of catharsis, discuss the relationship between aggression and the media. On the basis of arguments from both sides come up with your own conclusion on the subject of media and aggressive behaviour.
2. In most organisations, if not all, committees are used for decision making on the assumption that **“groups make better decisions than individuals.”** Critically evaluate this assumption drawing on your knowledge of social psychology findings on decision making in groups.
3. Prejudice and its related concepts of stereotyping and discrimination have long been an area of interest and study to social psychologists.
 - (a) Cite a clear example, documented or experienced, of prejudice in our Zambian context making clear the social group you are referring to, the nature of the prejudice (stereotyping and discrimination).
 - (b) Drawing on your social psychology knowledge, discuss **one** possible way in which the prejudice and/or discrimination you refer to in (a) could have emerged.
 - (c) The jigsaw classroom has been found to be effective in reducing prejudice in schools. Why is this the case? Explain with reference to relevant research.
4.
 - (a) Describe Milgram’s study of obedience.
 - (b) Discuss the factors that account for destructive obedience and show how these were reflected in Milgram’s study.

END OF EXAMINATION

UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
2015 ACADEMIC YEAR EXAMINATIONS
SOC 1110: INTRODUCTION TO SOCIOLOGY

INSTRUCTIONS: THERE ARE THREE SECTIONS IN THIS PAPER, READ THE
INSTRUCTIONS CAREFULLY IN EACH SECTION.

TIME: THREE (3) HOURS

SECTION A: Multiple Choice. Answer all the questions (30 Marks)

1. Mr. Kalombwana Siamanjanji is imprisoned for ten years for aggravated robbery. When he comes out of prison, he finds his wife and family are no longer interested in him. He also fails to find employment and the welfare department is of no help. He commits suicide leaving a note that he could not cope with the changed circumstances. This is a typical case of:
 - a) Anomic suicide
 - b) Altruistic suicide
 - c) Fatalistic suicide
 - d) Egoistic suicide
 - e) Egoistically self-inflicted suicide
2. A sample is defined as:
 - a) A selection from the larger population
 - b) A partial representation of the target group
 - c) The individuals intended to represent the population to be studied
 - d) Subgroups of the population in which every member has an equal chance of selection
 - e) A small group chosen on account of their prominence for study
3. Those aspects of social life that have to do with social order, stability and social organisation that allow society to hold together and endure over time are called:
 - a) Social structure
 - b) social dynamics
 - c) Social statics
 - d) Social stratification
 - e) None of the above
4. Which one of the following is NOT a macro sociologist:
 - a) Auguste Comte
 - b) Karl Marx
 - c) Talcott Parsons
 - d) Erving Goffman
 - e) Emile Durkheim
5. Max Weber agreed with Karl Marx that property or wealth was the basis for social class:
 - a) True
 - b) False

6. In the estate system of social stratification, the main estates were:
 - a) The serfs, the aristocrats and the bourgeoisies
 - b) The bourgeoisies, the proletariats and the lumpens
 - c) The clergy, the commons and the serfs
 - d) The commons, the clergy and the knights
 - e) The commons, the nobility and the clergy
7. The practice of endogamy is most likely to be found in the:
 - a) Class system
 - b) Socialist system
 - c) Caste system
 - d) Traditional system
 - e) Racist system
8. Doctors are of greater importance to society than cleaners and therefore should be placed higher on the stratification scale. This is likely to be the view of:
 - a) Davis and Moore
 - b) Marx and Engels
 - c) Scott and Tumin
 - d) Durkheim and Weber
 - e) None of the above
9. Which one of the following is NOT true about the 'status' of an individual in society:
 - a) Statuses are culturally defined
 - b) One's status may differ from one society to another
 - c) A status can be involuntary
 - d) Statuses are always biologically determined
 - e) (c) and (d) above
10. _____ is a vehicle of culture.
 - a) Man
 - b) Technology
 - c) Language
 - d) Society
 - e) Group solidarity
11. Which one of the following is NOT an agent of socialization:
 - a) Political party
 - b) Social media
 - c) The work place
 - d) The bank
 - e) The church
12. Sociologists distinguish families and marriages solely on the basis of the choice of a marriage partner:
 - a) True
 - b) False
13. Which one is not considered when computing total fertility rate:
 - a) Age composition
 - b) Live births
 - c) Sex

- d) Infertility
 - e) None of the above
14. Marxist believe that the school employs _____ to ensure conformity
- a) Punishment
 - b) Retribution
 - c) Labelling
 - d) Latent functions
 - e) None of the above
15. Mead defined 'generalised other' as:
- a) A group of people whose opinion matter to us and shape our behaviour
 - b) The overall impression of ourselves that we try to project to others
 - c) A significant figure in early childhood who teaches us the general values of society
 - d) An image of how people in the wider society might perceive our behaviour
 - e) None of the above
16. An exaggerated and preconceived image of a category of people which affects the way in which we see them is called:
- a) Ethnocentrism
 - b) Stereotyping
 - c) Relativism
 - d) Universalising
 - e) None of the above
17. Which of the following was NOT identified by Smelser as a precondition to an episode of collective behaviour?
- a) Previous history
 - b) Social control
 - c) Structural strain
 - d) Generalised belief
 - e) Precipitating event
18. The key concept in labelling theory of deviance is that of:
- a) Commitment
 - b) Association
 - c) Stigma
 - d) Learning
 - e) Acceptance
19. World-systems theory distinguishes between core, peripheral and semi-peripheral countries. Which one of the following countries is part of the semi-periphery?
- a) Japan
 - b) India
 - c) Ethiopia
 - d) Spain
 - e) Germany
20. Global economic inequality refers primarily to:
- a) Systematic differences in wealth and income between global firms
 - b) Systematic differences in wealth and income between countries

- c) Systematic differences in wealth and income within countries
 - d) Systematic differences in wealth and income between poorer countries
-

SECTION B: Write brief notes on fifteen (15) of the following (30 marks)

1. Difference between pure and applied sociology
 2. Apartheid as a pluralist society
 3. Primogeniture
 4. Moral holidays
 5. Sapir-Whorf hypothesis
 6. Cultural variability
 7. Bereavement
 8. Mass behaviour
 9. Innovator in relation to deviance
 10. Organised crime
 11. Difference between fecundity and fertility
 12. Egalitarianism
 13. Lesbian couples
 14. Orthodox church
 15. Karma
 16. State capitalism
 17. Oligopoly
 18. Human development
 19. Underdevelopment
-

SECTION C: Answer any two (2) questions from the following (40 Marks)

1. While the contagion theory of collective behaviour argues that people become irrational during collective behaviour, the convergence theory and emergent norm theory argue that collective behaviour is rational. Which of these arguments do you agree with? Clearly explain why?
2. With the help of any three theories of socialization and practical examples, discuss the process of acquiring the self-concept in the Zambian society and explain why the 'self' differs from one person to the other.
3. There is a contest between the dependency theory and the modernisation theory in the explanation of the existence of poverty and lack of development in Africa. Discuss
4. Outline the pull and push factors of migration in Zambia and discuss the consequences of international migration both on sending and host countries.

UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
2016 ACADEMIC YEAR
MID YEAR FINAL EXAMINATIONS
SOC 9255: CRIMINOLOGY

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS FROM THE
FOLLOWING. ALL QUESTIONS CARRY EQUAL MARKS.

TIME: THREE (3) HOURS

1. With practical examples, discuss what penology is all about and how it relates to criminology and criminal justice in society *(25Marks)*
 2. With practical examples, discuss the positions of the functionalist and conflict perspectives on crime and criminal law in society *(25 Marks)*
 3. What is the structure of the criminal justice system in Zambia? How does the criminal justice system function in Zambia as a social control measure of criminal behaviour? Give practical examples *(25 Marks)*
 4. In the Positivist School of Criminology, there are three renowned exponents of the School's principles, what were their main arguments in as far as criminal behaviour was concerned in society?
 5. What is crime? With practical examples, discuss the two major categories of crime and the types of crime that fall under them *(25 Marks)*
-

END OF EXAMINATION

UNIVERSITY OF ZAMBIA
DEPARTMENT OF SOCIAL WORK AND SOCIOLOGY
SOCIOLOGY DIVISION

SOC 9755 SOCIOLOGY OF HEALTH AND ILLNESS EXAMINATION
Thursday 15th June, 2017

INSTRUCTIONS

1. Read instructions carefully before attempting to answer any question.
2. Answer Question **ONE** from Section 1 and any **TWO** Questions from Section 2.

SECTION 1

- i) Discuss the **two** variants of phenomenology (5 Marks)
- ii) Critically analyse the **three** variants of phenomenology. Support your answer with practical examples from the Zambian perspective (15 Marks)

SECTION 2

2. Epidemiologists believe that health and disease are strongly culturally and socially influenced and therefore in seeking to understand the determinants of diseases, Epidemiologists do not only investigate diseases that are spread by humans alone but also those caused by the interactions between human and animals. Based on this statement answer the following questions:
 - i) Why is the study of Epidemiology important in sociology of health and illness? (5 Marks)
 - ii) Which group of people in society are mostly affected by Zoonotic diseases and why? Use practical examples from the Zambian perspective to support your argument. (10 Marks).
3. It is mid-morning in the male medical ward at the University Teaching Hospital (UTH) in the Zambian capital Lusaka. As usual the ward is full, with 32 patients suffering conditions ranging from malaria, broken bones due to accidents and meningitis to diarrheal infection. Ideally there should be six nurses on duty, four doctors, one nutritionist, six indoor servants and one physiotherapist. But chronic staff shortages mean that as usual, sister-in-charge Vanessa Chisanga and her nursing team are alone, dispensing drugs, exercising those who may have stroke, changing dressings and doing their best against the odds to monitor seriously ill charges. They seem to have a very happy and solid relationship among

themselves and quarrels are unheard of. Based on this scenario answer the following questions:

- i) What solidarity theory would you use to explain the roles people like Vanessa Chisanga and her nurses are playing in the ward? (5 Marks).
 - ii) What must have been behind the cohesion in their work? (10 Marks).
4. Looking at the current healthcare system in Zambia, what could be done to improve the structure and function to the health services? Give practical examples to support your answer (15 Marks).
 5. Utilisation of alternative services is on the increase in Zambia. Discuss **five** determinants of Illness Behaviour or reasons why people seek or not seek medical expert in Zambia. Provide practical examples for each determinant to support your answer. (15 Marks)

END OF EXAMINATION

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF SOCIAL DEVELOPMENT STUDIES
SOCIOLOGY DIVISION**

2016/17 MID-YEAR FINAL EXAMINATION

SOC 9855: POLICY, PROJECTS AND PROGRAMS FOR DEVELOPMENT

=====

Instructions

- Duration: Three (3) hours
- The paper is divided into three sections. Read carefully the instructions under each section.

SECTION A: Write brief notes on all of the following (40 Marks)

1. What is a concept note and what is the main reason for writing it?
2. In the views of dependency theorists, what constitute the main obstacle to the wellbeing of poor countries?
3. What do the acronyms 'SMART' stand for in project planning?
4. What is a log-frame and why is it considered as a free standing document?
5. What is project planning and what are some of the barriers to effective project planning?
6. Briefly explain one best way to derive objectives of a project
7. What is project appraisal and why is it relevant in project planning?
8. Why is it important to use participatory methodologies during needs assessment?
9. Identify and briefly explain any two differences between projects and programmes
10. Contrast between situational and structural poverty

SECTION B: Answer all of the following questions (40 Marks)

As a student in SOC 9855 during the 2016/17 academic year, one of the tasks for the continuous assessment required you to write a concept note on an identified problem. Assume that your concept note has been accepted and your request for funding has been approved and granted, and

you are the project manager for your identified problem/project. As a project manager, you are therefore tasked to do the following for your project (*Based on your respective problem when writing the concept note*);

- i) Outline the steps followed when constructing a stakeholder analysis table and write the issues you would consider when conducting a stakeholder analysis (14)
- ii) Conduct a problem analysis for your identified problem, clearly outlining the steps and indicating its relevance (15)
- iii) Outline the issues you will need to consider when focusing the project (5)
- iv) Explain the general management knowledge and skills that you need to possess in order to properly manage this project (6)

SECTION C: Answer any ONE question from the following; (20 Marks)

1.
 - a) What is meant by capacity assessment? At what stage in project management is capacity assessment carried out and why? What type of assets can this exercise take into consideration? (15)
 - b) Briefly explain the importance of having well defined goals in any given project (5)
2.
 - a) Differentiate between the top-down and the bottom up approaches to problem/project identification. What are the advantages and disadvantages of using each of these approaches? (15)
 - b) Between the top-down and bottom-up approaches, which one is best suited for identifying felt, normative and relative needs? (5)
3.
 - a) What is a policy? With the aid of a diagram, state the main stages of a policy cycle and explain in as much detail as possible what is involved at each stage (15)
 - b) To what extent do you agree or disagree with the assumption of the group equilibrium approach that government policies are those that conform to the values and demands of the several social groups (5)

END OF EXAMINATION!!!

**UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF HISTORICAL AND ARCHAEOLOGICAL STUDIES**

FOURTH YEAR UNIVERSITY EXAMINATIONS, 2017

ARCH 4210: AFRICAN ARCHAEOLOGY

TIME: THREE HOURS

INSTRUCTIONS: Answer question one (1) and any other two (2) questions from the list of questions.

1. A) Draw a Map of Africa and clearly indicate the locations of the following sites:

a) Ingombe Ilede b) Mumbwa Caves, c) Olduvai Gorge, d) Hadar e) Laetoli

f) Taung g) Sterkfontein h) Kromdraai i) Kalambo Falls.

B) Choose three of the following archaeological sites and discuss their significance in the context of age, material culture and their contribution to reconstruction of Africa's past :

a. Kalambo Falls Pre historic site
b. Mumbwa Caves
c. Sterkfontein
d. Olduvai George
e. Hadar
2. The Chimfunshi site in the Copper belt Province provides an excellent sanctuary of living Chimpanzees for the study of social organization and behavior of some of man's closest relatives. Discuss those aspects of Chimpanzee behavior that would be useful in the study of early hominins.

3. The introduction of food production and metallurgy in sub Saharan Africa must have revolutionized man's attitude towards his environment. Discuss those positive and negative aspects of food production that impacted on his way of life.
4. The Acheulian period is one of the most exciting periods in human history. Discuss those aspects that characterize this period that are important in understanding human cultural development.
5. Discuss the significance of African Archaeology in the study of the human past, giving examples from Eastern and Southern Africa.
6. Did the invention of iron technology have any impact on the people that came into possession of this knowledge? What was its utilitarian and ritual significance among African communities?
7. The Mwanganda butchery site in Malawi is relevant to the study of ancient human dietary practices. In your assessment of the importance of technology and stone tools, What aspects of human behavior can we hope to learn from the ancient man's butchery practices in terms of technology?
Is there anything we can learn from the use of stone tools in understanding early human behavior?

----- END -----

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2016 ACADEMIC YEAR
END OF YEAR FINAL EXAMINATION

BBA 3415: BUSINESS STATISTICS
TIME ALLOWED: THREE (3) HOURS
INSTRUCTIONS: ANSWER ALL QUESTIONS AND CLEARLY SHOW ALL YOUR
WORK TO EARN MAXIMUM POINTS

Question One

State whether each of the following statements are true, false or uncertain.

- i. A point estimator having a small standard deviation is efficient
- ii. The binomial distribution is always used when the probabilities associated with the two possible outcomes are equal
- iii. A geometric distribution is a subset of a binomial distribution
- iv. The desired error margin is directly proportional to the size of the sample
- v. The tails of the standard normal distribution contain more area relative to the tails of the t-distribution
- vi. The probability of any event is always non-negative
- vii. The confidence interval always correctly estimates the true value of the population parameter.
- viii. An estimator is said to be unbiased if and only if the bias is non-negative
- ix. Given a random sample 30 and the 99% confidence limits [A, B], we are confident that there is a 99% probability that the sample mean lies between A and B.
- x. Regardless of the shape of the t distribution and given that the population variance is unknown, a researcher is able use the t distribution to construct a confidence interval of population means for small samples

Question Two

The following data gives the marks obtained in a test for 40 randomly selected students in the Department of Economics at UNZA.

53	56	60	62	65	67	67	69	71	72
72	73	74	74	75	75	76	76	77	77
78	79	79	81	81	82	83	84	84	84
85	86	87	87	87	88	90	92	94	96

Determine the following descriptive statistics for the marks above:

- Mean mark
- The median mark.
- Modal mark.
- The interquartile range
- Present these data graphically using a carefully drawn histogram starting with the interval 50-59.
- Discuss the skewness of the distribution, and clearly show how you arrived at your conclusion.

Question Three

In the recent past, Zambia has witnessed an increase in the number of unemployed graduates partly due to the poor prevailing economic conditions. The probability that a graduate receives a job offer on the first and second job application is 0.3 and 0.4 respectively. Assuming that graduates are of the view that the probability of getting a job offer on both employment applications is 0.35,

- What is the probability that a graduate gets an offer on at least one of the job applications?
- What is the probability that a graduate is not offered a job on either of the two applications?
- Are the two job applications mutually exclusive?
- Suppose that the Central Statistical Office (CSO) estimates that 70% of the unemployed graduates are below the age of 35. Furthermore, during the 12 month period, CSO estimates that 8% of the unemployed graduates below the age of 35 years will be offered a job while 15% of the unemployed graduates 35 years of age or

older will be employed. Assuming that a graduate is offered employment during the 12 month period, what is the probability that the graduate is 35 years or older?

Question Four

The Lusaka City Council wishes to establish a road accident compensation fund. Any person who is involved in a road traffic accident would be compensated if they survive, otherwise the family of the victims would receive the compensation on their behalf. The council would not be able to implement the project if the average number of traffic accidents exceeds 1,700 per month.

- a. Given that a period of 25 months had an average of 1900 accidents with a standard deviation of 36, test whether the project would be implemented at 10 per cent significance level
- b. Given that the population variance is 100, estimate the 99% confidence interval of a mean of 1880 accidents within 20 months. Interpret your result
- c. Test whether the project would be implemented if there were 2000 accidents on average within 60 months and a standard deviation of 8. Use 5% level of significance.
- d. Distinguish a type I error from a type II error

Question Five

The Dean of Students (DOSA) is considering mounting a laundry machine in selected student hostels for piloting purposes. Given that consultants are of the view that the time the laundry machine is idle between two laundry users on a Sunday morning follows an exponential probability distribution with an expected value of 1.4 minutes,

- a. Show the probability density function for this distribution?
- b. What is the probability that the next laundry user arrives between 24 seconds and 54 seconds after the first student uses the machine?
- c. Find the probability that the laundry machine will be idle for at least a minute between two laundry users?
- d. During peak hours, the laundry machine breaks down at the rate of two per hour. Given that the morning rush period lasts for 1 hour 30 minutes and the evening rush period lasts for two hours,
 - i. What is the probability that there will be no machine breakdown during the morning rush period on any particular period?

- ii. What is the probability of two machine breakdowns during the evening rush period?
- iii. What is the probability of four or more machine breakdowns during the evening rush period?
- iv. On a particular day, what is the probability there will be no machine breakdown during both the morning and evening rush periods?

Question Six

The table below provides hypothetical aggregate information on consumer's disposable income and the corresponding consumption (in billions of kwacha) for the Zambian economy.

<i>Year</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<i>Disposable Income (X)</i>	751.6	779.2	810.3	864.7	857.5	874.9	906.8	942.9	988.8	1015.7
<i>Consumption (Y)</i>	672.1	696.8	737.1	767.9	762.8	779.4	823.1	864.3	903.2	927.6

- a. Estimate the line of best fit and interpret the observed coefficients.
- b. Given that you are willing to risk a type I error of 5%, construct the confidence interval for the slope parameter.
- c. Using the level of significance in (b) above, is there sufficient evidence to conclude that the slope parameter is less than one?
- d. Calculate the covariance between the two regression coefficients and interpret your results in the context of regression analysis.

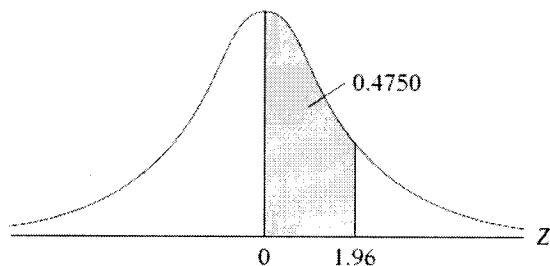
END OF EXAMINATION

AREAS UNDER THE STANDARDIZED NORMAL DISTRIBUTION

Example

$$\Pr(0 \leq Z \leq 1.96) = 0.4750$$

$$\Pr(Z \geq 1.96) = 0.5 - 0.4750 = 0.025$$

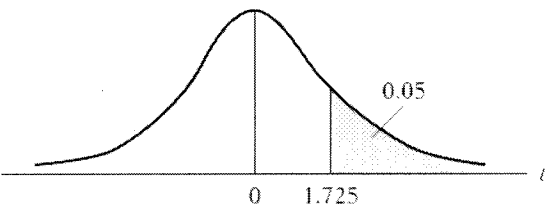


Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.0000	.0040	.0080	.0120	.0160	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2517	.2549
0.7	.2580	.2611	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4429	.4441
1.6	.4452	.4463	.4474	.4484	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4761	.4767
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4864	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	.4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4979	.4980	.4981
2.9	.4981	.4982	.4982	.4983	.4984	.4984	.4985	.4985	.4986	.4986
3.0	.4987	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.4990
3.1	.4990	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	.4993	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.4995

PERCENTAGE POINTS OF THE t DISTRIBUTION

Example

$\Pr(t > 2.086) = 0.025$
 $\Pr(t > 1.725) = 0.05$ for $df = 20$
 $\Pr(|t| > 1.725) = 0.10$



	Upper-tail probability p								
df	0.2500	0.1000	0.0500	0.0250	0.0100	0.0050	0.0025	0.0010	0.0005
1	1.000	3.078	6.314	12.706	31.821	63.66	127.3	318.3	636.6
2	0.816	1.886	2.920	4.303	6.965	9.925	14.09	22.33	31.60
3	0.765	1.638	2.353	3.182	4.541	5.841	7.453	10.21	12.92
4	0.741	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	0.727	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.869
6	0.718	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	0.711	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	0.706	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	0.703	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	0.700	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587
11	0.697	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.437
12	0.695	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.318
13	0.694	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.221
14	0.692	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.140
15	0.691	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.073
16	0.690	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.015
17	0.689	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.965
18	0.688	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.922
19	0.688	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.883
20	0.687	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.850
21	0.686	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.819
22	0.686	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.792
23	0.685	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.768
24	0.685	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.745
25	0.684	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.725
26	0.684	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.707
27	0.684	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.690
28	0.683	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.674
29	0.683	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.659
30	0.683	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.646
40	0.681	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.551
60	0.679	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.460
90	0.677	1.291	1.662	1.987	2.368	2.632	2.878	3.183	3.402
120	0.677	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.373
∞	0.675	1.282	1.645	1.960	2.327	2.576	2.808	3.091	3.291



THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF ECONOMICS

2016/2017 ACADEMIC YEAR

FINAL YEAR EXAMINATIONS

BBA 9215: FINANCIAL STATEMENTS ANALYSIS

TIME: THREE (3) HOURS

INSTRUCTIONS: ATTEMPT ANY FOUR (4) QUESTIONS. EACH QUESTION EQUALS 25 MARKS.

QUESTION ONE

a) What is financial statements analysis? Briefly explain the parties interested in the financial statement analysis. **(5 Marks)**

b) The following are the Balance Sheets of Ms. Anjani Anand for the year 2006 and 2007. Discuss the financial position of the company in two years with the help of common size Balance Sheet. **(20 Marks)**

	2006	2007		2006	2007
Liabilities	K	K	Assets	K	K
Share capital	625,000	675,000	Goodwill	80,000	50,000
Reserve surplus	352,000	352,000	Plant	526,000	513,000
Surplus	175,535	59,070	Patent	30,000	26,000
6% debentures	225,000	200,000	Investment	205,000	125,000
Accrued interest	3,750	3,000	Cash at bank	170,650	287,000
on debenture			Prepaid expenses	3,200	4,600
Sundry creditors	112,000	143,000	Debtors	138,760	153,000
Dividend payable	—	25,000	Stock	235,800	287,670
Taxation provision	8,000	48,000	Debenture discount	6,875	5,000
	1,401,285	1,405,070		1,401,285	1,405,070

QUESTION TWO

From the summarized cash account and fixed asset schedule of Thistle Ltd for 20X2, prepare a cash flow statement. (25 Marks)

Summarised Cash Account

	K'000		K'000
Opening balance	500	Wages	1,350
Cash from cash sales	3,500	Other expenses	600
Cash from credit sales	5,750	Cash paid to suppliers	4,320
Cash from issue of shares	1,200	Tax paid	100
		Cash paid on finance	
Cash from sale of building	970	lease	700
		Final dividend for 20X1	100
		Interim dividend 20X2	50
		Closing balance	4,700
	<u>11,920</u>		<u>11,920</u>

Fixed Asset Schedule

	<i>Plant</i>	<i>Buildings</i>	<i>Total</i>
	K'000	K'000	K'000
Cost at 1.1.20X2	10,000	15,000	25,000
Acquisitions	4,730	-	4,730
Disposals	-	(5,000)	(5,000)
Cost at 31.12.20X2	<u>14,730</u>	<u>10,000</u>	<u>24,730</u>
Accumulated depreciation at 1.1.20X2	3,500	6,000	9,500
Charge for year	650	1,500	2,150
Disposals	-	(4,500)	(4,500)
Accumulated depreciation at 31.12.20X2	<u>4,150</u>	<u>3,000</u>	<u>7,150</u>

Other information:

- a) The tax charge for the year was K400,000. The opening balance on the tax liability was K100,000.
- b) Other expenses include insurance, which is paid a year in advance, on 30 June. In 20X1, insurance of K300,000 was paid. The amount paid in 20X2 was K400,000.
- c) Accrued wages were K75,000 at 1.1.20X2, and K95,000 at 31.12.20X2.
- d) Stocks were K1,500,000 at 1.1.20X2, and K1,700,000 at 31.12.20X2.
- e) All K700,000 paid on the finance lease in 20X2 represented capital. This was the first year of the lease and interest was not paid until the second payment, which was made in 20X3. Interest of K403,000 was included in the 20X3 payment and was accrued in the 20X2 financial statements.
- f) Opening and closing trade debtors and trade creditors were:

	1.1.20X2	31.12.20X2
Trade debtors	300,000	450,000
Trade creditors	500,000	475,000

- g) 600,000 K1 ordinary shares were issued at a premium on 1.3.20X2.
- h) Retained profits for the year to 31.12.20X2 were K752,000.

QUESTION THREE

Using the following balance sheet and profit and loss accounts, calculate the and comment on ten accounting ratios. (25 Marks)

Balance sheet as at 31 March 20X6

	K	K	K
<i>Fixed assets</i>			
Equipment at cost			600,000
less Depreciation to date			(200,000)
			<u>400,000</u>
<i>Current assets</i>			
Stock		300,000	
Debtors		60,000	
Bank		-	
		<u>360,000</u>	
<i>Less current liabilities</i>			
Creditors	160,000		
Dividends payable	12,000		
Bank overdraft	168,000	(340,000)	20,000
			<u>420,000</u>
<i>Long-term liabilities</i>			
5 % debentures			(100,000)
			<u><u>320,000</u></u>
<i>Financed by:</i>			
Share capital- ordinary shares of K0.50 each			250,000
<i>Reserves:</i>			
General reserves			40,000
Profit and loss			30,000
			<u><u>320,000</u></u>

Profit and loss for period ended 31 March 20X6

	K	K
Sales		2,000,000
Less cost of sales		
Opening stock	250,000	
Add purchases	1,450,000	
	<u>1,700,000</u>	
Less closing stock	(300,000)	(1,400,000)
Gross profit		<u>600,000</u>
Less Depreciation	80,000	
Other expenses	477,000	(557,000)
Net operating profit		<u>43,000</u>
Less debenture interest		(5,000)
Net profit		<u>38,000</u>
Add balance b/d		24,000
		<u>62,000</u>
Less Appropriations		
General reserve	20,000	
Dividend	12,000	(32,000)
		<u>30,000</u>
		<u><u>30,000</u></u>

QUESTION FOUR

A company is considering an investment in an item of equipment costing K8,000. The equipment would attract a 25 % annual writing down allowance. The operating cash flows are forecast as:

	K
Year 1	3,000
Year 2	4,000
Year 3	2,000

The estimates do not allow for the investment of K2,500 in working capital that would be required. The project is expected to have a three-year life, at the end of which the equipment would have a sell-off value of K5,000 at the end of year 3. The rate of tax on profits 30%. The company's cost of capital is 8%.

Required

Calculate the NPV of project and suggest whether it should be undertaken. (25 Marks)

QUESTION FIVE

What is risk analysis? Explain the types of risks and methods of risk analysis. (25 Marks)

END OF EXAMINATION

PRESENT VALUE TABLE

Present value of \$1, that is $(1+r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	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
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	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
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2016 ACADEMIC YEAR
END OF YEAR FINAL EXAMINATION

ECN 2342: APPLIED STATISTICS FOR ECONOMICS

TIME: TWO (2) HOURS

INSTRUCTIONS: ANSWER ALL QUESTIONS IN ANY ORDER OF YOUR CHOICE
AND SHOW ALL YOUR WORK TO EARN MAXIMUM POINTS

Question One

State whether each of the following statements are TRUE, FALSE or UNCERTAIN.

- i. Nine distinct samples of size nine can be drawn from a finite population of size ten
- ii. Under stratified sampling, it is advisable to draw smaller samples from strata with less variability
- iii. The principle deeply rooted in the Delphi technique is that forecasts from a well-organized group of experts are more accurate relative to those from the unstructured group of specialists.
- iv. In acceptance sampling, the type II error is synonymous to the consumers risk.
- v. The average seasonal index must always be equal to one
- vi. The p and np charts are perfect substitutes
- vii. The confidence coefficient and producers risk are inversely related
- viii. Over longer periods of time, seasonal and cyclical variations are analogous.
- ix. The average sum of squares and mean sum of squares are synonymous
- x. In the ratio-to-moving average method, the sum of the weights is always equal to one

Question Two

The meteorological department reported the following daily temperatures (in degrees) for the last 10 days. As a learned second year student possessing the necessary statistical proficiencies, you have been approached by some “monks” to offer an opinion on what the weather would be like on the 11th day.

Day	1	2	3	4	5	6	7	8	9	10
Temperature	1.5	2.3	3.7	3	1.4	-1.3	-2.4	-3.7	-0.5	1.3

- Use the three point moving average to find the daily temperature forecasts as well as the forecast temperature for the 11th day.
- To insulate yourself from criticisms arising from the flaws of the moving average method, you decide to also employ the exponential smoothing method to find the daily forecasts.
 - Express the exponential forecast model as a function-of past data values Y_t .
 - Assuming a smoothing constant of 0.8, derive the forecast temperature for the 11th day.
- Which of the two forecasts would you prefer? Substantiate your answer

Question Three

Indices are now widely used as an information source by different economic agents. Assume a hypothetical economy where a typical consumer’s basket contains three items X, Y, and Z. The table below shows the price and corresponding quantities consumed in 2016 and 2017

	P_t^X	q_t^X	P_t^Y	q_t^Y	P_t^Z	q_t^Z
2016	3	11	4	11	6	11
2017	5	14	8	9	4	15

Using the above information, calculate

- The inflation rate in 2017 using the Laspeyres Price Index
- The inflation rate in 2017 using the Paasche Price Index
- The Fisher’s Index number, and state its advantage
- Will the inflation rate resulting from the Laspeyres Price Index always exceed the inflation rate computed with the Paasche Price Index? Please elucidate

Question Four

The manager of TOYOTA Zambia is concerned about the thickness of paint on TOYOTA cars sold in Zambia. As a consequence, the manager puts to task the statistician employed by the company to assess whether the thickness standards are within acceptable levels. The table below shows the thickness of paint on cars for five cars from each production shift.

Subgroup #	Thickness (in mm)				
1	2.7	2.3	2.6	2.4	2.7
2	2.6	2.4	2.6	2.3	2.8
3	2.3	2.3	2.4	2.5	2.4
4	2.8	2.3	2.4	2.6	2.7
5	2.6	2.5	2.6	2.1	2.8
6	2.2	2.3	2.7	2.2	2.6
7	2.2	2.6	2.4	2	2.3
8	2.8	2.6	2.6	2.7	2.5
9	2.4	2.8	2.4	2.2	2.3
10	2.6	2.3	2	2.5	2.4
11	3.1	3	3.5	2.8	3
12	2.4	2.8	2.2	2.9	2.5
13	2.1	3.2	2.5	2.6	2.8
14	2.2	2.8	2.1	2.2	2.4
15	2.4	3	2.5	2.5	2
16	3.1	2.6	2.6	2.8	2.1
17	2.9	2.4	2.9	1.3	1.8
18	1.9	1.6	2.6	3.3	3.3
19	2.3	2.6	2.7	2.8	3.2
20	1.8	2.8	2.3	2	2.9

- Explain the two types of causes that are responsible for variations in the painting process
- Using the above information, construct the \bar{X} control limits and illustrate graphically. Is there sufficient statistical evidence to suggest that the painting process is out of control? Please explain your answer

- c. It is argued that the \bar{X} chart is not sufficient on its own and should be supplemented with an R-chart (Range-chart).
 - i. Why is this the case?
 - ii. Explain briefly the purpose of the R- chart, and what assumption underpins the construction of control limits of an R-chart?
- d. Construct the R-chart control limits and illustrate graphically. Is there sufficient statistical evidence to authenticate your conclusion in (b) above? Please explain
- e. As a knowledgeable student of Applied Statistics, would you support the TOYOTA statistician for preferring the R-chart to the s-chart? Please explain your answer

END OF FINAL EXAMINATION

TABLE 11 FACTORS FOR \bar{x} AND R CONTROL CHARTS

Observations in Sample, n	d_2	A_2	d_3	D_3	D_4
2	1.128	1.880	0.853	0	3.267
3	1.693	1.023	0.888	0	2.574
4	2.059	0.729	0.880	0	2.282
5	2.326	0.577	0.864	0	2.114
6	2.534	0.483	0.848	0	2.004
7	2.704	0.419	0.833	0.076	1.924
8	2.847	0.373	0.820	0.136	1.864
9	2.970	0.337	0.808	0.184	1.816
10	3.078	0.308	0.797	0.223	1.777
11	3.173	0.285	0.787	0.256	1.744
12	3.258	0.266	0.778	0.283	1.717
13	3.336	0.249	0.770	0.307	1.693
14	3.407	0.235	0.763	0.328	1.672
15	3.472	0.223	0.756	0.347	1.653
16	3.532	0.212	0.750	0.363	1.637
17	3.588	0.203	0.744	0.378	1.622
18	3.640	0.194	0.739	0.391	1.608
19	3.689	0.187	0.734	0.403	1.597
20	3.735	0.180	0.729	0.415	1.585
21	3.778	0.173	0.724	0.425	1.575
22	3.819	0.167	0.720	0.434	1.566
23	3.858	0.162	0.716	0.443	1.557
24	3.895	0.157	0.712	0.451	1.548
25	3.931	0.153	0.708	0.459	1.541

Adapted from Table 27 of ASTM STP 15D, *ASTM Manual on Presentation of Data and Control Chart Analysis*.
Copyright 1976 American Society for Testing and Materials, Philadelphia, PA. Reprinted with permission.

THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2016 ACADEMIC YEAR
END OF YEAR FINAL EXAMINATION

ECN 3322: ECONOMETRICS II

TIME: TWO HOURS

INSTRUCTIONS: ANSWER **ALL** THE QUESTIONS, SHOWING ALL THE NECESSARY WORKING. STATISTICAL TABLES ARE PROVIDED AT THE END OF QUESTIONS. USE 5% LEVEL OF SIGNIFICANCE FOR ALL TESTS.

Question One

- a. Explain the rationale for using the adjusted R^2 in regression analysis.
- b. In regression analysis, what is the meaning of the statement, " X_2 and X_3 are collinear"?

Question Two

Explain the difference between Least Square estimation and Maximum Likelihood estimation.

Question Three

Maria runs two linear model on 50 observations. In the first model, she runs Y on X_1 and X_2 and in the second model, X_1 is dropped.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + u_i \quad (1)$$

$$Y_i = \alpha_0 + \alpha_2 X_{2i} + v_i \quad (2)$$

It is established that the coefficient of correlation between the two explanatory variables, X_1 and X_2 , is zero ($r_{12} = 0$).

- a. Will $\hat{\alpha}_2 = \hat{\beta}_2$? Explain
- b. Are the coefficients of determination comparable for the three models above? Explain.

Question Four

In a regression of average wages (Y) on the number of employees (X) for a random sample of 30 firms, the following regression results were obtained

$$\hat{Y} = \underset{(3.56)}{7.5} + \underset{(2.11)}{0.009} X, \quad R^2 = 0.9 \quad \text{Eqn (1)}$$

$$\hat{Y}/X = \underset{(2.03)}{0.008} + \underset{(6.58)}{7.8} (1/X), \quad R^2 = 0.99 \quad \text{Eqn (2)}$$

the values in parenthesis are respective t-values.

- Comment on the significance of the constant and coefficient in Eqn (1)
- What is the author assuming in moving from Eqn (1) to Eqn (2)?
- How do you relate the slopes and intercepts of the two models?
- Can you compare the R^2 values of the two models? Explain

Question Five

A researcher suspects that the total cost function may change its slope at the output level of 5000 units. Using C to represent total cost and X to represent total output, the researcher obtains the following regression results

$$\hat{C}_i = \underset{(-0.82)}{-145.72} + \underset{(6.06)}{0.2791} X_i + \underset{(1.14)}{0.945} X_i D_i, \quad n = 145, \quad R^2 = 0.9737$$

the values in parenthesis are respective t-values and D is defined as

$$D = \begin{cases} 1, & X > 5000 \\ 0, & \text{otherwise} \end{cases}$$

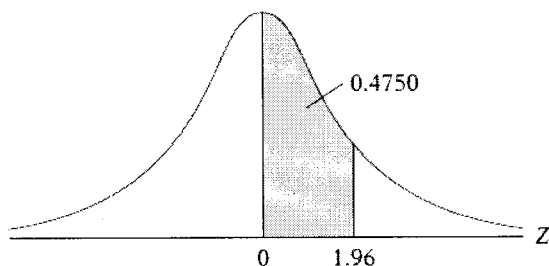
- Interpret the coefficient on $X_i D_i$.
- Based on the results above, write your finding and conclusion addressing the researcher's suspicion.
- If the dummy D was defined as $D = \begin{cases} 1, & X \leq 5000 \\ 0, & \text{otherwise} \end{cases}$ how do you expect the coefficient on $X_i D_i$ to change?

AREAS UNDER THE STANDARDIZED NORMAL DISTRIBUTION

Example

$$\Pr(0 \leq Z \leq 1.96) = 0.4750$$

$$\Pr(Z \geq 1.96) = 0.5 - 0.4750 = 0.025$$



Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.0000	.0040	.0080	.0120	.0160	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2517	.2549
0.7	.2580	.2611	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4429	.4441
1.6	.4452	.4463	.4474	.4484	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4761	.4767
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4864	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	.4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4979	.4980	.4981
2.9	.4981	.4982	.4982	.4983	.4984	.4984	.4985	.4985	.4986	.4986
3.0	.4987	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.4990
3.1	.4990	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	.4993	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.4995

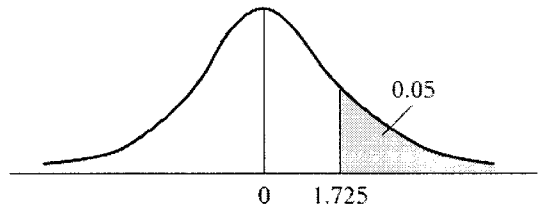
PERCENTAGE POINTS OF THE *t* DISTRIBUTION

Example

$$\Pr(t > 2.086) = 0.025$$

$$\Pr(t > 1.725) = 0.05 \quad \text{for } df = 20$$

$$\Pr(|t| > 1.725) = 0.10$$



	Upper-tail probability p								
df	0.2500	0.1000	0.0500	0.0250	0.0100	0.0050	0.0025	0.0010	0.0005
1	1.000	3.078	6.314	12.706	31.821	63.66	127.3	318.3	636.6
2	0.816	1.886	2.920	4.303	6.965	9.925	14.09	22.33	31.60
3	0.765	1.638	2.353	3.182	4.541	5.841	7.453	10.21	12.92
4	0.741	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	0.727	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.869
6	0.718	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	0.711	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	0.706	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	0.703	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	0.700	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587
11	0.697	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.437
12	0.695	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.318
13	0.694	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.221
14	0.692	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.140
15	0.691	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.073
16	0.690	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.015
17	0.689	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.965
18	0.688	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.922
19	0.688	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.883
20	0.687	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.850
21	0.686	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.819
22	0.686	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.792
23	0.685	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.768
24	0.685	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.745
25	0.684	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.725
26	0.684	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.707
27	0.684	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.690
28	0.683	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.674
29	0.683	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.659
30	0.683	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.646
40	0.681	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.551
60	0.679	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.460
90	0.677	1.291	1.662	1.987	2.368	2.632	2.878	3.183	3.402
120	0.677	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.373
∞	0.675	1.282	1.645	1.960	2.327	2.576	2.808	3.091	3.291

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
2016 ACADEMIC YEAR
FINAL EXAMINATION**

ECN 9155: HEALTH ECONOMICS

INSTRUCTIONS

- 1. SECTION A IS COMPULSORY, AND CHOOSE ANY OTHER THREE QUESTIONS OF YOUR CHOICE FROM SECTION B**
 - 2. TIME: TWO (2) HOURS**
-

SECTION A (COMPULSORY)

Question One

There is general agreement that we cannot talk about development without reference to the health of communities. Health and development share a very close link.

- a. Mention the three MDGs relating to health as well as the one SDG relating to health. What are some of the targets related with these goals (3 targets will be sufficient)?
- b. Discuss the relationship between health and development. Which one causes the other?
- c. Distinguish between diseases of the rich and diseases of the poor.

SECTION B (CHOOSE ANY THREE QUESTIONS OF YOUR CHOICE)

Question Two

The University Teaching hospital has both doctors and nurses attached to the Casualty Section. Assume there is scope for substitution between nurses and doctors and that increasing the wage of doctors from K34, 000 to K40, 000 would eventually lead to a 5 percent reduction in the relative use of doctors as compared to nurses as long as nurse wages remain fixed at K8000.

- a. With the aid of a suitable diagram, characterize the production function depicted in the Casualty Section of the Hospital.
- b. Calculate the percentage change in the factor price ratio.
- c. Calculate and interpret the elasticity of substitution (nurses for doctors).
- d. Briefly explain the three stages of health care costing.

Question Three

A Canadian funded project is considering two projects for possible implementation in the Zambian Health sector. The projects seek to reduce the number of cases and deaths due to Cholera in Lusaka compounds and have benefits not only in the current year (2017) but also in the year after implementation (2018). The Table below summarizes the projected costs and outcomes of each project.

Project	Cost (Kwacha) (2017)	Cases prevented (2017)	Death prevented (2017)	Cases prevented (2018)	Deaths Prevented (2018)
A: Water Treatment	180,000	35	25	10	8
B: Sanitation improvement	150,000	65	50	15	12

- Based on total cases prevented, which project must be implemented?
- Based on total deaths prevented, which project must be implemented?
- Assuming that each case prevented is equal to K900 Savings and each death prevented is equal to K 4,000 savings, which project must be implemented based on Cost-benefit analysis? Assume the relevant discount rate is 5 percent.

Question Four

Health care costs valuation refers to the use of unit prices of measured costs in order to calculate the total cost of health care provision.

- What is the link between identification, measurement and valuation of health care costs?
- State and explain the two approaches used in the valuation of health care costs.
- With reference to the two approaches given in (b) above, state which approach is best suited in the valuation of costs of the following projects:
 - Eyes services offered by NGOs at the Unza graduation square
 - Cancer testing services offered by the Cancer centre at UTH.
 - Malaria prevention intervention in Lusaka compounds.
 - ARVs supply and provision at a government health facility.
- What is Cost-Utility analysis and when is it appropriate to use this method of economic evaluation?

Question Five

Health care financing is very important in the health economy. It ensures that resources are mobilized and incentives put in place to facilitate health care provision.

- a. Compare OOPs and private health insurance as sources of financing in terms of equity, effect on demand for services, and pooling.
- b. Explain the characteristics of health care demand that necessitate health insurance.
- c. What other characteristics of health care demand make it appear different from demand for other commodities?

END OF FINAL EXAMINATION

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF GENDER STUDIES**

2017 ACADEMIC YEAR FINAL EXAMS

COURSE: GDS 3130: GENDER AND FOOD SECURITY

DATE: 15th SEPTEMBER, 2017

TIME ALLOWED: 09-12 HOURS (3HOURS)

INSTRUCTIONS:

THERE ARE TWO SECTIONS IN THIS PAPER, SECTION A IS COMPULSORY
ANSWER ANY TWO QUESTIONS FROM SECTION B.

SECTION A

1. Describe Zambia's current land tenure system in Zambia. Explain why the current land tenure system has not been able to sufficiently meet the demands of land for women and disadvantaged groups? What recommendations would you give to the Ministry of Lands to address the land problem among women?

SECTION B

2. Discuss the differences and similarities between the Malthusian Theory on population and Economic Dependency theory causes of food insecurity in societies.
3. Discuss the impact of structural Adjustment Policies (SAP) introduced during the Chiluba MMD government on small scale female farmers in Zambia.
4. Explain in detail how the New Deal MMD Administration after 2001 built the resilience of small scale female farmers who had experienced both policy and environmental shocks in the past 10 years (1991-2000).
5. Identify and discuss the natural causes of food insecurity in Africa and their gendered impact.

END OF EXAMINATIONS

UNIVERSITY OF ZAMBIA FINAL EXAMINATIONS

DEPARTMENT OF MEDIA STUDIES AND COMMUNICATION

MCS 0970: STRATEGIC COMMUNICATION FOR HEALTH AND DEVELOPMENT

Answer only one question in section one .

Give as much details as possible without any REPETITIONS in your answers

1. The data at the Ministry of Health shows that the number of children dying of malnutrition related diseases has greatly increased. You are asked as an expert in behavior change communication to come up with strategies and interventions that will decrease the 60% death rate of malnutrition related deaths to 30% of all under five within a period of three months in Chipata Compound.
2. His excellence has noted with great sadness that early marriages in Zambia are still rampant as an expert in communication for change you are asked to come up with strategies and interventions that can reduce early marriages to zero % within two years.
3. The vice chancellor has received the message that the message of total abstinence ' Yili Che' has fallen on death ears on 90% of the student population at the university of Zambia. The majority of this age group will not enjoy their hard earned degrees. They will either die early or live on medication the rest of their lives. As an expert for communication for behavior change you are tasked to address the issue.

- 1) Draw matrices on whatever question you have chosen
- 2) What are your key messages? 8marks
- 3) What is the ideal behavior? 4 marks
- 4) What are the Key behaviors 6 marks

- 5) In failure to ideal behavior what are the doable behaviors that can contribute to your goals and main objective. 10 marks
 - 6) What are the barriers and how are you going to address them? 10 marks
 - 7) What are the threats? 5 marks
 - 8) What theories are you going to use in your interventions? 10 marks
 - 9) Describe your Primary and secondary audiences (profiles) 10 marks
 - 10) What are the Institutions and partners you would work with? 5 marks
 - 11) For your choice of audience(s) what Communications channels will you use?
And at what levels 8 marks
 - 12) Describe your Communication strategies in order of priority? 4 marks
 - 13) Write two 30 sec broadcast commercials one for the primary audience and the second for the secondary audience. Use the 7Cs in building your commercials 10 marks
-

Section two: Answer one question only.

4. Discuss the five stages of strategic communications 10 marks
 5. Discuss the stages of planning for a media product from conception of the idea to implementation 10 marks
-

END OF EXAM

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF POLITICAL AND ADMINISTRATIVE STUDIES**

2016/17 ACADEMIC YEAR FINAL EXAMINATIONS

PAM 3010: ORGANISATION THEORY, DESIGN AND MANAGEMENT

- INSTRUCTIONS:**
- a) Answer **ONE QUESTION** in **SECTION A** and **TWO QUESTIONS** in **SECTION B**.
 - b) The time allowed is three (3) hours.
-

SECTION A (ANSWER ONE QUESTION)

1.
 - (a) Define organisation change and organisation innovation.
 - (b) Explain why change is inevitable and necessary in an organisation.
 - (c) Identify and explain the elements of successful change in an organisation.
 - (d) Differentiate between evolutionally and revolutionary change.
 - (e) Using Kurt Levin's change model, demonstrate how an organisation can effectively implement and manage change.
2. Using illustrations or examples, identify and discuss the sequence of the stages of growth and development through which an organisation may pass.
3. Using illustrations or examples, discuss the basic process of Organisation Development.

SECTION B (ANSWER TWO QUESTIONS)

4.
 - (a) With the help of relevant examples derived from Zambian organisations, compare and contrast the functional structure with the product structure of organisation.
 - (b) Explain why most organisations today have opted for mixed kind of organisational structures.

5.
 - (a) Define job analysis and critically discuss the key steps involved in the process of conducting Job Analysis in an organisation.
 - (b) State the importance and purpose of Job Analysis.
 - (c) Identify and explain the methods and tools that can be used in conducting Job Analysis
 - (d) With the help of practical examples, discuss the role that Job Analysis plays in the recruitment and selection process.
6. Using illustrations or examples, discuss the meaning, steps, benefits, issues, merits and demerits of Job Design, and the factors that can affect Job Design in an organisation.
7. Using appropriate examples, critically discuss the merits and demerits of the Weberian principles of Bureaucracy to the Zambian Public Sector.
8. In order to survive in a dynamic and unstable environment, organisations need to have the right fit between internal structure and the external environment. Using an organisation of your choice as an example, identify and discuss at least five strategies which the organisation might employ to adapt to environmental uncertainty.

END OF EXAMINATION



THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF PHILOSOPHY AND APPLIED ETHICS

2016 ACADEMIC YEAR

FINAL EXAMINATIONS

PHI 3050: ETHICS

TIME: THREE HOURS

INSTRUCTIONS: Answer **THREE QUESTIONS**: *one* from Section A, *one* from Section B, and *one* from Section C. Each question carries equal marks.

SECTION A

(Answer two question)

1. When we look around, it seems to be a common sense conclusion that people are generally selfish when choosing actions, careers, or things to do. People seem first to consider what is good for themselves before thinking about others. Generally philosophers might insist that even if it is in human nature to act that way, it does not necessarily mean people ought to act that way.
 - (a) Discuss the difference between *ethical egoism* and *psychological egoism*.
 - (b) Explain two (2) arguments in support of the view that people always act in pursuing their own interests.
 - (c) Discuss two (2) arguments against *ethical egoism*.
 - (d) Some philosophers claim that one commits a *naturalistic fallacy* when they make claims of how humans ought to act based on their human nature. Using a *Zambian* example (real or imagined), explain the fallacy (bad reasoning) in this case, and discuss whether or not it is bad reasoning at all to do so.

2. The trolley problem is a philosophical thought experiment that displays some of the inadequacies in the application of certain normative ethical theories. Here is one example of the problem. *Suppose a runaway train is headed downhill a straight railway where there are twenty (20) workmen doing maintenance works on it. The brakes on the train are not working. But you notice that there is a sidetrack before the railway reaches the workmen. There is one (1) person sleeping on the sidetrack. You are standing next to a switch/lever such that if you flicker the switch, the train will be diverted to the sidetrack where it will end up killing the 1 person and saving the 20 workmen. If you do nothing, the train will go straight on and kill the 20 workmen.*
 - (a) In light of *utilitarianism*, discuss what would be the morally right thing to do and the limitations/problems of such a decision.
 - (b) In light of the ethical theory of *Immanuel Kant* (using his three central insights), discuss, what would be the morally permissible thing to do in this case.
 - (c) In light of the thought experiment above (the trolley problem), what would be the major criticism of Kantian ethics.
 - (d) Briefly explain two (2) positive features of Kant's moral philosophy.

3. Every year, there are reported cases of young girls being impregnated by elderly persons who normally it is their duty to care for the young ones (e.g., pastors, uncles, teachers, or supervisors at work). There does not seem to be a decrease in this problem despite Zambia putting up stringent legal measures to curb the scourge. One suggestion on dealing with this problem is to educate Zambians on the prominence of virtues in the moral life.
- (a) Distinguish *virtue ethics* from *deontological* and *consequentialist* approaches to ethics.
 - (b) Define virtue and explain some examples (at least four) of the virtues according to Aristotle (together with their corresponding vices or extremes).
 - (c) Discuss the importance of virtues to both the individual and society and one major weakness of applying virtue theory to a moral problem such as the one highlighted above.
 - (d) Discuss whether virtue theory alone can help best deal with such a problem.

SECTION B

(Answer one question)

4. It is not unusual for us to condemn the practices of peoples in other cultures that are different to ours. We easily condemn twin killing, burying a wife with her dead husband, female genital circumcision, eating human flesh, abandoning parents in old age homes, polygamy, etc. But peoples from other cultures also do condemn some of our own practices that have a blessing from our own cultures.
- (a) Explain two (2) arguments in support of *moral objectivism*.
 - (b) Evaluate two (2) arguments in support of *ethical relativism*.
 - (c) Explain *subjective ethical relativism* and two problems with the theory.
 - (d) Some people claim that *cultural relativism* is good for the development and promotion of minority societies? Discuss whether you think such an argument is reasonable or not.
5. Philosophers have debated the fact-value problem as arising from a number of factors.
- (a) Explain the fact-value problem as argued for by *David Hume* and *A. J. Ayer*.
 - (b) Briefly discuss *Hare's* prescriptivism and how he argues for his view.
 - (c) In your view, what is the problem of claiming that moral statements are *non-cognitive* (meaningless and have no truth value)?
 - (d) In your own view, explain what could be the basis of morality if not the facts about human nature. Try to give examples to demonstrate your point.
6. Whether we are morally free to choose actions or not has repercussions on how we judge people as being morally responsible for their actions. Sometimes persons claim that a person cannot be held to be morally wanting because, it was outside their power to do those actions.
- (a) Clearly explain *determinism*, *indeterminism*, *hard determinism* and *fatalism*.
 - (b) Explain four (4) arguments in support of determinism.
 - (c) Explain two (2) arguments in support of the view that some of the times our actions are a product of our own free will.
 - (d) In the discussions on homosexuality, some argue that for some people it is in their nature to be homosexual and such gays are not in control of their sexual orientation. Briefly discuss the weakness of such an argument.

SECTION C

(Answer one question)

7.
 - Discuss two (2) ways in which morality can be said to depend on religion.
 - Evaluate the view that morality depends on God's commands. What is the difficulty with such a view especially that God could command immoral acts. Give examples of acts that have been claimed to be commanded by God that seem clearly to be wrong in the recent past.
 - Despite the difficulties of basing morality in religion, discuss at least four (4) ways in which religion could add value to morality.
 - Evaluate the view that religion has nothing good to offer but promotes trivialization of important issues, hatred, laziness, and persecution of those with different views to ours.

8. When we feel we have been treated unfairly, we quickly claim that injustice is at play. Yet when things are going on well, we seldom see how unfair we could be to others even by doing nothing about their situation.

 - Clearly explain the three (3) conceptions of justice that Plato objects to. Explain the objections to these conceptions of justice.
 - Explain Plato's own view of justice.
 - Explain the two (2) principles of justice according to John Rawls. How does he arrive at these principles of justice?
 - In light of the difficulty of how scarce goods in society ought to be distributed (e.g., access to scarce medical drugs or procedures), discuss the egalitarian conception of distributive justice and its major problem.

9. Talk about rights has become the mainstay of many people when they are making any claim on how they or others ought to be treated. Sometimes, there is even a feeling that rights talk is used as a quick excuse to getting what one wants in life without proper justification.

 - Clearly explain what rights are including the concepts of *negative* and *positive* rights, *absolute* and *prima facie* rights.
 - Discuss the four (4) main approaches to establishing and justifying natural rights.
 - Explain the two (2) senses one can use to claim that animals have rights.
 - Explain two (2) criticisms of the rights-based approaches to morality.

END OF EXAMINATION

THE UNIVERSITY OF ZAMBIA

DEPARTMENT OF POLITICAL AND ADMINISTRATIVE STUDIES

2016 ACADEMIC YEAR FINAL EXAMINATIONS (SEPTEMBER, 2017)

POL 3030: INTERNATIONAL RELATIONS

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: ANSWER ONE QUESTION FROM EACH SECTION

Section A

1. Some scholars suggest that the emergence of social constructivism has presented a fundamental challenge to neoliberalism and neorealism as core paradigms in international relations. Discuss the ways in which constructivist approaches undermine, reinforce or depart from the two traditional theoretical approaches mentioned above.
2. For more than a decade pundits have been declaring that “the sovereign state is just about dead” (Krasner Steven, 2001, “Sovereignty” Foreign Policy). How has the concept of sovereignty changed over the last 300 years? To what extent, and in which areas, has national autonomy waned, and to what extent and in which areas has state autonomy waxed?

Section B

3. A major assumption of the discourse regarding international finance is that countries lack credibility on a spectrum of governance and economic policies. Using Zambia as an example consider at least three policies and describe for each why the government may lack credibility, the potential cost of the lack of credibility, and what mechanisms the government can use to build credibility.
4. Critically discuss the likely “domino effects” of Britain’s withdrawal (BREXIT) from the European Union on Africa’s efforts towards regional integration and international cooperation.

Section C

1. Discuss the difference between conflict and war. In doing so explain the traditional and rationalist claims of the basis of war.
2. Political scientist Kenneth Waltz suggests that “the spread of nuclear weapons is not such a bad thing”. Evaluate this assertion.

END OF EXAMINATION