MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: ORGANISATIONAL BEHAVIOUR (MHA - 607)
(REPEATERS)
Tuesday, December 05, 2017 (10.00 - 13.00)

Answer ALL the questions.

Marks: 80 **Duration: 180 mins.**

Long essay questions.

1)	With regard to decision making in organisations, discuss Rational model, Bounded rationality and Intuition. List (only name) the common Biases and Errors in decision making.	(15)
2)	With regard to Contemporary theories of motivation, discuss in detail with examples Reinforcement theory, Equity theory, and Expectancy theory.	(15)

3. **Short essay questions.**

3A)	Define and discuss Personality. Describe MBTI and the Big 5 Personality Model.	(10)
3B)	Discuss the different directions of communication. Discuss the different types of interpersonal communication. Discuss Electronic communication.	(10)
3C)	Challenges and opportunities in Organisational behaviour.	(10)
3D)	Henry Mintzberg's ten roles of a manager.	(10)
3E)	Discuss the stages of group development in detail.	(10)

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: ORGANIZATIONAL BEHAVIOR (MHA - 603)
Tuesday, December 05, 2017 (10.00 - 11.30)

Answer ALL the questions.

Marks: 50 **Duration: 90 mins.**

Long essay questions.

1)	Define Attitude. Describe the 3 components of Attitude. Discuss the relationship between Attitude and Behaviour. (2+4+4 = 10 marks)	(10)
2)	List and describe the 7 characteristics of Organisational culture.	(10)

3. **Short essay questions.**

3A)	With regard to Personality traits, discuss Machiavellianism and Narcissism.	(5)
3B)	Write the formula for Motivating potential score(MPS). Give examples of jobs high and low on MPS.	(5)
3C)	Discuss the different kinds of Organisational communication.	(5)
3D)	The Big 5 model framework for identifying and classifying Personality traits.	(5)
3E)	Discuss the stages of group development in detail.	(5)
3F)	"Teams are not always the answer": Discuss.	(5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: STATISTICS AND RESEARCH METHODOLOGY (MHA - 605)
(REGULARS - NR)
Wednesday, December 06, 2017 (10.00 - 11.30)

Answer ALL the questions.

Marks: 50 **Duration: 90 mins.**

1A) Define a quantitative variable and its different types with examples for each. (4)

1B) Compute the mean, median, and standard deviation of the following data regarding the heart rate (bmp) of seven rat pups from an experiment involving the carotid artery. (8)
500 560 570 450 560 570

2) In a study of 126 patients admitted in a hospital, it was assessed whether patients were 'likely to be discharged', 'possibly to be discharged' or 'unlikely to be discharged'. The frequencies of these categories are shown in table below. Represent the data with the help of a pie chart. (5)

Discharge	Frequency
Unlikely	63
Possibly	42
Likely	21

3) State the null and alternative hypothesis, assumptions, and situation for the use of one way ANOVA. Why not we use independent sample t test repeatedly instead of ANOVA? (3+2 = 5 marks) (5)

4) Mention the factors affecting confidence interval. (2)

5) Define:

5A) Power (2)

5B) Standard error (2)

5C) Population (2)

5D) Sample (2)

5E) Level of significance (2)

6) Suppose a researcher is interested in obtaining an estimate of the average level of some enzyme in a certain human population. He takes a sample of 10 individuals and determines the level of the enzyme in each and computes a sample mean of 22. Suppose further it is known that the variable of interest is approximately normally distributed with a variance 4.5. (5)

Find a 90% and 95% CI for μ.

(2.5 marks x 2 = 5 marks)

7. Smoking status of mothers and birth weight (in kg) of the child, 7 from non-smoker and 6 from smoker mother, is given.

	Mean	Std. deviation
Non-smoker	3.3	0.35
Smoker	3.8	0.2

Tabulated t (at α=0.05, degrees of freedom= 11) = 2.2010.

Using a suitable test of significance, researcher wishes to investigate if there is any difference in the birth weights of children born to smoker and those born to a non-smoker mother. Answer the following:

7A) Name the suitable test of significance (1)

7B) State null and alternate hypotheses (2)

7C) Calculate test statistic (3)

7D) State the decision rule (1)

Select the appropriate choice from the options provided:

8) If length of hair is measured in inches, then the unit of standard deviation of hair length is (1)

Inches Percent $Inches^2$ No unit

9) Which of the following is not an advantage of sampling? (1)

Only procedure when population is infinite | Gives the better estimate than census | Saves time and labour | Reduces cost

10) Graphs and charts facilitate: (1)

Comparison of values | To know the trend | To know the relationship | All of the above

11) Mode is that value in a frequency distribution which possesses: (1)

Minimum frequency | Maximum frequency | Frequency one | None of the above

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: BUSINESS STATISTICS, OPERATIONS RESEARCH AND RESEARCH METHODOLOGY (MHA - 603)
(REPEATERS)
Wednesday, December 06, 2017 (10.00 - 13.00)

Answer ALL the questions.

Marks: 80 **Duration: 180 mins.**

1A) Classify the following into different scales of measurement: (2)
i) IQ
ii) Socio economic status (upper/middle/lower)

1B) The data given below is the weight of 65 children. (6)
i) Construct a histogram.
ii) Compute relative frequencies.

Weight (kg)	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40	40 – 45
Frequency	8	12	16	14	10	5

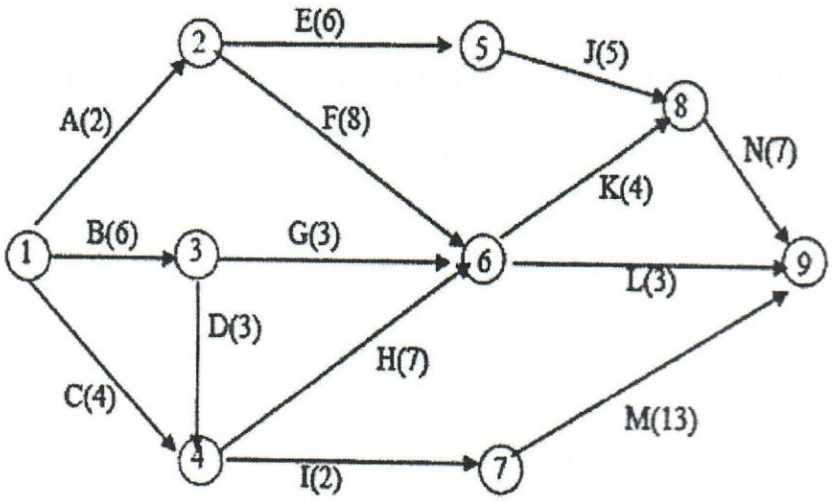
(4+2 = 6 marks)

1C) Duration of time for the first exposure to HIV infection to AIDS diagnosis is called the incubation period. The incubation periods of a random sample of 8 HIV infected individuals is given below (in years): (7)
8.5 12.0 10.5 10.0 6.3 13.0 12.0 7.7
Calculate mean and standard deviation of incubation period.
(2+5 = 7 marks)

2A) It is known that the following 3 x 5 game is unstable. Using dominance properties, solve the game. (5)

Player A	Player B				
	1	2	3	4	5
1	2	5	10	7	2
2	4	4	8	12	1
3	3	3	6	6	4

2B) For a project network given below, find the critical path and the duration of the project. (5)



2C) A manufacturer produces two different models X and Y of the same product. Raw materials R1 and R2 are required for the production. At least 18 kg of R1 and 12 kg of R2 must be used daily. Maximum of 34 hours of labour are to be utilized. 2 kg of R1 are needed for each model X and 1 kg of R1 for each model of Y. For each model of X and Y 1 kg of R2 is required. It takes 3 hours to manufacture a model X and 2 hours to manufacture a model Y. The profit is Rs. 50 for each model of X and Rs. 30 for each model Y. Formulate an LPP and solve the same to get optimal product mix. (5)

3A) What is stratified random sampling? Explain the procedure with example. List the advantages and disadvantages of this method. (6)

3B) What are sampling and non-sampling errors? Explain with example. (4)

4A) Of the 64 men selected randomly from a district, 27(42.2%) reported that they experienced bleeding gums at least once a week and may provide a way of identifying undiagnosed men with bleeding disorders in the general population. Calculate a 95% CI for the proportion with bleeding gums in the population and interpret. (5)

4B) What is the purpose of sample size determination? Describe how to compute the sample size for estimating population mean. (5)

5A) Is there any association between smoking and gender? (5)

Gender	Cigarette smoking		Total
	YES	NO	
Male (%)	219 (39)	340 (61)	559
Female (%)	23 (6)	368 (94)	391
Total (%)	242 (26)	708 (74)	950

5B) Briefly explain different components of Research Protocol. (5)

6A) Explaining the situations and assumptions, write the procedure for Mann Whitney U test. (5)

6B) Define: (5)

i) Level of significance
ii) Power
iii) P value
iv) Estimator
v) Confidence level

7A) Illustrate diagrammatic assessment of correlation between two variables. (5)

7B) A study was planned to find the prevalence of obesity among people in the age group of 30 to 40 years in an urban community. What is the minimum sample size required for the study if the relative precision is fixed at 15% and confidence level of 95%? A similar study conducted three years before in the same population reported prevalence of obesity as 20%. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: PUBLIC HEALTH ADMINISTRATION, HEALTHCARE DELIVERY SYSTEM AND EPIDEMIOLOGY
(MHA - 607)
(REGULARS - NR)
Thursday, December 07, 2017 (10.00 - 11.30)

Answer ALL the questions.

Marks: 50 **Duration: 90 mins.**

1) Discuss natural history of disease in detail giving importance to the various phases and stages. Compare the epidemiologic triad with the web of causation. (10)

2) Explain in detail the important components of the national health mission of India. What are the various scheme befits provided under this program. (10)

3A) A cohort study was conducted to investigate the association between low birth weight and alcohol consumption during pregnancy. The findings are given below: Calculate the relative risk. Interpret your findings. (5)

Low birth weight	Alcohol (Yes)	Alcohol (No)
Yes	1000	19000
No	400	39600

3B) Write in detail regarding the natural history of disease explaining the various phases and stages in detail. (5)

3C) Enumerate stages of demographic transition. What factors affect the population growth? (5)

3D) What are the objectives of the National vector borne disease control Program? (5)

3E) Briefly discuss International classification of disease and its importance. (5)

3F) Discuss the universal immunization program. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINAION - DECEMBER 2017
SUBJECT: HEALTH ECONOMICS AND INSURANCE (MHA - 609)
(REGULARS - NR)
Friday, December 08, 2017 (10.00 - 11.30)

Answer ALL the questions.

Marks: 50 **Duration: 90 mins.**

1)	Define Demand. Explain any four factors affecting demand for health services in India.	(10)
2)	Define the four models of Healthcare delivery systems across the world countries? What are the challenges faced by National Health Services of United Kingdom and how are they overcoming them?	(10)
3A)	Explain any two differences between micro and macro economics.	(5)
3B)	Explain any two types of cost concept in Economics.	(5)
3C)	What is production? Mention factors of production.	(5)
3D)	Qd=400-20P and Qs = 200+60P. Calculate equilibrium price and quantity.	(5)
3E)	Explain any five features of perfect competition.	(5)
3F)	Who developed wealth definition for economics?	(1)
i)	i) J.M.Keynes ii) Alfred Marshall iii) Adam Smith iv) Samuelson	
ii)	Which one is not revenue receipts of the central government? i) Income tax ii) Penalties iii) Profit from the post office iv) Corporate taxes	(1)
iii)	Which is following one is not monetary measure o control inflation? i) Repo rate ii) CRR iii) Increase in tax rates iv) SLR	(1)
iv)	Price and quantity demanded are ____ related. i) Direct ii) Inversely iii) Proportionately iv) Posiively	(1)
v)	Automobile industry is belongs to which market? i) Monopoly ii) Oligopoly iii) Monopolistic iv) Duopoly	(1)

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