MANIPAL UNIVERSITY

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: MHA – 601: EPIDEMIOLOGY, PUBLIC HEALTH, HEALTH ADMINISTRATION AND MEDICAL ETHICS
(REGULAR & REPEATER)

Monday, December 14, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

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1. Enumerate and discuss Hill's criteria with appropriate examples. Discuss in detail on the various types of association.

    (10+5 = 15 marks)

2. Enumerate on vector borne diseases. Discuss the dengue prevention and control strategies in India.

    (15 marks)

3A. Discuss the dimensions of health in detail.

    (10 marks)

3B. A cohort study was conducted to investigate the association between lead exposure and leukemia among factory workers. The data are presented as below:

	Leukemia		
Lead exposure	Yes	No	Total
Yes	500	9500	10,000
No	200	19800	20,000

Calculate the relative risk. Interpret your findings.

    (7+3 = 10 marks)

3C. Enumerate the vaccines covered under the universal immunization program, write the route, schedule, dosage and site of administration of measles vaccine.

    (10 marks)

3D. Discuss on the goals and objectives of the national health policy in India.

    (10 marks)

3E. Discuss the role of a medico social worker.

    (10 marks)

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MANIPAL UNIVERSITY

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: MHA – 603: BUSINESS STATISTICS, OPERATIONS RESEARCH AND RESEARCH METHODOLOGY
(REGULAR & REPEATER)

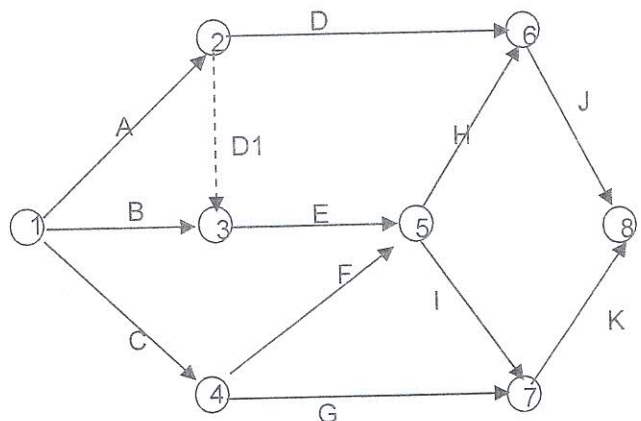Tuesday, December 15, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

1A. Differentiate between interval and ratio scale of measurement with examples.

1B. Write a short note on skewness.

1C. Compute three measures of central tendency for Erythrocyte Sedimentation Rate (ESR) readings (in mm) of 12 tuberculosis patients

12   8   11   9   8   15   8   12   8   9   11   10

1D. Calculate median and inter-quartile range for the following data:

Hb level (in gm %):   14   10   11   12   10   13   14   11   13

(3+3+3+6 = 15 marks)

2A. A hospital is exploring the level of staffing needed for a booth in the local mall, where they would test and provide information on diabetes. Previous experience has shown that, on average, every fifteen minutes a new person approaches the booth. A nurse can complete testing and answering questions, on average, in twelve minutes. Find each of the performance measures listed below:

i)   Compute the average number of patients in a queue.

ii)   Compute the average waiting time for patients in a queue and in the system.

2B. For the details of activity given below, the network is given on its right. Find the expected duration of the project

Activity	a	m	b
A	6	7	8
B	1	2	9
C	1	4	7
D	1	2	3
E	1	2	9
F	1	5	9
G	2	2	8
H	4	4	4
I	4	4	10
J	2	5	14
K	2	2	8

2C. The table given below summarizes the quantity of each nutrient available in foods and their daily requirement for good health conditions of an individual, as well as the unitary cost of these foods. Formulate an LPP to minimize the total diet cost and comply with nutritional restrictions.

Costs, nutrients and predetermined nutritional restrictions

Nutrient	Milk(glass)	Salad(500mg)	Minimum Nutritional Requirement
Vit. A	2 mg	50 mg	11 mg
Calcium	50 mg	10 mg	70 mg
Cost/Unit	₹ 6.00	₹ 4.00	

(5+5+5 = 15 marks)

3A. What is Systematic random sampling? Explain the procedure with an example. List the advantages and disadvantages.

3B. Briefly explain the sampling technique used for evaluation of vaccination coverage.

(5+5 = 10 marks)

4A. What are the objectives of sample size determination in estimation and hypothesis testing problems? How do you estimate sample size for estimating a proportion?

4B. Explain how you estimate sample size for comparing the prevalence of a disease between two population groups.

((2+3)+5 = 10 marks)

5. Explain with situations and assumptions the use of Mann Whitney U test and McNemar test.

(10 marks)

6A. Illustrate diagrammatic assessment of correlation between two variables.

6B. Describe the requirement and objectives of a pilot study.

(5+5 = 10 marks)

7A. In a sample of 60 men who have had myocardial infarction, the mean CPK level is 285μ/l and the SD is 16μ/l. Construct 95% confidence interval for mean CPK level.

7B. Describe the steps involved in test of significance.

(5+5 = 10 marks)

MANIPAL UNIVERSITY

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: MHA – 605: GENERAL MANAGEMENT
(REGULAR & REPEATER)

Wednesday, December 16, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

✍ **Write Long Essay on:**

1. Write in detail on Management Process with the help of an example for each.

(10+5 = 15 marks)

2. What is organization? What are the Common Bases for Departmentalization? How will you organize a service industry? Explain with the help of an example.

(15 marks)

3. **Write short notes on the following:**

3A. Span of authority and responsibility at various levels of management
3B. Role of environmental challenges in management process
3C. Differentiate among types of organizational plans
3D. Importance and theories of classical perspective of management
3E. Importance and need for optimum staffing

(10 marks × 5 = 50 marks)

MANIPAL UNIVERSITY

FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION DEGREE EXAMINATION – DECEMBER 2015

SUBJECT: MHA – 607: ORGANISATIONAL BEHAVIOUR
(REGULAR & REPEATER)

Thursday, December 17, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

SECTION A

✍ **Long Essay Questions:**

1. Discuss Job Involvement, Organisational commitment, Perceived Organisational Support and Employee engagement in detail with examples.

(15 marks)

2. Define and discuss Organisational Behaviour in detail.

(15 marks)

SECTION B

3. **Short Essay Questions:**

3A. With regard to Personality traits, discuss Narcissism and Type A personality.

3B. With regard to Perception, discuss the common shortcuts used in judging others.

3C. Discuss the challenges and opportunities managers have in applying O.B. concepts.

3D. What are Work Teams? Discuss the different types of work teams.

3E. Contemporary theories of motivation.

(10 marks × 5 = 50 marks)

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