

Reg. No.

**MANIPAL UNIVERSITY**  
**FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION**  
**DEGREE EXAMINATION – JUNE 2016**

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

Wednesday, June 01, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

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1. Write in detail on the levels of prevention and the various modes of prevention under each level using suitable examples.

(15 marks)

2. Discuss in detail on International classification of disease. Differentiate between ICD-10 and ICD-9.

(10+5 = 15 marks)

3A. In an outbreak of diarrhea in Madhya Pradesh in 2011, diarrhea was diagnosed in 18 of 152 children who consumed water from an unprotected well compared with 3 of 7 children who did not consume water from the same well.

	Diarrhea	No diarrhea
Consumed well water	18	134
Did not consume well water	3	4

(10 marks)

3B. What are the various types of study designs? Elaborate on prospective and retrospective cohort study design.

(5+5 = 10 marks)

3C. What are the different levels of health care? Discuss the principles of primary healthcare.

(5+5 = 10 marks)

3D. Describe natural history of disease in detail.

(10 marks)

3E. Discuss measures of association in detail with appropriate examples.

(10 marks)



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**FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION  
DEGREE EXAMINATION – JUNE 2016**

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

Thursday, June 02, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

- 1A. Compute range and inter-quartile range for the following data regarding weight of infants (in kg)  
2.31 2.63 2.89 3.23 3.16 2.90 2.65 3.30 3.00 2.44
- 1B. How is biostatistics useful in public health administration?
- 1C. Classify the following into different scales of measurement:  
i) Gender  
ii) Systolic blood pressure  
iii) Temperature (°C)
- 1D. Calculate mean and median for the following data:  
SBP (mmHg): 123 125 117 127 120 129 125 118

(6+4+3+2 = 15 marks)

- 2A. Consider the data of a project as shown in the following table:

Activity	Time (week)		Cost (in thousand ₹)	
	Normal	Crash	Normal	Crash
1-2	13	9	700	900
1-3	5	4	400	460
1-4	7	4	600	810
2-5	12	11	800	865
3-2	6	4	900	1130
3-4	5	3	1000	1180
4-5	9	6	1500	1800

If the indirect cost per week is ₹ 160 thousand, crash the network by just one iteration and find the reduced cost.

- 2B. Solve the following LPP:

Minimize  $Z = 8000X + 7000Y$

Subject to

$3X + Y \leq 66; \quad X + Y \leq 45; \quad X \leq 20; \quad Y \leq 40; \text{ and } X, Y \geq 0$

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**MANIPAL UNIVERSITY**  
**SECOND SEMESTER MASTER IN HOSPITAL ADMINISTRATION**  
**DEGREE EXAMINATION – JUNE 2016**

**SUBJECT: MHA – 604: FINANCIAL MANAGEMENT IN HEALTHCARE**

Tuesday, June 14, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

✍ Answer ALL questions.

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1. From the following prepare a Working Capital Statement for a level of activity of 1,40,000 units of production.

- Raw material – ₹ 50 per unit; Direct Labor – ₹ 20 per unit; Overheads – ₹ 20 per unit; Profit – ₹ 30 per unit; Selling price – ₹ 120 per unit.
- Raw materials are in stock for an average of 2 months.
- Materials are in process on an average of 3 weeks.
- Finished goods are in stock on an average 1 month.
- Credit allowed by supplier is 2 months.
- Time lag in payment of wages is 2 weeks.
- Time lag in payment of overheads is 1.5 months.
- Credit allowed to debtors is 2.5 months.
- 25% of the output is sold for cash.
- Cash in hand and at bank is expected to be ₹ 40,000.
- It's assumed that the production is carried on evenly throughout the year and wages and overheads accrue similarly. The time period of 4 weeks is equal to 1 month.

(15 marks)

2. Jatin Corporation has the practice of estimating Working Capital Requirements on the basis of the operating cycle. It gives the following details:

- Period covered 365 days.
- Average creditors 2,50,000
- Average debtors 15,00,000
- Raw materials consumed 85,00,000
- Cost of Production 2,40,00,000
- Cost of Sales (operating cost) 3,20,00,000
- Sales 3,95,00,000
- Average Inventory:
  - Raw materials: 5,00,000
  - Work in process: 17,20,000
  - Finished Goods: 18.80 000

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**SECOND SEMESTER MASTER IN HOSPITAL ADMINISTRATION  
DEGREE EXAMINATION – JUNE 2016**

**SUBJECT: MHA – 606: HEALTH ECONOMICS AND BUSINESS ECONOMICS**

Wednesday, June 15, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

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**✍ Long Essay Questions:**

1. Explain along with demand diagrams show the effect of the following events. Government introduced a policy which would reduce the demand for tobacco products in the community.
  - 1A. Public service announcements, mandatory health warnings on the packets of tobacco products.
  - 1B. Tax imposed on tobacco products in increased.
  - 1C. The income of a particular working group falls.

(5+5+5 = 15 marks)

2. Discuss the importance of Public-private partnership (PPP) in health sector. What are the different models of PPP that are found in India and explain their relevance to the economy of the country?

(7+8 = 15 marks)

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

- 3A. Enumerate the importance of opportunity cost and its relevance to public health.
- 3B. Health sector in India faces variety of economic problems. Discuss these problems in detail.
- 3C. Explain law of supply. Discuss the factors responsible for the shifts in the supply curve along with diagram.
- 3D. Give an example of government created monopoly. Is creating this monopoly a bad public policy? Explain.
- 3E. Describe Social Health Insurance. Discuss the types of medical insurance plans in India.

(10 marks × 5 = 50 marks)



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**MANIPAL UNIVERSITY**  
**FIRST SEMESTER MASTER IN HOSPITAL ADMINISTRATION**  
**DEGREE EXAMINATION – JUNE 2016**

**SUBJECT: MHA – 607: ORGANISATIONAL BEHAVIOUR**  
**(REPEATER)**

Friday, June 03, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

**SECTION – A**

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**✍ Long Essay Questions:**

1. Define Attitude. Describe the 3 components of Attitude. Discuss the relationship between Attitude and Behaviour.  
(15 marks)
2. What is Organisational Behaviour? Discuss the value of systematic study to O.B. Discuss the major behavioural science disciplines that contribute to O.B.  
(15 marks)

**SECTION – B**

**3. Short Essay Questions:**

- 3A. With regard to Personality traits, discuss Narcissism and Self Monitoring
- 3B. Dependent variables in O.B.
- 3C. Discuss the Team effectiveness model
- 3D. Barriers to effective communication
- 3E. Contemporary theories of motivation

(10 marks × 5 = 50 marks)

