First Year MHA Degree Examinations
Model Question paper
PAPER I – General Management
(2013 Scheme)

Time: 3 Hours • **Answer all the questions** **Max Marks: 100**

Essay (2x20=40)

1. "Decisions permeates through functions and resources"- Explain the statement with examples from hospital. Add a note on process of decision making
2. Define motivation and explain four major theories of motivation.

Short Essay (2x10=20)

3. Which are the essential elements of an effective control system
4. How does TA help in managerial development

Short Notes (8x5 =40)

5. Contingency approach
6. Management by objectives
7. Features of coordination
8. Types of discipline
9. Job analysis
10. Advantages of trade unionism
11. Advantages of incentive schemes
12. Morale

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QP Code: 122380

PAPER II - HOSPITAL ADMINISTRATION –I
(2013 Scheme)

Time: 3 hours   **Max Marks: 100**

- **Answer all the questions**
- **Draw diagrams wherever necessary**

Essays: **(2x20=40)**

1. Discuss about the planning process for 300 bedded multispecialty hospitals in account to foreseeable future development.
2. Explain elements and principles of primary health care. Brief the Indian public health standards for PHC.

Short Essay: **(2x10=20)**

3. Explain the planning, design and organization of an accident and emergency department.
4. Define hospital. Explain the types and classification of hospital

Short notes: **(8x5=40)**

5. Hospital as a system

6. Hospital transportation services

7. Millennium development goal

8. Sleep laboratory

9. Indices of measurement of hospital utilization

10. HVAC in hospitals

11. Srivastava committee

12. Types of hospital waste

First Year MHA Degree Examinations
Model Question paper
PAPER III – RESEARCH METHODOLOGY & BIOSTATISTICS
(2013 Scheme)

Time: 3 Hours   **Max Marks: 100**

- **Answer all the questions**
- **Write Section A and B Separate answer books.**
- **Do not mix up questions from section A and Section B**

QP Code: 123380   **SECTION A- RESEARCH METHODOLOGY**   **50**

Essay: **(20)**

1. Prepare a methodology including questionnaire to assess the satisfaction of employees in a hospital.

Short Essay: **(10)**

2. Describe various research methods

Short Notes: **(4X5=20)**

3. Sampling
4. Hypothesis testing
5. Pictogram
6. Report writing

QP Code: 124380   **SECTION B-BIOSTATISTICS**   **50**

Essay: **(20)**

1. Explain the distinction between regression and correlation. Calculate the co-efficient of correlation from the following data by the method of rank difference:

   Rank of X: 10   4   2   5   8   5   6   9

   Rank of Y: 10   6   2   5   8   4   5   9

Short Essay: **(10)**

1. Two groups of 100 people each were taken for testing the uses of a vaccine .15 persons contracted the disease out of the inoculated persons ,while 25 contracted the disease in the other group .Test the efficacy of the vaccine using X^2 value.

   At 5% level for one degree of freedom the value of X^2 is 3.84

Short Notes: **(4X5=20)**

2. Chi-square test.
3. Probability.
4. Why standard deviation is considered to be the best measure of dispersion
5. Following are the total cholesterol values of 15 patients – 155, 196, 235, 153, 180, 152, 178, 180, 172, 202, 223, 164, 231, 196, 219. Calculate the median.

PAPER IV – MEDICAL RECORDS & MEDICAL EQUIPMENT

(2013 Scheme)

Time: 3 Hours   **Maximum: 100 marks**

- **Answer all questions**
- **Write Section A and B in separate answer books.**
- **Do not mix up questions from section A and Section B**

QP Code: 125380   **SECTION A – MEDICAL RECORDS**   **(50)**

Essay: **(20)**

1. Define medical records. What are the uses & values of medical records.

Short Essay: **(10)**

2. What is medical audit. What would be the composition of an audit committee.

Short Notes: **(4X5=20)**

3. Medical records committee
4. ICD-10
5. Functions of MRD
6. Mention the medical term for the following with example
    a. Gum
    b. Stomach
    c. Vein
    d. Knee
    e. Rectum

QP Code: 126380   **SECTION B – MEDICAL EQUIPMENT**   **(50)**

Essay :   **(20)**

1. Explain the functions of biomedical engineering department in a multispecialty Hospital. Explain various types of maintenance.

Short Essay: **(10)**

2. Explain physiological effects of electric current.

Short notes :   **(4X5=20)**

3. Shortwave diathermy
4. X ray safety
5. Defibrillator
6. Radiation safety

PAPER V ORGANISATIONAL BEHAVIOUR & MANAGERIAL COMMUNICATION
(2013 Scheme)

Time: 3hours   **Marks:100**

- **Answer all the questions**
- **Write Section A and B Separate answer books.**
- **Do not mix up questions from section A and Section B**

QP Code : 127380   SECTION A- ORGANISATIONAL BEHAVIOUR   **50**

Essay: **(20)**
1. What is motivation. Discuss the important theories of motivation.

Short Essay: **(10)**
   2.   Define personality. Critically examine the Freudian stages of personality development

Short notes: **(4X5 = 20)**
3. Absenteeism
4. Leadership styles
5. Team building
6. Perception

QP Code: 128380   Section B - MANAGERIAL COMMUNICATION   **50**

Essay: **(20)**

1. Discuss in detail about meeting and various meeting documentations in a health organization

Short Essay: **(10)**
2. Explain press release. Prepare a press report about the remarkable heart surgery done in your hospital

Short notes: **(4X5=20)**
3. Rapid reading
4. Group communication
5. Structure of a speech
6. Managing time

First Year MHA Degree Examinations
Model Question paper
Paper V1-Operations Research
(2013 Scheme)

Time: 3 Hours   **Max Marks: 100**
- **Answer all the questions**
- Draw diagrams wherever necessary
- Normal Distribution table will be given

Essay: **(2 x 20 = 40)**

1. **(a)** What is replacement problem

    (b) The operating costs per year and resale prices of equipment "A" , whose purchase price is Rs. 10,000 are given below:

Year	1	2	3	4	5	6	7
Operating cost(Rs.)	1,500	1,900	2,300	2,900	3,600	4,500	5,500
Resale value (Rs.)	5,000	2,500	1,250	600	400	400	400

What is the optimum period of replacement

2. From the following data, draw the project network. Find out the critical path and project duration. What is the probability of completing the project one week before the expected time

Activity	1-2	1-3	1-5	2-3	2-4	3-5	3-6	5-6	4-6
Optimistic time	2	6	6	2	11	8	3	9	4
Most likely time	4	6	12	5	14	10	6	15	10
Pessimistic time	6	6	24	8	23	12	9	27	16

(P.T.O)

Short essays: **(2 x 10 = 20)**

3. For the assignment problem with the following cost matrix, find the optimal solution:-

	Salesmen			
	P	Q	R	S
Places A	11	9	13	14
B	17	7	16	10
C	8	12	15	12
D	16	6	12	11

4. Find the sequence that minimizes the total elapsed time required to complete the following jobs on machines A and B :

Job	1	2	3	4	5
Machine A	5	1	9	3	10
Machine B	2	6	7	8	4

Short notes: **(8 x 5 = 40)**

5. Customer arrive at a booking office window ,being manned by a single individual at the rate of 25 per hour. Time required to serve a customer has exponential distribution with a mean of 120 seconds .Find the average waiting time of customer.

6. Types of decision making.

7. What is meant by linear programming

8. Find the initial feasible solution to the following transportation problem by lowest entry method.

	W1	W2	W3	Supply
F1	2	7	4	5
F2	3	3	1	8
F3	5	4	7	7
F4	1	6	2	14
Demand	7	9	18	

9. Scope of operations research in management and administration level.

10. Solve the following game:-

		Player B			
		B1	B2	B3	B4
Player A	A1	1	7	3	4
	A2	5	6	4	5
	A3	7	2	0	3

11. Explain simulation model .

12. Write the dual of the following LPP:-

Maximize Z   : $3x_1 + 5x_2$

Subject to   : $x_1 + 2x_2 \leq 5$

$-x_1 + 2x_2 \leq 2$

$X_1 \geq 0$, $x_2 \geq 0$.

Paper – VII BASIC MEDICAL SCIENCES & EPIDEMOLOGY
(2013 Scheme)

Time: 3 hrs   **Max marks: 100**

- *Answer all questions*
- *Write Section A and Section B in separate answer books. Do not mix up questions from section A and section B*

Q.P.Code: 130380   **SECTION A- BASIC MEDICAL SCIENCES**
(Applied Anatomy, Physiology & Microbiology)

Time: 1½ hrs   **Max Marks: 50**

Essay: **(20)**
1. Describe the anatomical location, anatomical relations and structure of heart. Diagrammatically show the major blood vessels and blood flow in the heart

Short Essay: **(10)**
2. What is epithelium. Mention the different types of epithelial tissues, lining the human body and its functions.

Short Notes: **(4x5=20)**
3. Amoebiasis
4. Erythrocyte sedimentation rate (ESR)
5. Blood pressure
6. Pasteurization of milk

Q.P.Code: 131380

SECTION B – EPIDEMIOLOGY

Time: 1½ hrs   **Max Marks: 50**

Essay: **(20)**
1. Explain the difference between the case control study and prospective study

Short Essay: **(10)**
2. Explain about the basic measures in epidemiology

Short notes: **(4x5=20)**
3. Explain about the modes of intervention
4. Life cycle of malarial parasite
5. Explain about the different levels of prevention
6. Explain the epidemiology of any two of the life style diseases.

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