



HOSPITAL ADMINISTRATION
Research Methodology and Operations Research
Q.P. CODE: 8713

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY

1 X 20 = 20 Marks

1. In one of the ICU wards of a hospital, the pattern of admissions during a period of 100 days were as follows. On the basis of this data simulate the pattern of admissions in the ICU for first 10 days in a month. Given that random number chosen for the ten days are as given below.

No. of admission per day	0	1	2	3	4	5	6	Total
No. of days	5	12	12	32	29	5	5	100

Random numbers for first ten days are as follows

Day No.	1	2	3	4	5	6	7	8	9	10
Random No.	53	63	35	63	98	02	64	85	58	34

SHORT ESSAY (Answer any Seven)

7 X 10 = 70 Marks

2. What is scientific process of research? Describe various steps of this scientific process.
3. Describe various aspects of review of literature.
4. Describe different ethical guidelines involved in hospital management research.
5. Describe completely randomized and Randomized block designs with examples.
6. Describe different time factors which can be calculated in critical path method and their uses in monitoring of project management.
7. It is envisaged to organize a training programme for nurses at a hospital to train them on better ward management. It is proposed that training be carried out by two methods. Lectures and demonstrations. To undertake this activity trainers are available for a total period of 250 days. Each lecture will extend over 3 days while a demonstration extends for 2 days. Funds available for the programme is Rs. 100,000. Cost of each lecture will be Rs.2000, while that for a demonstration is Rs.500. number of nurses who can be trained, is that 15 nurses in each lecture and 10 in each demonstration. Construct objective function and constraint inequalities to estimate the number of the two activities so that maximum number (N) of nurses will be trained within the available manpower and funds for undertaking this training programme.
8. What are different types of decision making? Describe different factors which influence decision making.
9. Describe the layout of a research report.

SHORT ANSWERS (Answer any Five)

05 X 02 = 10 Marks

10. Blinding in experimental studies
11. Induction in scientific process
12. Crashing of a network
13. Principle of randomization
14. Moving averages
15. Irregular trends

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