SHRIMATI INDIRA GANDHI COLLEGE

(Nationally Accredited at 'A' Grade (3rd Cycle) By NAAC) Tiruchirappalli – 2.

QUESTION BANK FOR M.Sc HOSPITAL MANAGEMENT 2017-2018



DEPARTMENT OF HOSPITAL ADMINISTRATION

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S.No. 2484 P 16 HA 13

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

Hospital Administration

BASIC BIOLOGICAL SCIENCE PART - I

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1. What is aflation? Name the species having this toxin.
- 2. Name two parasites induce food poisoning.
- 3. What are nematodes? Give example.
- 4. Give the symptoms of kala azar.
- 5. Write the functions of enzymes Glucose 6 phosphates and acetyl cotransferase.
- 6. What are hormones? Give the hormones of pancreas.
- 7. Name the male and female sex hormones.
- 8. Write four functions of hypothalamus.
- 9. What are rods and cones?
- 10. Name the nerves and blood supply to ear.

PART B -(5x5=25)

Answer ALL questions

11. (a) What are the food preservatives? Give example. Explain any one preservative.

Or

- (b) What are enterotoxins? Give example. Briefly write on chostrudurin botulinum.
- 12. (a) What is protoizoal infection? Give example for protozoa. How it can be prevented?

- (b) Briefly write on trichomoniasis.
- 13. (a) Explain sorbitol pathway.

- (b) What are fat soluble vitamins, give its physiological importance?
- 14. (a) Draw the systemic circulation and label the different arteries and veins.

Or

- (b) Explain the physiological functions of aldosterone.
- 15. (a) Explain the anatomical features of cerebellum.

Or

(b) Name the different layers and muscles of the heart.

PART C - (3x10=30)

- 16. In detail explain any two bacteria induced food poisoning and its management.
- 17. How malaria infection develops? Explain the life cycle of malaria parasite.
- 18. Explain protein metabolism.
- 19. Write the physiology of urine formulation.
- 20. What is the basic unit of the brain? Draw its structure and label its parts. Add a note on ventricles of the brain.

S.No. 6559 P 16 HA 13

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, APRIL 2017.

Hospital Administration

BASIC BIOLOGICAL SCIENCE PART - I

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1) What is heart sound? How it is produced?
- 2) Name four different parts of the brain.
- 3) Name the artery and veins of the kidney?
- 4) Give two functions of saliva.
- 5) What is HMGCoA? Give its function?
- 6) Give the normal values of
 - a. Glucose
 - b. Cholesterol
 - c. Creatinine
 - d. Urea.
- 7) Name two food borne diseases how it is affects the human biological system?
- 8) What are preservatives? Give example.
- 9) Name four different malaria parasites.
- 10) What is Leishmaniasis?

PART B -(5x5=25)

Answer ALL questions

11. (a) Draw the internal structure of a kidney and label its part.

Or

(b) Draw the internal structure of a heart and label its part.

12. (a) Explain the mechanism of respiration.

Or

- (b) Explain the physiology of hearing.
- 13. (a) What are essential amino acids? List them, why it is called as essential amino acids?

Or

- (b) Name water soluble vitamins and give its physiological importance.
- 14. (a) Draw bacillary organism and give its inclusions.

Or

- (b) What is food poisoning? Explain fungal induced food poison.
- 15. (a) What is hook worm infestation? How it is spread?

Or

(b) What is Tape worm infestation? How it can manage?

PART C -- (3x10=30)

- 16. Draw human eye, label its parts. Mention the blood supply and nerves of eye.
- 17. Explain the adrenergic neurotransmission
- 18. Explain the ATP production through glycolysis.
- 19. What is gastroenteritis? Explain virus induced food poison.
- 20. Explain the immune and physiological changes during parasitic infection.

S.No. 2486 P 16 HA 15

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

Hospital Administration

BIOSTATISTICS

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 21. What do you mean by ordinal scale?
- 22. Types of data.
- 23. Merits and demerits of mean, mode and median.
- 24. What is the formula use to calculate standard deviation?
- 25. What is mean by multiple correlations?
- 26. Give the regression equations.
- 27. What is an opportunity sample?
- 28. What is the definition of target population?
- 29. What is the formula of probability?
- 30. Write the uses of t-test.

PART B -(5x5=25)

Answer ALL questions

31. (a) Role of biostatistics in public health.

Or

- (b) Define variables and explain the types of variable.
- 32. (a) What is standard error of the mean and write its application?

- (b) Write a short note on the selection of appropriate measures of central tendency.
- 33. (a) Write a short note on spearman rank correlation.

- (b) Explain the linear regression.
- 34. (a) What are the criteria's of good sample?

Or

- (b) Explain the multi phase and multi stage sampling.
- 35. (a) Chi square in 2 x 2 tables?

Or

(b) Write a note on standard error and null hypothesis.

PART C -
$$(3x10=30)$$

- 36. Explain in detail about descriptive epidemiological study design.
- 37. Explain continues probability distribution.
- 38. Define correlation and explain the types of correlation with a neat scatter plots.
- 39. Write the principle involved in the selection of samples. Explain the errors in sampling.
- 40. The study was conducted to find out the association between tobacco chewing and oral cancer, 50 cases of oral cancer and 50 normal cases, find the study desi8gn and 2x2 table.

S.No. 2486 P 16 HA 15

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, APRIL 2017.

Hospital Administration

BIOSTATISTICS

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1. Define histogram
- 2. What is meant by frequency distribution?
- 3. Difference between mean and mode.
- 4. Application of coefficient variation.
- 5. What is mean by positive and negative correlation?
- 6. What is the relation between regression and Pearson-r?
- 7. Why do we use samples?
- 8. Advantages of stratified sampling over other sampling methods.
- 9. Define hypothesis.
- 10. What is mean by null hypothesis?

PART B -(5x5=25)

Answer ALL questions

11. (a) Explain the frequency curve presentation.

Or

- (b) State the merits and demerits of interview method of data collection.
- 12. (a) Briefly explain methods of estimating the regression equation.

- (b) Write the basic concepts of regression.
- 13. (a) What are the errors in sampling technique?

- (b) List down the methods of sampling. Explain snow ball sampling.
- 14. (a) Briefly explain 95 percentage and 99 percentage confidence interval for mean.

Or

- (b) Write the standard deviation for discrete and individual series.
- 15. (a) Explain the various tests for significance.

Or

(b) Explain the different types of probability.

Answer any THREE questions

- 16. Explain different methods in data collection.
- 17. Pulse rate of 12 individual are given below, find the coefficient of variation 58, 66, 70, 74, 80, 86, 90, 100, 79, 96, 88, 97.
- 18. Body weight (BW) and systolic blood pressure(BP) of 10 new born babies are given below, find the correlation coefficient.

BW: 1.5 1.9 2.2 2.5 2.7 2.8 3.0 3.2 3.4 3.7

BP: 47 50 71 76 76 81 86 85 91 106

- 19. Explain briefly about sample size for simple comparative experiments for normally distributed variables.
- 20. Calculate the chi square from following data; table value for 3 df at 0.05 level is 7.82 state the null and alternative hypothesis.

Addiction of	Liver	Liver cirrhosis	Total
Alcohol	cirrhosis yes	absent	
No	10	890	900
Once in a month	50	450	500
2 to 5 times in a month	80	320	400
6 to 10 times in a month	120	80	200
Total	260	1740	2000

S.No. 2483 P 16 HA 12

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

Hospital Administration

EPIDEMIOLOGY

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 41. What is person distribution?
- 42. Define epidemiological triad.
- 43. What is incidence density?
- 44. Types of prevalence.
- 45. Define Carrier.
- 46. Types of disinfection.
- 47. Advantages of screening.
- 48. Any two difference between screening and diagnostic test.
- 49. What is confounding?
- 50. Define bias.

PART B -(5x5=25)

Answer ALL questions

51. (a) Summarize the historical evolution of epidemiology.

Or

- (b) Short notes about descriptive study.
- 52. (a) Short notes on cumulative incidence.

Or

(b) Describe the prevention and control measures that protect the susceptible host from communicable disease.

53. (a) Explain in detail about elimination and eradication of cholera.

Or

- (b) Write in detail about control and elimination of HIV.
- 54. (a) Write the types of bias.

Or

- (b) Describe the uses of surveillance system.
- 55. (a) Elaborate the effects of confounding.

Or

(b) Write in detail about attributable risk.

PART C - (3x10=30)

- 56. Explain in detail about cohort study with example.
- 57. How to apply risk, relative risk, odds ratio to apply disease frequency.
- 58. Explain in detail about epidemiology of communicable disease.
- 59. Write the reservoir, mode of transmission, portal of entry and factors in host susceptibility for Hepatitis.
- 60. Write the characteristic features of different data types and components involved in evaluation of chance.

S.No. 6558 P 16 HA 12

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, APRIL 2017.

Hospital Administration

EPIDEMIOLOGY

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1. Define epidemiology.
- 2. Time distribution.
- 3. What is ratio?
- 4. Point prevalence.
- 5. Define reservoir.
- 6. Name any two mode of transmission of communicable disease.
- 7. What is specificity?
- 8. Any two uses of screening.
- 9. Information bias.
- 10. Variables.

PART B -(5x5=25)

Answer ALL questions

11. (a) Write the types of epidemiological studies.

Or

- (b) Short notes about descriptive studies.
- 12. (a) Describe in which studies the Relative Risk (RR) and the odds ratios are used. Outline the reasons why they would be used in a particular study and not in another.

Or

(b) Write the measures of disease frequency.

13. (a) Classify communicable diseases.

Or

- (b) Brief about vectors.
- 14. (a) Write in detail about epidemiological approach to malaria.

Or

- (b) Explain evaluation of screening programs.
- 15. (a) Outline the characteristics features of different data types.

Or

(b) Write the components involved in evaluation of chance.

PART C -- (3x10=30)

- 16. What are the applications and disadvantages of any two epidemiological study designs?
- 17. Explain the epidemiological indicators with basic formulas. Add a note on their applications.
- 18. Explain in detail about surveillance system and its uses.
- 19. List different types of vector control methods and select the most appropriate according to the prevailing conditions for malaria.
- 20. Write the types of bias and how to control bias in epidemiological study.

S.No. 2485 P 16 HA 14

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

Hospital Administration

ORGANISATIONAL BEHAVIOUR

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1. What is personality?
- 2. How group formations help in organizational behavior?
- 3. Name the stealth in an organization.
- 4. What is depression?
- 5. What is conflict?
- 6. Name two essential characters of a leader.
- 7. What are formal groups?
- 8. Name two principles of labour division.
- 9. What is group dynamics?
- 10. Why people resist changes?

PART B -(5x5=25)

Answer ALL questions

11. (a) What are the informed groups? Explain its role.

Or

- (b) Explain the importance of job satisfaction in an OB.
- 12. (a) Write the concept and essentialness of motivation.

- (b) Explain the importance of promotion in job satisfaction.
- 13. (a) Differentiate leaders and managers by function..

- (b) Briefly write on the basic principles of a supervisor.
- 14. (a) Explain the importance of inter personal relationship.

Or

- (b) What are the factors influence the decision making process?
- 15. (a) Briefly write on diversity management.

Or

(b) Discuss the importance of organizational culture in managing change.

PART C -
$$(3x10=30)$$

- 16. Write the importance of promotion in job satisfaction. Write the scope and nature of an organizational behaviour.
- 17. Explain the theories of motivation.
- 18. Explain any two characteristics of a leader.
- 19. Name the team building factors and its importance in art organization.
- 20. Explain the importance of power and policies in an organization.

S.No. 2482 P 16 HA 11

(For candidates admitted from 2016-17 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

Hospital Administration

PRINCIPLES OF HOSPITAL ADMINISTRATION AND HEALTH ECONOMICS

Time: Three Hours Maximum: 75 marks

PART A - (10x2=20)

Answer ALL Questions

- 1. Write the scope of Economics
- 2. Brief on parts of a Hospital.
- 3. Write in brief about hospital services.
- 4. What are the different Health policies in health care?
- 5. Explain the role of government in health care services.
- 6. Define consumer behavior.
- 7. Define Health economics
- 8. What is health care management?
- 9. What is opportunity cost?
- 10. Role of Hospital in health care delivery.

PART B -(5x5=25)

Answer ALL questions

11. (a) Explain the various means of calculating the cost for health care services?

Or

- (b) Classify health care market.
- 12. (a) What are the various means of calculating the cost for health care services?

Or

(b) Discuss the nature and scope of health economics.

13. (a) Define management and explain different skills required for management.

Or

- (b) Explain the unique nature of input-output process of health.
- 14. (a) Explain the various demand determinants of health care.

Or

- (b) Define hospital. Explain types and functions of hospital.
- 15. (a) Explain about External relationship in hospital management.

Or

(b) Discuss the principles of management objectives.

PART C - (3x10=30)

- 16. What are the various health care initiatives taken by Government?
- 17. Explain the Concepts of demand and explain the various demand determinants of health.
- 18. Explain
 - a. Role of hospital administrator
 - b. Time values for money
 - c. Concepts of management models.
- 19. Compare the health care strategies with other countries.
- 20. How will you measure demand and supply of health care products and create consumer awareness among public?

S.No.6562 P 16 HA 21

(For candidates admitted from 2016-2017 onwards)

M.Sc DEGREE EXAMINATION, APRIL 2017.

Hospital Administration

BASIC BIOLOGICAL SCIENCES PART II

Time: Three hours

Maximum: 75 marks

PART A
$$- (10 \times 2 = 20)$$

Answer ALL questions.

- 1. State two advantages of intravenous route of administration.
- 2. What is mean by biotransformation? Give one example.
- 3. Give the pharmacological action phenytoin.
- 4. Name four drug used to treat cardiac arrhythmias.
- 5. What are macrolide antibiotics? Give example.
- 6. Name the side effects of fat soluble vitamins.
- 7. Write the risk factors affecting congestive heart failure.
- 8. Write the etiology of ulcer.
- 9. Write the factors affecting optimum utilization of equipments and its cost?
- 10. Write the application of x-ray in clinical.

PART B
$$- (5 \times 5 = 15)$$

Answer ALL questions.

11. (a) Name the factors influences distribution of drugs.

Or

- (b) Explain the advantages/disadvantages and limitations of topical route of administration.
- 12. (a) State the drugs acting at beta 2 receptors an agonist.

- (b) Explain the pharmacological action of oxytocin in uterus.
- 13. (a) Classify antibiotic based on mechanism of action with suitable example.

- (b) Explain the mechanism of action of anthelmintic drugs.
- 14. (a) Discuss the normal factors affects kidney functioning.

Or

- (b) Explain the terms adaptation of organs/tissue to a stimulus with example.
- 15. (a) Write the quality control measures in equipment maintenance in the hospital.

Or

(b) List the basic equipments required in a tertiary care hospital.

PART
$$C - (3 \times 10 = 30)$$

- 16. Classify different routes of administration and explain different dosage forms for oral route of administration.
- 17. What are the anticoagulants? Explain its pharmacological action, therapeutic uses.
- 18. Classify vitamins? Explain the functions of deficiency of water soluble vitamins.
- 19. Explain the pathology of atherosclerosis.
- 20. Discuss the working principle and functions of MRI.

S.No.6563 P 16 HAE 22

(For candidates admitted from 2016-2017 onwards)

M.Sc DEGREE EXAMINATION, APRIL 2017.

Hospital Administration – Elective

HOSPITL FACILITIES PLANNING AND

ADMINISTRATION

Time: Three hours Maximum: 75 marks

 $PART A - (10 \times 2 = 20)$

Answer ALL questions.

- 1. Design the team of hospital construction.
- 2. Expand CSSD.
- 3. Describe the types of wastes.
- 4. Write the importance of selection of location.
- 5. Discuss the Outpatient services.
- 6. State the qualities of a Hospital administrator.
- 7. Define clinical department.
- 8. List out types of hospital.
- 9. Difference between public hospital and private hospital.
- 10. What is ambulatory care?

PART B
$$- (5 \times 5 = 15)$$

Answer ALL questions.

11. (a) Outline briefly the structure of hospital organization.

 O_1

- (b) Explain the planning and design of building and layout of general hospital.
- 12. (a) Explain the functional plan of a hospital in detail.

Or

(b) What are the safety measures to taken in a hospital?

13. (a) Discuss in detail about the water supply management.

Or

- (b) Illustrate the various radiological services in a private hospital.
- 14. (a) Write about the general consideration while selecting a site.

Or

- (b) Draw the food service department flow chart.
- 15. (a) Write notes on mechanical and electrical standards.

Or

(b) Explain the functions, location and design of ambulatory zone.

PART
$$C - (3 \times 10 = 30)$$

- 16. Discuss about the bio-medical waste handling standard and types, methods of waste management in a hospital.
- 17. Explain the guiding principles of planning hospital services.
- 18. How to plan and design a multispecialty hospital?
- 19. Explain the layout, requirement, functions and responsibilities of Pharmacy department in a 1000 bedded hospital.
- 20. Describe the functional plan, financial plan and human resource planning of hospital.

S.No.6566 P 16 HAE 2

(For candidates admitted from 2016-2017 onwards)

M.Sc DEGREE EXAMINATION, APRIL 2017.

Hospital Administration – Elective

HUMAN RESOURCE MANAGEMENT

Time: Three hours

Maximum: 75 marks

$$PART A - (10 \times 2 = 20)$$

Answer ALL questions.

- 12. Define department.
- 13. What are the concepts of development negotiation.
- 14. What is an interview?
- 15. What is job analysis?
- 16. Define training.
- 17. Define motivation.
- 18. Define wages.
- 19. What is collective bargaining?
- 20. What is provident fund?
- 21. Define promotion.

PART B
$$- (5 \times 5 = 15)$$

Answer ALL questions, choosing either (a) or (b).

22. (a) Explain the relation between departments in an organization.

Oı

- (b) Explain the procedures involved in departmentation.
- 12. (a) State the difference between job analysis and job descroption.

- (b) Explain the methods of selection followed in an interwiew.
- 13. (a) What are the methods of performance appraisal?

- (b) What is counseling? Why it is necessary?
- 14. (a) What is job evaluation?

Or

- (b) What are merit rating methods of wage payment?
- 15. (a) What are the benefits of payment of wages act?

Or

(b) What are the benefits of trade unions?

PART
$$C - (3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Briefly explain the functions of departments.
- 17. Define requirement. What are the methods and procedures involved in requirement process?
- 18. What is training? What are the needs for training?
- 19. Explain the following:
 - (a) Occupational safety
 - (b) Job evaluation.
- 20. Define discipline. What are the disciplinary procedures?

S.No.6564 P 16 HA 23

(For candidates admitted from 2016-2017 onwards)

M.Sc DEGREE EXAMINATION, APRIL 2017.

Hospital Administration

HOSPITAL INFORMATION SYSTEM

Time: Three hours

Maximum: 75 marks

PART A
$$- (10 \times 2 = 20)$$

Answer ALL questions.

- 1. What is the main objective of confidentiality relevant to hospital information system?
- 2. List any four computer languages.
- 3. Define the term Information network.
- 4. What is modularity specific to system development?
- 5. Define Bottom-up approach.
- 6. Define process driven method.
- 7. System documentation is important. Justify.
- 8. List any two information/requirement needs specific to hospital information system
- 9. Difference between online and offline information.
- 10. Define purpose of current awareness service.

PART B
$$- (5 \times 5 = 15)$$

Answer ALL questions, choosing either (a) or (b).

11. (a) Define the aspect "Secutity" in hospital information system.

Or

- (b) Define the term 'Decision Making'.
- 12. (a) List any five data obtained from information requirement.

- (b) Define the term "Planning and Control".
- 13. (a) What are all the challenges in the design of HIS?

- (b) Describe Top-down approach.
- 14. (a) Describe the role of documentation in HIS design/development.

Or

- (b) What are all the steps involved in HIS design?
- 15. (a) Define the term Information service.

Or

(b) List five uses of online services subject to medical science.

PART
$$C - (3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Describe the features of HIS.
- 17. Explain briefly about resource, planning and control.
- 18. Draw a use case diagram for patient registration in HIS.
- 19. Explain design requirements in detail.
- 20. Explain any four offline information services in detail.

S.No.6565 P 16 HAE 1

(For candidates admitted from 2016-2017 onwards)

M.Sc DEGREE EXAMINATION, APRIL 2017.

Hospital Administration – Elective

MATERIALS MANAGEMENT

Time: Three hours

Maximum: 75 marks

PART A $- (10 \times 2 = 20)$

Answer ALL questions.

- 1. Define EOQ and lead time.
- 2. Define standard deviation.
- 3. Write the importance of materials management.
- 4. Define codification and advantages of codification.
- 5. Ethics in purchasing.
- 6. What is operational audit?
- 7. What is Acquisition cost?
- 8. What do you mean by store keeping?
- 9. Advantages of staggered deliveries.
- 10. Role of material managers.

$$PART B - (5 \times 5 = 15)$$

Answer ALL questions.

11. (a) Write about Inventory control and its significance.

Or

- (b) Discuss the difference between vendor relation and vendor rating.
- 12. (a) Describe briefly on purchase of capital equipment.

Or

(b) Role of computers in material management.

13. (a) Discuss importance of stores, its lay out and location in a hospital setting.

Or

- (b) Differentiate between centralized and decentralized purchasing.
- 14. (a) Explain the new concept of, Supply Chain-as a series of suppliers.

Or

- (b) Explain the factors influencing inventory management and control.
- 15. (a) Explain the methodology of codification.

Or

(b) Discuss the advantages and disadvantages of standardization.

PART
$$C - (3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Define the various roles of materials management in the context of internal and external interfaces to a materials management system.
- 17. Why is negotiation an important aspect of purchasing? Describe the elements and objectives of negotiation. Also discuss the negotiation process and techniques.
- 18. Explain the techniques of standardization with examples.
- 19. Elaborate on definition and scope of inventory control. Explain the inventory control techniques in material management.
- 20. Discuss about the computer and its application with relevance to material information system.
