BHM-2ND SEM

SUB:- HOSPITAL OPERATION MANAGEMENT-I
PAPER CODE:-BHM 201

Answer the followingquestions:

1.) What are the challenges of a modern hospital discuss.
2.) Describe the modern techniques of Hospital Management.
3.) Define Research. Discuss the importance of Health Service research.
4.) What is Hospital Planning? Briefly Discuss the steps of hospital planning.
5.) HEPA filter?
6) Discuss in brief the arrangements, physical facilities in an O.T. with reference to

i) Zoning
ii) Air circulation
iii) Equipment
iv) Sterility

BIO STATISTICS-I
Paper Code: BHM-202

Answer the following questions

1. Write a short note on Stratified Sampling.
2. If x_1 and x_2 are two positive values of a variate, prove that their geometric mean is equal to the geometric mean of their arithmetic and harmonic means.
3). Draw ogives (less than types) for the following frequency distributions.

Wages (Rs)	50-59	60-69	70-79	80-89	90-99	100-109	110-119
No. of employees	8	10	16	14	10	5	2

4) Show that the standard deviation is the minimum root-mean-square deviation.　　　5) The arithmetic mean and variance of n values $x_1, x_2, \ldots , x_n$ are 0 and σ^2 respectively, and y is a variable defined by $y = x^2$. Prove that $\bar{y} = \sigma^2$.
6) The geometric mean of 10 observations on a certain variables was calculated to be 16.2. It was later discovered that one of the observations was wrongly recorded as 12.9, when in fact it was 21.9. Apply appropriate correlation and calculate the correct geometric mean.
7) The weight of 11 forty-year old men were 148, 154, 158, 160, 161, 162, 166, 170, 182, 195, and 236 pounds. If the heaviest man is omitted, what is the percentage change in the range?

SUB:- MEDICAL TERMINOLOGY-II
PAPER CODE:-BHM 203

Answer the followingquestions:

A. Describe the blood circulation in the heart.
B. Define hormone. Describe briefly about the different hormones secreted from pituitary gland and their functions.
C. Different between a malignant and a benign tumor. Explain the of the termT_1 N_2 M_0 in Oncology ? What are the types of cancer treatment available today?
D. What are the components of cardiovascular system? Describe the process of blood circulation. What are the functions of blood?
E. What is neuron? Draw and describe the different parts of a neuron..
F. What are the different types of muscle? Mention their locations into the body and their functions. What are the different types of joints present in our body? Explain their locations.

SUB: MARKETING MANAGEMENT
PAPER CODE: BMM204

1. Define in brief the core marketing concept.
2. What are the factors to be considered for pricing of services? Briefly discuss the   pricing strategies adopted by a service firm.
3. Define the concept of Consumer Behavior. What are factors of consumer buying behavior? Explain Consumer Buying Process in details.
4. Marketing Mix elements.
5. What do you mean by new product? Illustrate the stages involved in New Product Development (NPD) with an example.
6. Functions of Marketing Channels.

SUB:- HOSPITAL & HEALTH SYSTEM -II
PAPER CODE:-BHM 205

Answer the following questions:

A. Describe the Health Manpower Planning.
B. Describe the health care system in US.
C. Describe the Healthcare System in Canada.
D. Write briefly about RCH programmed in India.
E. Discuss the role of NACO in the national AIDS control programmed in India.
F. What are CBA and CEA? Explain with examples in the Health care domain.

BBA-2ND SEM

SUB:- ENGLISH-II

1. Suppose you have found that the employees of your company are not maintaining the office hours regularly. So write a memo about it.
2. Differentiate the following pairs of words by making sentences.
   a) Right: Write   b) Berth: Birth   c) Too: Two   d) Course: Coarse   e) By: Bye
3. Explain the characteristics and advantages of e-mail.
4. Write a proposal to the head of your institution regarding the introduction of a computer literacy programme to its students.
5. Write an application for the post of Sales Manager in a reputed organization. Now attach your resume.
6. Write a notice for all the employees of your concern regarding a business meet very shortly.
7. Draft an advertisement to be published in the leading newspaper of the country inviting students and corporate executives to attend a seminar to be organised by your institute in the next month. The topic for discussion is "Management Education in the new millennium."
8. What are complaint letters and what are adjustment letters?
9. You are going to open a fashion assessor's outlet in your city. Write a sales letter promoting your shop to be circulated among the residents of the city.
10. A recognised university conducts short courses on management trainee. You are interested for the same. Now write a letter of enquiry to the authority for details of the course along with a query of future prospect.

SUB:- MATHEMATICS-II
PAPER CODE:- BBA-202

Answer the following questions

1. Evaluate $\lim_{x \to 0} \frac{1 - cos x}{x^2}$

2. If $ax^2 + 2hxy + by^2 = 1$ prove that $\frac{d^2 y}{dx^2} = \frac{h^2 - ab}{(hx + by)^3}$.

3. The equation of the directrix of the hyperbola is $x - y + 3 = 0$. It's focus is (-1, 1) and eccentricity is 3. Find the equation of the hyperbola.

4) Verify Euler's theorem for the function $x^n log \frac{y}{x}$.

5) Evaluate $\int secx \sqrt{\frac{(1 - sinx)^2}{1 - sin^2 x}} dx$.

6) Find the area of the region bounded by the curves $6y = x^2$ and $3y = x + 4$.

7) *Express y explicitly as a function of x then find* $\frac{dy}{dx}$ *when* $e^x - e^{-y} = 2x$.

SUB:- STATISTICS-II
PAPER CODE:- BBA-203

Answer any six of the followings.

1) The probability function of a random variable X is f(x) = k (x-1) (2-x) for $1 \le x \le 2$. Determine i) the value of k   ii) the distribution function F(x).   iii) P ($5/4 \le X \le 3/2$).

2) Write a short note on   i) critical region   ii) Type-I and Type-II error

3) Find the probability distribution (or probability function or p.m.f.) of the number of heads when a fair coin is tossed repeatedly until the first tail appears.

4) Assuming that the height distribution of a group of men is normal, find the mean and standard deviation, if 84% of the men have height less than 65.2 inches, 68% have height lying between 65.2 and 62.8 inches.

5) If x_1 , x_2, …, x_n is a random sample from an infinite population with variance σ^2 , and $\bar{x}$ is the sample mean, show that $\sum_{i=1}^{n} \frac{(x_i - \bar{x})^2}{n}$ is a biased estimator of σ^2 , but the bias becomes negligible for large n. Give an unbiased estimator of σ^2 here.

6) A sample of 6500 crews is taken from large consignment and 75 are found to be defective. Estimate the percentage of defects of consignment and assign limits within which the percentage lies.

7) A manufacturer claimed that at least 90% of the components which he supplied confirm to specifications. A random sample of 200 components showed that only 164 are up to standard. Test his claim at 1% level of significance.

SUB:- ECONOMICS-II
PAPER CODE:- BBA-204

Answer the following Questions

1. What are the functions of World Bank? Explain various heads of public expenditure.

2. Differentiate inflation and deflation. What are the remedies of inflation in a country?

3. What are the differences between GDP and GNP? Explain various methods to measure National Income.

4. Briefly discuss the functions of commercial Banks.

5. Give a short note on:

a. IMF   b.IBRD   c.NNP

SUB:- PSYCHOLOGY
PAPER CODE:- BBA-205

Q. Answer the following questions.

1. What is learning? Mention the difference between insightful learning and programmed learning.

2. Discuss the difference between the Extrovert and Introvert people.

3. Write a short note on classical conditioning.

4. What do you mean by personality test? Discuss about the different types of tests used for assessment of personality.

5. What is perception? Explain the determinants of perception. Discuss the various errors in perception.

6. Define personality. Discuss the major determinants of personality. Explain the concept of Freud's Psycho-analytical theory of personality.

7. Difference between Type A and Type B personality.

8. Explain the concept of Freud's Psycho-analytical theory of personality.

1. What is Flowchart?
2. What is an Algorithm?
3. Full form of EEPROM?
4. What is program?
5. What do you mean by computer programming?
6. Write an algorithm on biggest of three nos.
7. What is printer? What is memory?
8. Short notes on generation of computer.
9. Difference between SRAM and DRAM.
10. What is cache memory? What is virtual memory?
11. Difference between primary memory and secondary memory.
12. What is hard disk and floppy disk?
13. Convert a number decimal to binary.

$$(123.14)_{10} = (?)_2$$

BCA- 2ND SEM

SUB: COMPUTER ARCHITECHTURE & SYSTEM SOFTWARE
PAPER CODE: BCA 201

1. Describe Flynn's classification of computer?
2. Compare RISC and CISC architecture in brief.
3. Differentiate in between 3-address, 2-address, 1-address and 0-address with suitable example.
4. What is instruction cycle? Compare and contrast hardwired vs. micro programmed control unit.
5. What is Von-Neumann architecture? What is a Von-Neumann bottleneck? How can be this reduced?
6. What do you mean by Hazard? State various types of Hazards in brief. Explain arithmetic pipeline with suitable example and diagram.
7. What is cache misses? Write down the techniques to minimize the cache misses?
8. What is coherence? What is cache mapping? What is the difference between associative mapping and set-associative mapping?
9. A computer has 512KB cache memory and 2MB main memory. If the block size is 64 bytes then find subfield for
   a) associative memory
   b) direct mapping
   c) set-associative mapping

10. Differentiate between Vectored and Non-vectored interrupts

SUB: INFORMATION SYSTEM ANALYSIS & DESIGN
PAPER CODE: BCA 202

1. Define generalization and specialization. What is aggregation?

2. Draw an ER MODEL of a hospital with all its entity and activity.

3. Discuss UNIT and regression testing.

4. Discuss different type of integration testing.

5. What is prototype? Explain the different phase of the software development model in prototype is used?

6. Explain different phases of iterative waterfall model with diagram? What are the advantages of iterative waterfall model over classical waterfall model?

7. What is normalization? What is functional dependency? Explain 2NF with example?

8. Define the terms: Entity, Attributes, Primary key, super key.

9. A retail shop gives a discount of 10% to it's customer if the customer pay in advanced or if the purchase is Rs 15000 or more and the customer is a regular customer otherwise it will give no discount. Draw the decision tree and decision table for the problem.

10. a) What is software failure?
   b) How is it related with a fault?

SUB: COMPUTER PROGRAMMING
PAPER CODE: BCA 203

1) What are the different ways to Declare and Instantiate an object in Visual Basic?

2) Describe In Process and Out Process component.

3) What are early binding and late binding? Explain them.

4) What is Option Base used in VB6?

5) What is the difference between Namespace and Assembly?

6) What are Option Strict and Option Explicit?

7) What is namespace? Which namespace are used for accessing the data?

8) What are the different types of Authentication?

9) What is Garbage collection?

10) What are all the differences between Dispose and Finalize ()?

SUB: MATHEMATICS
PAPER CODE: BM 201

Answer of the following questions

1) Prove that the vectors (1,-2,3),(2,3,1) and (-1,3,2) form a basis of V_3.

2) Discuss the convergence of the sequence $\{\frac{n^2}{3^n}\}$

3) Test the convergence of the series $\frac{6}{1.3.5} + \frac{8}{3.5.7} + \frac{10}{5.7.9} + \cdots to \infty$

4) Find the differential equation of a family of circles having the radius r..

5) Show the sequence $\{S_n\}$ where $S_n = \frac{1}{1!} + \frac{1}{2!} + \frac{1}{3!} + \ldots + \frac{1}{n!}$ is convergent.

6) Prove that the sequence is convergent, find the limit: x_n where $x_1 = \sqrt{2}, x_{n+1} = \sqrt{2x_n}, n > 1$.

7) Test the convergence of the series $\sum_{n=1}^{\infty} \frac{n!.2^n}{n^n}$.

SUB: DEVELOPMENT OF LIFE SKILLS
PAPER CODE: HU 201

1. What do you know by media of communication?
2. What is communication process model?
3. Differentiate between verbal and non-verbal communication.
4. What is a 'Memorandum'? What are the types?
5. What are forms of non- verbal communications?
6. An MNC has the demand of recruiting some professionals, especially experienced MBA for their city branch. Now apply with full confidence with a C.V. to the Managing Director.
7. What do you mean by upward and downward communication?
8. Write short notes on – Kinesis and Gesture.
9. Your club has arranged for a free eye operation camp in your locality. Write a notice about it mentioning everything.
10. What are the similarity and dissimilarity between face to face communication and telephonic talk?

BHM- 4TH SEM

EPIDEMIOLOGY & ANALYSIS OF HEALTH INFORMATION DATA
PAPER CODE: BHM-401

Answer the followingquestions:

A. Define and classify vaccines.
B. Distinguish between the term 'epidemic' and 'pandemic'. Describe the benefits of epidemiology. 5+10
C. What is Rheumatic heart disease? State the epidemiological factors. What are the measures of prevention you can take?
D. Define "cold life". Discuss any five types of cold chain equipment which are used today.
E. Describe natural history of disease.
F. Describe modes of intervention of disease.

SUB:- SUPPORT & UTILITY SERVICES -I
PAPER CODE:-BHM 402

Answer the following questions:

A. Describe the Transport services in hospital.

B. Discuss various types of Medical records needs in a hospital.
C. Discuss the organization and operational planning services of a hospital laboratory.
D. Illustrate the factors which influence the number of nurses in a hospital. Discuss about the staffing norms of nursing services.
E. Give a brief account on various activities carried out in linen room. Describe the laundry process with explanation of various equipments used.
F. Define biomedical waste. Why is safe disposal important? Discuss the different methods used for collection, segregation and disposal process.

ENVIRONMENTAL ECOLOGY
PAPER CODE: BHM-403

Answer the following questions:

1. Define food chain. Discuss grazing food chain with examples.

2. State the importance of Environmental Protection Act (1986).

3. Define ecology. Explain the ecological balance & its consequences of changes. Describe domestic waste water treatment with proper flow diagram.

4. Define the objectives of EIA. Mention the steps involved in the EIA process. Highlight eight(8) guiding principles of EIA.

5. Legislation vs. Social obligations for health care.

6. What is solid waste? What are the source wise compositions of solid wastes? Discuss the advantages and disadvantages of sanitary landfill. Explain autoclaving and incineration.What is the importance of environmental study?

SUB:- MEDICAL RECORD SCIENCE –II
PAPER CODE:-BHM 404

Answer the following questions:

A. Describe the Audit Cycle in Medical Record.
B. What are the different types of records of reports generated by MRD? Explain uses. Why hospital statistics are essential?
C. What is a Medical Record Department? List few functions of the Medical Record Department in a hospital. What are the duties and responsibilities of a Medical Record Officer?
D. Can a patient be regarded a consumer when he/she avails free services from a Govt. Hospital? Justify your answer with reasons. Discuss briefly the 'Consumer Protection Act' as applicable in the medical field.
E. Who are considered as workman as per the Workmen Compensation Act? Who fails to be considered as workman under the legal purview of this Act? Which conditions?

1. What is System? System concepts: A foundation.
2. Components of an Information system. Describe with diagram.
3. Write various topologies with diagram.
4. What are the Information system resources?
5. Write down the data Resources.
6. Short note: Data flow with diagram.
7. Describe shortly about Information system activity.
8. Describe Categories of networks. (LAN, MAN and WAN)
9. Describe shortly about Software resources.
10. Short note: Data communication components.

BCA- 4TH SEM

SUB: DATABASE MANAGEMENT SYSTEM
PAPER CODE: BCA 401

1. Describe 3-layer architecture RDBMS with diagram.
2. Short notes on Data models.
3. What are entity, primary key and candidate key?
4. What is normalization? What are the anomalies?
5. Draw an E-R diagram on banking system?
6. Compare 1NF, 2NF and 3NF.
7. What is BCNF.
8. What is functional dependency?

SUB: OBJECT ORIENTED PROGRAMMING WITH C++
PAPER CODE: BCA 402

1. What do you mean by default constructor?
2. Write C++ code to implement copy constructor.
3. Write down three properties of destructor.
4. What is inline function? Explain with example.
5. What is the advantage of an inline function over a macro? Explain with example.
6. Explain the default argument with proper example.
7. What does polymorphism means in C++?
8. Briefly explain runtime polymorphism with appropriate example.
9. Distinguish between function overloading and overriding (state at least 3 points).
10. a) What do you mean by operator function?
    b) State at least three operators that cannot be overloaded.
11. What is the purpose of inheritance? Explain wit example. What do you mean by multiple inheritance? What do you mean by friend function? State at least three points each to describe the merits and demerits of friend function.

SUB: SOFTWARE PROJECT MANAGEMENT & QUALITY ASSURANCE
PAPER CODE: BCA 403

1. Describe Classical Waterfall Model.
2. Describe Iterative Waterfall Model.
3. Describe Prototyping model.
4. Describe Spiral model.
5. Describe Basic COCOMO Model.
6. Short note: Complete COCONO model.
7. Describe PERT Chart.
8. Describe Risk management.
9. Short note: Software Configuration management.
10. Write the software requirements specification.

SUB: NUMERICAL METHODS & ALGORITHM
PAPER CODE: BM 401

Answer the following questions :

1. **Answer the following questions**

1) Obtain an approximate value of $\int_0^1 \frac{dx}{1+x^2}$ by Simpson's One-third rule taking four equal intervals

2) Given $\frac{dy}{dx} = x^3 + y$, $y(0) = 1$, $compute\ y(0.02)$, by Euler's method correct up to four decimal places, taking step length h = 0.01.

3) Solve the system of equations, by Gauss – elimination method

$$3x_1 + 9x_2 - 2x_3 = 11$$
$$4x_1 + 2x_2 + 13x_3 = 24$$
$$4x_1 - 2x_2 + x_3 = -8$$

Correct up to two decimal places.

4) Using Trapezoidal rule with h = 2, evaluate the integral $\int_0^{12} \frac{dx}{1+x}$ correct to four decimal places.

5) Discuss the Bisection method for finding a root.

6) Use Runge-Kutta Method of forth order to compute the numerical values of the differential equation $\frac{dy}{dx} = x^2 + y^2$; y(1)=0, find y at x = 1.3.

7) Construct the iterative scheme of predictor – correction method.

SUB: ENVIRONMENTAL & ECOLOGY
PAPER CODE: HU 401

1. Mention the cause and biochemical effect of toxicity due to (i) Hg (ii) Cd.
2. Write short note on (i) catalytic converter (ii) electrostatic precipitator.
3. Differentiate between (i) primary and secondary pollutant (ii) BOD and COD.
4. What is noise? Discuss about different types of noise. What is Noise dose?
5. Define pollutant and contaminant.Give one example of each.What is environmental pollution?What are the natural and man made activities that cause environmental pollution?

6. What is air pollution? Classify them. Discuss the effect of NO_2 & SO_2 on human health.
7. What is global warming? Discuss it with the help of simple global temperature model.
8. Discuss the mechanism of ozone layer depletion.

What is PAN? Discuss the mechanism of formation of PAN.

BBA- 4TH SEM

SUB: PRODUCTION MANAGEMENT
PAPER CODE: BBA 401

Answer the following Questions

1. Define cost of quality. Enumerate the three categories of cost of quality. Write a short note on ISO 9000 series of standard on quality management systems.

2. What is make or buy decision? What are the elements of PPC? Discuss various objectives of PPC.

3. Define plant layout. State its objectives. Briefly discuss various types of Plant Layout with example.

4. Give a short note on:
(a) Statistical Quality Control
(b) Performance Rating
(c) Work Measurement

5. What is production system? Explain various types of production system with example.

SUB: MATERIALS MANAGEMENT
PAPER CODE: BBA 402

1. Define purchasing cycle. Explain purchasing cycle process in detail.

2. Define MRP. Highlight the inputs of MRP. Discuss the steps involved in MRP.

3. Explain various steps involved in conducting motion study.

4. Give a short note on:
   A. Material budget   B. ABC analysis   C.Make or Buy decision

5. Define Material handling. What are the equipments of material handling? Explain the benefits of material handling procedure?

SUB: FINANCIAL MANAGEMENT-I
PAPER CODE: BBA 403

Answer the following Questions

1. The following two projects S and R require an investment of Rs. 2,00,000 each. The cost of capital is 10%. The earnings after tax (EAT) for these two projects is as follows-

Year	1	2	3	4	5	6
S	80,000	80,000	40,000	20,000	----	----
R	20,000	40,000	40,000	40,000	60,000	60,000

Using the following criteria determine which of the project will be preferable and why?

   (a)   Pay Back Period (PBP)
   (b)   Accounting rate of Return (ARR)

2. What are the differences between Profit maximisation and Wealth Maximisation?
3. Give a short note on:
   (d) Zero Based Budgeting (ZBB)
   (e) Future Value
   (f) Present Value of Interest Factor Annuity (PVIFA)
4. What is Budgetary Control? What are the advantages and disadvantages of budgetary control?
5. Explain various advantages and disadvantages of different Capital Budgeting methods with their accept and reject criteria.

SUB: MARKETING MANAGEMENT-I
PAPER CODE: BBA 404

1. Define in brief the core marketing concept.
2. What are the factors to be considered for pricing of services? Briefly discuss the   pricing strategies adopted by a service firm.
3. Define the concept of Consumer Behavior. What are factors of consumer buying behavior? Explain Consumer Buying Process in details.
4. Marketing Mix elements.
5. What do you mean by new product? Illustrate the stages involved in New Product Development (NPD) with an example.
6. Functions of Marketing Channels.

Q. <u>Answer the following questions</u>.

1. What is job design? What are the techniques of job design?
2. What are the major principles of wages and salary administration?
3. What are the broad objectives of performance appraisal?
4. Explain the steps of HRP process.
5. What do you understand by HR supply forecasting? What is man power inventory?
6. What are the causes of industrial dispute?
7. What are the different methods to settle the industrial disputes? What is simulation?
8. What do you mean by the concept of workers participation Management?

SUB: MANAGEMENT INFORMATION SYSTEM
PAPER CODE: BBA 406

1. What is System? System concepts: A foundation.
2. Components of an Information system. Describe with diagram.
3. Write various topologies with diagram.
4. What are the Information system resources?
5. Write down the data Resources.
6. Short note: Data flow with diagram.
7. Describe shortly about Information system activity.
8. Describe Categories of networks. (LAN, MAN and WAN)
9. Describe shortly about Software resources.
10. Short note: Data communication components.

MHA- 4TH SEM

SUB: UTILITY SERVICES AREA
PAPER CODE: MHA 401

A. What is welfare service? What are the purposes of the welfare services? State some important areas of patient welfare functions provided by the governmental and non-governmental organizations in our country.

B. What is Mortuary? State the importance of hospital mortuary. Discuss the policy and procedures of the hospital mortuary management.

C. State the importance and ideal location of hospital pharmacy. Discuss the process of the storage and dispensing of drugs and other materials in the hospital pharmacy. How will you control and evaluate the hospital pharmacy?

D. Discuss the importance of house-keeping services in the hospital. State the organization chart and selection procedures of house-keeping staff of the large city hospital. Explain the control and management process of the house-keeping department.

E. List out and discuss in details the medical and health care facilities available to employees in your hospital. Suggest steps improve upon those.

SUB: STRATEGIC MANAGEMENT
PAPER CODE: MHA 402

Q. Answer the following questions.

1. What is Porter's Five Force Model? Why is it important for determining core competency? Is Porter's model related anyway to SWOT analysis?
2. What are the essential features of an effective evaluation and control system? What are the different types of strategic control process?
3. Describe BCG matrix in detail. Discuss the utility of the matrix in developing corporate strategy. What could be considered as the limitations of the tool?
4. Name and describe the components on which external environment can be analyzed. Provide relevant examples of each.
5. Short note:-
   i) 7-S framework.
   ii) Strategic entry.
   iii) Strategic intent.

SUB: MEDICAL EQUIPMENT MANAGEMENT
PAPER CODE: MHA 403

Answer the following questions:

A. What is medical equipment? Write in detail the essential factors for medical equipment planning and selection.

B. What are the different modes of procurement of imported medical equipment? Identify the problems face by the users of imported medical equipment.

C. Describe in detail, various tendering process. How does the evaluation of tenders help in selecting the best bidder?

D. What are the basic objectives of medical equipment maintenance? Discuss about different types of maintenance. What are the prerequisites to carry out a comprehensive maintenance plan?

E. Discuss the utilization of medical equipment and give five examples

SUB: CLINICAL SERVICES AREA
PAPER CODE: MHA 404

Answer the following questions:

A. What are the factors responsible for determining the number of total OT? Write down the advantages of grouping of OT. What are the policies and procedures in OT administration?

B. What are the objectives of ward management? Discuss the function of nursing care services of a hospital.

C. Mention the importance of ICU. Name the different types of ICU. Describe the physical facilities of ICU.

D. Elaborate the authority for removal and preservation of human organs.

E. What are the equipments needed to run a physical medicine and rehabilitation department? As a PMR department manager, what are the steps to be taken for smooth functioning of the department?

SUB: HEALTH INSURANCE
PAPER CODE: MHA 405

Answer the following questions:

1. In which Life Insurance Policies regulations are provided by IRDA and SEBI jointly? Why is this so?
2. Classify different types of risks.
3. Give the general principles of insurance. Critically examine each and suggest your views for improvement of such principles.
4. What steps should be taken by the state for social insurance for the population of the country. Discuss
5. Problems of co-insurance
6. Write a note on Reinsurance.

SUB: DISASTER MANAGEMENT
PAPER CODE: MHA 406

Q. Answer the following questions.

1. Explain the concept of disaster cycle. What are the recent advances in technology that has proved to be helpful in disaster management?
2. What is "Mock Training"? What are the benefits of mock training? Discuss the functions of a manager to prepare and manage the mock training.
3. What is disaster mapping? Discuss the importance of disaster mapping management. Discuss the responsibilities and functions of networking of hospitals in disaster management programme.
4. Define triage. Elaborate the organization of disaster management in a hospital.
5. Short note:-
   i) Man Made Disaster.
   ii) Disaster Management Cycle.
   iii) Recent trends in disaster management.

SUB: QUALITY MANAGEMENT
PAPER CODE: MHA 407

1. With examples substantiate how quality can be ensured in health care.
2. Describe the accreditation process of NABH for hospitals.
3. What do you mean by Total Quality Management? What are the dimensions of quality? What are the obstacles in implementing TQM in real life?
4. Define quality. What are the objectives of quality management in hospitals? Describe the elements of a comprehensive quality management program.
5. Cause-and-Effect Analysis
6. Write a note on Quality Circle.

SUB: HOSPITAL PLANNING
PAPER CODE: MHA408

Answer the following questions:

A. Describe in sequential steps the stages of hospital planning.
B. What are the guiding principles that are to be kept in mind while planning hospital facilities services?
C. What are the manpower requirements planning for a 50 bedded hospital?
D. Discuss the technical Analysis of hospital management.
E. What are the challenges faced by the management of Indian hospital? Describe the strategies adopted to face these challenges

F. Quality assurance in health care.
G. State the classification of various types of Hospitals.
H. Write a short note on Network analysis

MCA- 4TH SEM

SUB: SOFTWARE ENGINEERING & TQM
PAPER CODE: MCA 401

1. What is DFD? Draw a DFD for Hospital management system
2. What is McCall's quality model? Explain the different factor associated with this model?
3. What is the difference between Cohesion and coupling? With proper example explain why a good system requires high cohesion low coupling?
4. What is testing? What is the importance of testing? What are terms related to testing?
5. What is use case diagram? Draw a use case diagram for ATM system.
6. What is 4Ps of software project management?
7. What is iterative waterfall model? What are the advantages of iterative waterfall model over classical waterfall model?
8. What is prototype? Explain the model which use prototype.
9. What are the features of good software? What are the Top-down, Bottom-up approach?
10. What is software maintenance? What are the different types of software maintenance?

SUB: GRAPHICS & MULTIMEDIA
PAPER CODE: MCA 402

1. Describe Cathode Ray Tube(CRT)
2. Describe Shadow Mask CRT.
3. Short note: Raster Scan Display (Monitors)
4. Write DDA Algorithm
5. Implement the DDA algorithm to draw a line from (0.0) to (6,6).
6. Write Generalized Bresenham's algorithm.
7. Consider a line from (0,0) to (6,7). Use Bresenham's algorithm to rasterize the line.
8. Write Midpoint Ellipse algorithm.
9. Scan line Polygon Fill Algorithm.
10. Describe Geometric Transformations with diagram.

SUB: DATABASE MANAGEMENT SYSTEM-II
PAPER CODE: MCA-403

1. Describe 3-layer architecture od DBMS with diagram.
2. Short notes on Data models.
3. What are entity, primary key and candidate key?
4. What is normalization? What are the anomalies?
5. Draw an E-R diagram on banking system?
6. Compare 1NF, 2NF and 3NF.
7. What is BCNF.
8. What is functional dependency?

SUB: OPERATION RESEARCH & OPTIMIZATION TECHNIQUES
PAPER CODE: MM 401

Answer the following questions

1. A company that operates for 50 weeks in a year is concerned about its stocks of copper cable. This costs Rs 240 a meter and there is a demand for 8,000 meters a week. Each replenishment costs Rs 1,050 for administration and Rs 1,650 for delivery, while holding costs are estimated at 25 per cent of value held a year. Assuming no shortages are allowed, what is the optimal inventory policy for the company ?

How would this analysis differ if the company wanted to maximize its profits rather than minimize cost? What is the gross profit if the company sells the cable for Rs 360 a meter.

2. A television requirement finds that the time spent on his jobs an exponential distribution with mean of 30 mins. If he repairs the sets in the order in which they come in, and if the arrival of sets follows a Poisson distribution with an approximate average of a 10 per 8-hour day, what is the requirements of expected idle time each day? How many jobs are ahead of the average set just brought in?

3) Solve the following Integer LP problem using Gomory's cutting plan method.

Maximize $z = 2x_1 + 20x_2 - 10x_3$

Subject to $2x_1 + 20x_2 + 4x_3 \le 15$

$6x_1 + 20x_2 + 4x_3 = 20$

$x_1, x_2, x_3 \ge 0$ and are Integers.

4) Solve the following game graphically :

Player A	Player B	
	B_1	B_2
A_1	1	2
A_2	4	5
A_3	9	-7
A_4	-3	-4
A_5	3	1

5. a) State the Bellman principle.

  b) Find the minimum value of

$$Z = y_1^2 + y_2^2 + \cdots + y_n^2$$

Subject to $y_1 . y_2 \ldots y_n = c$ $(c \ne 0)$

and $y_j \ge 0$; j= 1,2,3,.....,n

... OF SCIENCE & TECHNOLOGY,
Assignment Questions.
M.C.A. — 4th semester - 2018
Sub;— Env. & Ecology
Code: — HU-401

1. Define the term environment. What is Biome? What is Biodiversity?

2. What is greenhouse effect? Name major green house gases. What are the effects of green house gases on the global Climate?

3. How does the earth manage its radiation balance to maintain an average temperature of 15°c.?

4. What is ozone hole? How does it happen chemically in the Stratosphere? What is to be done to stop ozone depletion?

5. What is Lithosphere? What are different types of solid Wastes? Discuss the modes of municipal waste disposal.

6. What is acid rain? How does it develop? What are the effects of acid rain?

7. Describe the nitrogen cycle with diagram.

8. Discuss the working principle of trickling filter used in the secondary treatment of waste water.

9. What are the principal sources of SO_2 & NO_2? Mention their detrimental effects.

Write short notes on:

(a) Earth's Albedo   (b) Chemical oxygen demand
(c) Hydrological cycle   (d) Catalytic converter.

BHM- 6TH SEM

SUB: PUBLIC RELATIONS
PAPER CODE: BHM 601

1. Define organizational structure of PR department in hospitals.
2. What is marketing? How does public relation correlate with marketing?
3. Discuss the location, organization and functions of public relations department in a big hospital.
4. Importance of PR in crisis management.
5. Suppose you are a PRO of ABC hospital. How do you organize a press conference for the hospital? What will be our steps?

SUB. : MEDICAL ETHICS
PAPER CODE : BHM-602

Answer the following questions:

A. State the difference between law and Ethics?
B. Discuss in detail the West Bengal Clinical Establishment Act.
C. Enumerate the following as per IMC Regulations, 2012
D. Duties of physician.
E. What is the importance of 'Doctor-Patient Relationship' in Medical Practice? Discuss the various ethical issues of the Doctor-patient Relationship that vex a physician in regular practice. What is Medical Misconduct ? What is Disciplinary Action ?Write in detail the different types of Medical Misconducts as elaborated in Chapter 7 of Code of Medical Ethics of Medical Council of India.
F. What is Euthanasia? What are the types of euthanasia? Describe briefly the debate between the supporters and no supporters of Euthanasia.

SUB: ORGANIZATIONAL BEHAVIOR
PAPER CODE: BHM 603

Q. Answer the following questions.

1. State the concept of group. What is the process of group formation?
2. How do you define Attitude? What are the factors that influence personality?
3. What are the contributing fields of OB?
4. "Leadership is not the same as management". Discuss.
5. Discuss briefly the force field analysis model to explain how the change process works.
6. Group Decision Making has its own merits and demerits. Elucidate.
7. In an organization how human relations are affected by improper communication?
8. Explain the concept of Freud's Psycho-analytical theory of personality.

Answer the followingquestions:

A. What do you mean by Sickness Absenteeism?
B. Write a short note on Miner's black lungs. What are the factors responsible for pneumoconiosis? How will you control industrial cancer?
C. Define occupational health. Enumerate its objectives. Why do you think it is an important branch of study? Lay down the principles of occupational health as declared by WHO/ILO.
D. What are the measures for health protection of workers in respect of communicable disease, environmental sanitation and mental health?
E. Write an essay on principles of radiation protection and its various methods.
   Define disability. What are the various types of disabilities listed in Workman's Compensation Act ? Enumerate the conditions under which an employer is not liable to compensate his employees even when faced with an accident.

BCA- 6TH SEM

ADVANCED NETWORKING AND COMMUNICATION
PAPER CODE: BCAE 601A

1. Applying CRC algorithm, determine the checksum and the transmitted frame for the bit stream 11010111 and for the generator polynomial $x^3 + x^2 + 1$.   .
2. Explain about WAN.
3. Compare UDP and TCP.
4. Explain DNS.
5. Differentiate between static IP address and dynamic IP address.
6. Find the expressions for average delay and throughput for both pure ALOHA and slotted ALOHA.
7. Describe the functions of network layer?
8. Explain Star Topology with proper diagram.
9. What is congestion? How does it occur?
10. Calculate the minimum hamming distance from the following table:

Dataword	Codeword
000	0000
001	0011
010	0101
011	0110
100	1001

101	1010
110	1100
111	1111

SUB: OBJECT ORIENTED PROGRAMMING WITH JAVA
PAPER CODE: BCAE 602B

1. Describe the Java features.
2. Describe various Operators.
3. Syntax with example:
 i) Simple if statement   ii) if-else statement
iii) Nested if-else statement   iv) else if ladder
4. Describe with example Switch case.
5. Syntax with example: i) while   ii) do- while   iii) for   iv) Nested for loop.
6. What is Constructors? Describe with example.
7. What is Methods Overloading? Describe with example.
8. What is Inheritance? Describe with example about Single Inheritance.
9. Describe with example One Dimensional Arrays.
10. Describe with example Two Dimensional Arrays.