

INSTITUTE OF SCIENCE & TECHNOLOGY

ASSIGNMENT QUESTION

BHM-3RD SEM

PAPER NAME : MEDICAL RECORD SCIENCE

PAPER CODE : BBA(HM) 301

- 1) Write a short note on Microfilming.
- 2) Discuss briefly about Importance of Medical Record.
- 3) Write a short note on Hospital statistics.
- 4) Discuss Medical audit.
- 5) Different between ICD9 and ICD 10

PAPER NAME : HEALTH CARE MARKETING

PAPER CODE : BBA(HM) 302

- 1) Write a short note on Marketing Mix.
- 2) Discuss briefly about Importance of Marketing in the health sectors.
- 3) Discuss about nature and significance of consumer behavior.
- 4) Discuss briefly on New Product Development.
- 5) Write a note about importance of price in the marketing mix.

PAPER NAME: HEALTH INFORMATION SYSTEMS

PAPER CODE : BBA(HM) 303

1. What is Data? Give Example
2. What is Information? Give Example
3. What are the classifications of Information?
4. What are the Resources of Information?
5. What is Primary and Secondary Data? Explain with Examples?
6. What are the difference between Data and Information?

PAPER NAME : HEALTH EDUCATION & COMMUNICATION

PAPER CODE : GE1B-03

- A. Elaborate on the organization and function of CSSD in a hospital with special reference to physical facilities, location and problem areas.
- B. Define HAI. What are the causes and routes of spread for nosocomial infection? Discuss briefly about hospital infection control Programme.
- C. Explain in brief the meaning, significance and importance of support and utility service to health care delivery system.
- D. Importance of Laundry services, Describe the storage conditions of a linen room. Describe the laundry process and the equipment use.
- E. Explain the importance of housekeeping services in the hospital..
- F.

BCA-3RD SEM-THEORY

PAPER NAME : OPERATING SYSTEMS

PAPERCODE : BCAC302

1. Explain about Batch Processing.
2. Explain the advantages and disadvantages of Batch Processing.
3. Explain Thrashing.
4. Write down the process of deadlock avoidance.
5. What are the differences between Time Sharing System and Batch Processing System?

PAPER NAME : OBJECT ORIENTED PROGRAMMING

PAPER CODE: BCAC301

1. What is a platform? What are the main difference between java platform and other platforms?
2. What is string in java? What are different ways to create string object?

3. How to use inheritance in java? What is the syntax of inheritance?
 4. What is an abstract class in java? What is an interface in java?
 5. Write a java program to print Fibonacci series without using recursion and using recursion.
- Input: 10
Output: 0112358132134

PAPER NAME : DATA STRUCTURE AND ALGORITHM

PAPER CODE : BCAC303

1. a) State and explain different types of string functions with example.
b) Explain dynamic memory allocation and releasing dynamically allocated memory.
2. a) Explain in detail array of structure and pointer to structure.
b) State and explain various modes of file opening and file closing.
3. What do you mean by pre-processor? Explain in detail macros.
4. a) Define array. Explain different types of array in detail.
b) State and explain various types of standard function with example.
5. a) State and explain different phases used in user defined function.
b) Explain function with return and function with arguments with example.

PAPER NAME : VALUE AND ETHICS OF PROFESSION

PAPER CODE : BCAS301

1. Discuss science, technology and engineering as social and professional activity.
2. What do you understand by Whistle Blowing? Are whistle blowers disloyal workers?
3. Define the term 'Corporate Social Responsibility'. How can a company provide support to the society through proper implementation of Corporate Social Responsibility?
4. Discuss the role of engineers and technologists in the development of the society.
5. Write in brief on the Report of Club of Rome.

PAPER NAME : PROBABILITY & STATISTICS

PAPER CODE : GE3B-10

1. Construct a pie chart for the following data:

Principal Exporting Countries of Cotton

(1,000 bales)-1955-56

U.S.A	India	Brazil	Egypt	Argentina
6,367	2,999	1,688	650	202

2. The chance that a doctor will diagnose a certain disease correctly is 60%. The chance that a patient will die by his treatment after correct diagnosis is 40% and the chance of death by wrong diagnosis is 70%. A patient of the doctor who had the disease dies. What is the probability that the disease was diagnosed correctly?
3.) Let the lines of regression concerning two variables x and y be given by $y=32-x$ and $x=13-0.25y$. Obtain the values of the means and the correlation coefficient.
4. Show that $P(A \cap B) \leq P(A)$ $P(A \cup B) \leq P(A) + P(B)$.
5. Three coins are tossed. Find the probabilities of i) 0 head; ii) 1 head, 2 heads, 3 heads; iii) more than 1 head; iii) at least 1 head.
6. The arithmetic mean calculated from the following frequency distribution is known to be 67.45. Find the value of missing frequency.

Height (inches)	60-62	63-65	66-68	69-71	72-74
Frequency	16	54	?	81	24

BCA-3RD SEM-PRACTICAL

PAPER NAME : OBJECT ORIENTED PROGRAMMING LAB

PAPER CODE : BCAC391

1. Write a Java program to divide two numbers and print on the screen.
2. Write a Java program that takes a number as input and prints its multiplication table upto 10
3. Write a Java program to print the area and perimeter of a circle.
4. Write a Java program that takes three numbers as input to calculate and print the average of the numbers.
5. Write a Java program to swap two variables.
6. Write a Java program to reverse a string.

PAPER NAME : OPERATING SYSTEM LAB

PAPER CODE : BCAC392

1. Simulate the FCFS CPU scheduling algorithms in C.
2. Write a C program to simulate producer-consumer problem using Semaphores
3. Write a C program to simulate the concept of Dining-philosophers problem.
4. Simulate MVT and MFT.
5. Write a C program to simulate the Worst fit contiguous memory allocation Techniques
6. Simulate FIFO page replacement algorithms.

PAPER NAME : DATA STRUCTURE LAB

PAPER CODE : BCAC393

1. Write a program for binary search.
2. Write a program for insertion sort.
3. Write a program to implement tree with insert and delete.
4. Write a recursive program to find factorial.
5. Write a program for Merge sort.
6. Write a program to implement queue.

BBA-3RD SEM

PAPER NAME : BUSINESS RESEARCH METHODS

PAPER CODE: BBA 301

1. What is Business Research?
2. Difference between Pure and Applied Research?
3. How Research Method is processed in Survey?
4. What is the element of Good Research Method?
5. What are the Difference between Exploratory, Descriptive and Explanatory Research

PAPER NAME: FINANCIAL ACCOUNTING

PAPER CODE : BBA 302

1. What do you know about GAAP.
2. What are the Characteristics of Final Accounts
3. Distinguish between Journal and Ledger.
4. What are the benefits of Accounting in MIS?
5. Discuss various classifications of receipts.

PAPER NAME: MARKETING MANAGEMENT

PAPER CODE : BBA 303

1. Write a short note on SWOT.
2. Discuss the Marketing concepts-Traditional and Modern.
3. Explain the steps of New product development.

4. Write down the importance of price in the Marketing Mix.
5. Differences between consumer buying and industrial buying behavior.

PAPER NAME: PRINCIPLES OF MANAGEMENT
PAPER CODE : GE5B-01

1. Define delegation of authority. State various elements of delegation.
2. Define long term plans. Differentiate between standing and special use plans.
3. Explain the various steps of MBO process. Give the limitations of MBO. Explain briefly the concept of leadership.
4. Management is both a science and an art----elucidate.
5. Briefly explain Matrix structure of an organization.

PAPER NAME : PERSONALITY DEVELOPMENT
PAPER CODE: BBA 305

1. Define Personality. How can it be development?
2. What do you mean by "good personality"?
3. What are personality traits of an individual?
4. Mention some tips for personality development.
5. What are benefits of Positive Attitude?

MHA-3RD SEM

PAPER NAME : UTILITY & CLINICAL SERVICE AREA
PAPER CODE: MHAN-301

1. Elaborate on the organization and function of CSSD in a hospital with special reference to physical facilities, location and problem areas.
2. Define HAI. What are the causes and routes of spread for nosocomial infection? Discuss briefly about hospital infection control Programme.
3. Explain in brief the meaning, significance and importance of support and utility service to health care delivery system.
4. Importance of Laundry services, Describe the storage conditions of a linen room. Describe the laundry process and the equipment use.
5. Explain the importance of housekeeping services in the hospital.

PAPER NAME : HEALTH INSURANCE
PAPER CODE: MHAN-302

1. What steps should be taken by the state for social insurance for the population of the country. Discuss.
2. Discuss point wise all issues and conditions which are not covered in any health insurance policy. What suggestion you have to avoid the principle of 'not covered'? what are the Income Tax benefits of premium paid for health insurance as per Finance Act, 2012 (as amended).
3. Give the general principles of insurance. Critically examine each and suggest your views for improvement of such principles.
4. Enumerate the types of approved health insurance policies-----discuss their advantages and disadvantages.

PAPER NAME : LEGAL ASPECT OF HEALTH
PAPER CODE: MHAN-303

1. Discuss the essential conditions of liability in Tort? How is tort different from the criminal law? Give two examples of torts committed in the medical profession.
2. Discuss in detail the PNDT Act with its applications in a large hospital having both USG & CT scan machines.
3. Discuss Donation of organs Act. What are its salient features and penal provisions under this Act.
4. Write down the objectives and salient features of West Bengal Clinical Establishment Act. Why this act is called the backbone of health care delivery system?

PAPER NAME : OPERATIONAL RESEARCH

PAPER CODE: MHAN-304

Answer the following questions.

1. Write down the queuing model for $\{(M/M/1) : (N/FCFS)\}$
2. Use two-phase simplex method to solve the following LPP problem:

$$\text{Maximize } z = 3x_1 + 2x_2 + 2x_3$$

$$\text{Subject to } 5x_1 + 7x_2 + 4x_3 \leq 7$$

$$-4x_1 + 7x_2 + 5x_3 \geq -2$$

$$3x_1 + 4x_2 - 6x_3 \geq 29/7, \quad x_1, x_2, x_3 \geq 0.$$

3. Machine A costs Rs 45,000 and its operating costs are estimated to be Rs 1,000 for the first year increasing by Rs 10,000 per year in the second and subsequent years. Machine B costs Rs 50,000 and operating costs are Rs 2,000 for the first year, increasing by Rs 4,000 in the second and subsequent years. If at present we have a machine of type A, should we replace it with B? If so when? Assume that both machines have no resale value and their future costs are not discounted?

PAPER NAME : HUMAN RESOURCE MANAGEMENT & INDUSTRIAL RELATIONS

PAPER CODE: MHAN-305

1. What do you understand by employee discipline? What is the charge sheet? State the procedure to carry out any enquiry a charge sheeted employee.
2. Explain the term 'promotion' and 'transfer'. State the different types of promotion and transfer. Discuss the role of promotion and transfer in the career planning of the employees.
3. Discuss the advantages and disadvantages of internal sources of recruitment. Briefly explain the selection process.
4. Explain the process of recruitment. Write, in brief, the sources of recruitment along with advantages and disadvantages of internal and external recruitment?

PAPER NAME : MARKETING AND STRATEGIC MANAGEMENT

PAPER CODE: MHA-306

1. Discuss the various bases for segmenting consumer markets. Being a marketing manager of a reputed hospital how you will target both the primary and secondary customer?
2. Describe the various factors you would like to consider for selecting the channel partners for hospitals. How the choice affects the business of the hospital?
3. You have been appointed as consultant by a consultancy firm to design a marketing strategy for an upcoming corporate hospital with capacity of 50 beds. Use Porter's Generic model as a good starting point.
4. Marketing strategy and planning are of little value without a system of control. What control procedures can be employed by marketing management?

MCA-3RD SEM-THEORY

PAPER NAME : SOFTWARE ENGINEERING USING UML

PAPER CODE: MCAN-301

1. a) What is SRS? Write down the features of a good SRS.
b) A project was estimated to be 500 KLOC. Calculate the effort development time, average Staff size and productivity level for the Semi detached model Organic model
2. What is the difference between Cohesion and coupling? With proper example explain why a Good system requires high cohesion low coupling?
3. What is testing? What is the importance of testing? What are terms related to testing?
4. Differentiate between black box testing and white box testing. What is acceptance testing?

5. a) Define DFD. Explain all the symbols present in DFD.
- b) What is software crisis? How it can be avoided?

PAPER NAME : ARTIFICIAL INTELLIGENCE

PAPER CODE : MCAN-302

1. What do you understand by Artificial Intelligence?
2. Why do we need Artificial Intelligence?
3. Give some real-world applications of AI.
4. How Artificial intelligence, Machine Learning, and Deep Learning differ from each other?
5. What are the types of AI?
6. What are the different domains/Subsets of AI?

PAPER NAME : DESIGN AND ANALYSIS OF ALGORITHM

PAPER CODE : MCAN-303

1. What is an algorithm?
2. What are important problem types? (or) Enumerate some important types of problems.
3. What are algorithm design techniques?
4. How is an algorithm's time efficiency measured?
5. What is Big 'Oh' notation?
6. What is recursive call?

PAPER NAME : BASIC DATA SCIENCE

PAPER CODE: MCAN-E304F

1. What does one understand by the term Data Science?
2. What is the difference between data analytics and data science?
3. What are some of the techniques used for sampling? What is the main advantage of sampling?
4. List down the conditions for Overfitting and Underfitting.
5. Differentiate between the long and wide format data.
6. What are Eigenvectors and Eigenvalues?

PAPER NAME : GRAPH THEORY

PAPER CODE: MCAN E305D

1. Prove that a tree with n vertices has (n-1) edges.
2. Define the terms with example.
Loops, parallel edges, simple graph, multiple graph, adjacent edges.
3. Draw the graph G corresponding to each adjacency matrix

$$A = \begin{bmatrix} 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 & 0 \end{bmatrix}$$

4. Describe Prim's algorithm.
5. Prove that a simple graph with n number of vertices and k number of components can have maximum $\frac{(n-k)(n-k+1)}{2}$ number of edges

MCA-3RD SEM-PRACTICAL

PAPER NAME : BASIC DATA SCIENCE LAB

PAPER CODE: MCAN-E394F

1. Detect the outliers(if exists), impute the outliers using suitable methods.
2. Implement simple linear regression with suitable datasets, observe the standard error, p-value, R-square values.
3. Implement the multivariate regression with suitable datasets and present the outputs
 - (a) What percentage of variation in the response is explained by these predictors?
 - (b) Which observation has the largest (positive) residual? Give the case number.
 - (c) Compute the mean and median of the residuals.
 - (d) Compute the correlation of the residuals with the fitted values.
 - (e) Compute the correlation of the residuals with the target variable.

BHM-5THSEM

PAPER NAME : QUALITY IN HEALTH CARE

PAPER CODE :BHMN-501

- 1) What is NABH? What are the elements of NABH? Examine the steps involved in obtaining NABH for a hospital.
- 2) PDCA cycle
- 3) Quality Health care through patient satisfaction.
- 4) Describe ISO 9000, its elements, advantages and disadvantages with special reference to a hospital.
- 5) What are the determinants of Quality? Enumerate 4 tools for evaluating quality.

PAPER NAME : HEALTH INSURANCE

PAPER CODE : BHMN-502

1. What steps should be taken by the state for social insurance for the population of the country. Discuss.
2. Discuss point wise all issues and conditions which are not covered in any health insurance policy. What suggestion you have to avoid the principle of 'not covered'? what are the Income Tax benefits of premium paid for health insurance as per Finance Act, 2012 (as amended).
3. Give the general principles of insurance. Critically examine each and suggest your views for improvement of such principles.
4. Enumerate the types of approved health insurance policies-----discuss their advantages and disadvantages.

PAPER NAME : CLINICAL LAW & MEDICAL ETHICS

PAPER CODE : BHMN-503

1. What is mercantile law? Mention the different types of contracts. Who are not eligible to enter into a contract? What are the circumstances under which a minor can enter into a contract?
2. Mention the rights of a consumer. What are the objectives of Consumer Protection Act? State how consumers can settle disputes with the help of Redressed Agencies.
3. What do you understand by the term 'free consent'? What are the conditions under which consent is said to be free? Explain with examples.
4. 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.
5. State the classification of contract.

PAPER NAME : HUMAN RESOURCE MANAGEMENT

PAPER CODE : BHMN-504

1. Explain the concept of Collective bargaining. What are the essential features of Collective Bargaining Process?
2. Explain the term 'promotion' and 'transfer'. State the different types of promotion and transfer. Discuss the role of promotion and transfer in the career planning of the employees.
3. Discuss the advantages and disadvantages of internal sources of recruitment. Briefly explain the selection process.
4. Explain the process of recruitment. Write, in brief, the sources of recruitment along with advantages and disadvantages of internal and external recruitment?
5. Explain briefly on grievance handling.

BCA-5TH SEM-THEORY
PAPER NAME : CYBER SECURITY
PAPER CODE – BCAN501

1. What is Intellectual property Law? What is development of information system?
Explain spiral model of information system
2. What is Cyber security? How to secure your information explain in detail?
3. What is smart card? Differentiate between Credit and Debit card?
4. What is the Cyber crime? Discuss the categories of cyber crime and cyber law.
5. What is the security Architecture of information system?

PAPER NAME : UNIX & SHELL PROGRAMMING
PAPER CODE: BCAN502

1. Describe briefly the UNIX architecture explaining the role played by the kernel and shell in sharing the workload.
2. What do multiprogramming, multiuser and multitasking mean?
3. Why are many UNIX commands designed to perform simple rather than complex tasks?
4. How do you direct **man** to use a specific pager, say, **less**?
5. What is the default location of a user's mailbox on UNIX and Linux system?

PAPER NAME : MANAGEMENT & ACCOUNTING
PAPER CODE : BCAN503

1. What are the differences between Trial Balance and Balance Sheet? Explain Accounting process in detail
2. Differentiate between Cash Budget and Flexible Budget.
3. Explain various assumptions of EOQ.
4. Explain the concept of CVP Analysis.
5. What are the functions of Financial Management?
6. "Planning is an important part of management" – Explain.

BCA-5TH SEM-PRACTICAL
PAPER NAME : LINUX LAB
PAPER CODE : BCAN592

- How to change the file owner and group and changing the access and modifications times of a file. Show it with an example.
- How to change date and time in Unix system and show calendar and create a user id and change the password.
- Write a c program largest of three numbers and show the result using vi editor.
- Write a c program for factorial of a number and show the result using vi editor.

BBA-5TH SEM
PAPER NAME :FINANCIAL MANAGEMENT
PAPER CODE :BBAN-501

1. Differentiate LIFO and FIFO.
2. How does the concept of "Economic Order Quantity" (EOQ) help manufacturing companies to cut costs?
State the assumptions taken while applying the EOQ.
3. Briefly explain Labour Turnover.
4. Discuss the advantages and disadvantages of LIFO method.
5. Differentiate Job costing and Batch costing.

PAPER NAME : SALES & DISTRIBUTION OF MANAGEMENT
PAPER CODE:BBAN502

1. What are the factors that determine choice of channels of distribution ?
2. What are the different types of sales quota ?
3. What measures can be taken up to improve territory productivity?
4. What do you understand by the term sales force ? Why is controlling and motivation essential for sales force
5. Define public distribution and elaborate its special features. Also discuss its role and importance

PAPER NAME :HUMAN RESOURCE DEVELOPMENT

PAPER CODE :BBAN503

1. State the importance of HRM audit.
2. Define the concept of learning organization
3. State the concept of Mentoring.
4. Explain the term 'career planning'. Outline and discuss the career stages. What problem may be encountered in career planning?
5. What is executive development? Why executive development necessary? Describe in brief the methods of executive development.

PAPER NAME : ENTREPRENEURSHIP DEVELOPMENT

PAPER CODE :BBAN504

1. Discuss the role of Entrepreneurs in complementing the economic growth of a country. How the innovative power of the entrepreneurs help in this respect?
2. Peter Drucker says "Knowledge is the business." How far is it true for entrepreneurship? Name the different knowledge areas that help an Entrepreneur to be successful in his venture
3. What is a project report? What is meant by feasibility analysis? Prepare a specimen project feasibility report for an SSI unit.
4. Discuss about the needs of Entrepreneurship Development Programmes in a developing country. State the problems normally faced by EDPs.
5. Entrepreneurship is a process of creative destruction. Explain.

PAPER NAME :RESEARCH METHODOLOGY

PAPER CODE – BBAN-505

1. Explain types of Research.
2. Write a short note on Steps of social research.
3. What do you know about Primary and Secondary data.
4. What are the various types of sampling?
5. Discuss Coding and Graphs.

MCA-5TH SEM-THEORY

PAPER NAME : IMAGE PROCESSING

PAPER CODE: MCAE-501B

1. What is sampling? What is quantization? What is the relation between them?
2. What is meant by image segmentation? What its use in image processing?
3. What is Image smoothing? Explain image smoothing using ideal low pass filters and Butterworth low pass filters?
4. Explain edge linking using Hough transform.
5. Explain about edge detection using gradient operator.

PAPER NAME : WINDOWS PROGRAMMING WITH VB

PAPER CODE – MCAE-502B

1. What is Multiple Document Interface(MDI)?Write an event procedure for a command button to find the smallest among the 3 numbers given.

2. What is difference between hide and upload form methods? In Window based programming what do you mean by controls, properties of control, events and methods?
3. What is dialog box? How many types of dialog boxes are there in VB?
4. Explain difference between ByVal and ByRef. When would each be used?
5. What is Window Registry? What is the role of Registry Editor?

PAPER NAME : OBJECT ORIENTED PROGRAMMING WITH JAVA

PAPER CODE: MCAE-503B

1. Write a Java program to check any character is vowel or consonant.
2. Write a Java program to print the greater number among three numbers.
3. Write a Java program to check **153** is Armstrong number or not.
4. Write a Java program to print the reverse number of any number. (e.g. like 123 = 321).
5. Write a Java program to check any number is prime or not.

PAPER NAME : E-COMMERCE

PAPER CODE: MCAE-504B

1. What is Electronic Data Exchange? Explain with the help of proper diagram and give examples.
2. What legal issues are associated with internet commerce? Explain them
3. Draw the Generic Trade cycle and briefly explain it.
4. Describe the component of EDI in electronic market?
5. Explain about Virtual Auction.
- 6.

PAPER NAME : VALUE & ETHICS OF PROFESSION

PAPER CODE:HU501

1. Discuss science, technology and engineering as social and professional activity.
2. What do you understand by Whistle Blowing? Are whistle blowers disloyal workers?
3. Define the term 'Corporate Social Responsibility'. How can a company provide support to the society through proper implementation of Corporate Social Responsibility?
4. Discuss the role of engineers and technologists in the development of the society.
5. Write in brief on the Report of Club of Rome.

MCA-5TH SEM-PRACTICAL

PAPER NAME : WINDOWS PROGRAMMING WITH VB LAB

PAPER CODE: MCAE592B

1. Write a program in VB to design a calculator.
2. Write a program in VB to find out book price after given 15% discount.
3. Write a program in VB to change the font and color of a word.
4. Write a program in VB to calculate the area of a triangle.