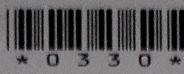


**B.Tech. First Year (First Semester) Artificial Intelligence & Data Science / Computer Science
 & Engineering / ML / Electronics & Telecommunication Engineering**

Computer Programming

AI24103 / CS24103 / ML24103 / ET24104

Total Pages : 3



* 0 3 3 0 *

Time : Three Hours

Max. Marks : 60

Instructions to Candidates :

1. Assume suitable data wherever necessary.

1. A) Solve the following multiple-choice question/s.

- i) Which of the following is not a valid C variable name? 1
 - a) my_variable
 - b) variable_1
 - c) 5_variable
 - d) variable_my
- ii) What is the purpose of the #include directive? 1
 - a) To define a function
 - b) To declare a variable
 - c) To include header files
 - d) To create a loop

B) Solve **any two** questions of the following.

- i) Define Algorithm? Explain its characteristic with example. 4
- ii) Classify different Operators in C with example. 4
- iii) Write a C program which includes the following. 4
 - a) Keyword
 - b) Identifier
 - c) basic input & output functions.

2. A) Solve the following multiple-choice question/s.

- i) Which control flow statement is used to repeatedly execute a block of code until a certain condition is met? 1
 - a) switch
 - b) for
 - c) if
 - d) do
- ii) What is the purpose of the return statement? 1
 - a) To declare a variable
 - b) To define a function
 - c) To exit a function and return a value
 - d) To jump to a specific label

B) Solve **any two** questions of the following.

- i) Define Loops & demonstrate all the types of loops with syntax & example. 4
- ii) Develop a C Program to read the month number & display the month name as an output. 4
- iii) Write a C Program to read the marks from user and display the result as per the following. 4

Marks	Result
10	Excellent
7-9	Good
5-6	Average
1-4	Poor

3. A) Solve the following multiple-choice question/s.

- i) How is an array declared in C? 1
 - a) `data_type array_name[array_size];`
 - b) `array_size data_type array_name;`
 - c) `data_type array_name(array_size);`
 - d) `array_size array_name data_type;`
- ii) What is the output of the following code? 1


```
int arr [2][3] = {{1, 2, 3}, {4, 5, 6}};
printf("%d", arr[1][1]);
```

 - a) 1
 - b) 2
 - c) 3
 - d) 5

B) Solve **any two** questions of the following.

- i) Develop a C Program for the addition of two matrices. 4
- ii) Define Strings. Explain the different ways of declaring & initializing strings. 4
- iii) Define array. Enlist its types and explain all with syntax & example. 4

4. A) Solve the following multiple-choice question/s.

- i) What are the two main types of functions in C? 1
 - a) Built-in and user-defined
 - b) Local and global
 - c) Static and dynamic
 - d) Recursive and iterative
- ii) What is the purpose of the void keyword in a function declaration? 1
 - a) To indicate that the function returns no value
 - b) To indicate that the function takes no arguments
 - c) To indicate that the function is recursive
 - d) To indicate that the function is static

B) Solve **any two** questions of the following.

- i) Classify different string handling functions with explanation & example. 4
- ii) Explain User defined functions? Discuss the four different ways to write user defined functions. 4
- iii) Write a C Program to perform arithmetic operations using functions. 4

5. A) Solve the following multiple-choice question/s.

- i) How is a pointer declared in C? 1
 - a) `data_type * pointer_name;`
 - b) `*pointer_name data_type;`
 - c) `pointer_name *data_type;`
 - d) `data_type pointer_name*;`
- ii) What is the output of the following code? 1


```
int x=10;
int *ptr = & x;
printf("%d", *ptr);
```

 - a) The address of x
 - b) 10
 - c) The memory address of ptr
 - d) 10A2F

B) Solve **any two** questions of the following.

- i) Explain array of pointers with example. 4
- ii) Write a C Program to demonstrate call by reference mechanism. 4
- iii) Define pointer arithmetic & explain it with example. 4

6. A) Solve the following multiple-choice question/s.

- i) What is the purpose of the `typedef` keyword with structures? 1
 - a) To create a new data type
 - b) To define a function
 - c) To declare a variable
 - d) To allocate memory
- ii) What is the size of a structure? 1
 - a) The sum of the sizes of its members
 - b) The size of the largest member
 - c) The size of the first member
 - d) The size of the last member

B) Solve **any two** questions of the following.

- i) Discuss file handling mechanism and discuss different file operations with example. 4
- ii) Define Structures. Demonstrate it with example. 4
- iii) Write a C program to create a structure students and store the name, rollno & marks of three students and display the information. 4

**B.Tech. First Year (First Semester) Artificial Intelligence & Data Science / Computer Science
& Engineering / ML**

Problem Solving Techniques
(AI24104 / CS24104 / ML24104)

Total Pages : 4



* 0 3 2 9 *

Time : Three Hours

Max. Marks : 60

1. A) Solve the following multiple-choice question/s.

- i) Which of the following is the first stage of the Problem Design Process? 1
 - a) Analyze
 - b) Define
 - c) Develop
 - d) Test.

- ii) In the "Define" stage of the Problem Design Process, which of the following is primarily established? 1
 - a) Solution criteria
 - b) Problem and objectives
 - c) Testing methods
 - d) Development timeline

B) Solve **any two** questions of the following.

- i) Explain the importance of the "Define" stage in the Problem Design Process and how it contributes to the overall success of a design project. 4

- ii) List and describe the seven stages of the design process, providing a brief explanation of the purpose of each stage. 4

- iii) Justify the importance of proposition. 4

2. A) Solve the following multiple-choice question/s.

- i) Which of the following best describes secondary research? 1
 - a) Collecting original data through surveys or interviews
 - b) Gathering data from already existing sources like reports and studies.
 - c) Conducting experiments to generate new information
 - d) Collecting data directly from a target audience.

- ii) What is the primary objective of collecting background information during research? 1
 - a) To identify technical issues in the product
 - b) To gain insights into existing knowledge and understand the context.
 - c) To test the product's functionality
 - d) To brainstorm new product ideas.

B) Solve any two questions of the following.

- i) Elaborate upon the steps involved in creating potential solutions during the ideation stage and explain how each step contributes to the overall process. 4
- ii) Describe the Prototyping stage with its primary purpose of resolution of the solution. 4
- iii) Compare and contrast primary and secondary research methods, explaining how they can both be integrated into the ideation stage. 4

3. A) Solve the following multiple-choice question/s.

- i) Which of the following best describes the “Select” stage in problem-solving? 1
 - a) Analyzing the problem
 - b) Making choices among various solutions.
 - c) Gathering data for the solution
 - d) Implementing the solution
- ii) In the “Implement” stage of a design process, what is the primary objective? 1
 - a) Defining the problem
 - b) Developing multiple solutions.
 - c) Delivering the solution to meet the design brief
 - d) Evaluating feedback

B) Solve any two questions of the following.

- i) Explain the importance of the “Select” stage in the problem-solving process. How does it influence the final outcome of the project? 4
- ii) Describe the steps involved in the “Implement” stage and how you would ensure the solution is delivered according to the design brief. 4
- iii) What role does the “Learn” stage play in refining a solution, and how can feedback be used to improve future designs? 4

4. A) Solve the following multiple-choice question/s

- i) Which of the following is a key reason why problem-solving techniques are important in Computer Science? 1
 - a) They help improve hardware performance
 - b) They assist in understanding algorithmic complexity
 - c) They increase programming speed without testing
 - d) They simplify code structure without optimizing performance.
- ii) Which of the following is an example of a basic problem-solving technique in Computer Science? 1
 - a) Binary Search
 - b) Data Encoding
 - c) Parallel Computing
 - d) Object-Oriented Programming

- B) Solve **any two** questions of the following.
- Demonstrate Divide and Conquer Problem solving technique in Computer science with example. 4
 - How do problem-solving techniques impact the efficiency of algorithms in Computer Science? 4
 - Describe algorithmic design and heuristic approaches with an example for each. 4
5. A) Solve the following multiple-choice question/s
- Which of the following is the primary purpose of brainstorming in problem-solving? 1
 - To evaluate the final solution
 - To generate multiple ideas
 - To select the most suitable decision
 - To prioritize problems
 - What is the key difference between problem-solving and decision-making? 1
 - Problem-solving is about finding the cause, decision-making is about choosing the best option.
 - Problem-solving involves choosing between options, decision-making involves executing a plan
 - Problem-solving is used only in business contexts, decision-making is only used in personal life
 - There is no difference between the two
- B) Solve **any two** questions of the following.
- Explain the concept of brainstorming and how it can be applied in problem-solving. Provide an example of its application. 4
 - Discuss the key techniques used in problem-solving and decision-making. Compare and contrast these techniques in terms of their objectives and applications. 4
 - Analyze how combining problem-solving and decision-making techniques can lead to more effective results. Use a real-world scenario to illustrate your analysis. 4
6. A) Solve the following multiple-choice question/s.
- Which of the following is the first step in the computer-based problem-solving process? 1
 - Program Design
 - Coding
 - Problem Analysis
 - Compilation & Execution
 - What does pseudocode represent in the problem-solving process? 1
 - A programming language syntax
 - A graphical representation of logic
 - A high-level description of an algorithm
 - A flowchart of the program's steps

B.Tech. First Year (First Semester) Artificial Intelligence & Data Science /
Computer Science & Engineering / ML

Green Chemistry and Environment - AI24102 / CS24102 / ML24102

Total Pages : 3



• 0 3 3 8 •

Time : Three Hours

Max. Marks : 60

Instructions to Candidates:

1. All questions carry equal marks.
 2. Diagrams and chemical equations should be given wherever necessary.
 3. Discuss the reaction, mechanism wherever necessary.
 4. Questions from 1A, 2A, 3A, 4A, 5A, 6A are compulsory.
 5. Solve **any two** questions from 1B, 2B, 3B, 4B, 5B, 6B.
 6. You can use a scientific calculator during exams.

1. A) Solve the following multiple choice questions.

1

- ii) Temporary Hardness of water caused by-----

 - a) Calcium Chloride b) Magnesium Sulphate
 - c) Both (a)(b). d) Calcium bicarbonate

1

B) Solve **any two** questions of the following.

- i) Explain the principle of method used to determine the hardness of water.

4

- ii) Estimate the total, temporary and permanent hardness of water in degree French containing the following salts $Mg(HCO_3)_2 = 292$ PPM, $Ca(HCO_3)_2 = 243$ PPM, $MgCl_2 = 190$ PPM, $CaSO_4 = 204$ PPM, $SiO_2 = 23$ PPM.

4

- iii) Discuss the de-ionization method of water softening with the help of a diagram.

4

2. A) Solve the following multiple choice questions.

- i) The nanogold particles are red in color.
True/False

1

- ii) The strength of nanomaterial is----

 - a) Less than bulk material
 - b) Equal to that of bulk material
 - c) More than bulk material
 - d) Changes with the variables

1

B) Solve **any two** questions of the following.

- i) Classify nanomaterial on the basis of origin and dimensions with examples. 4
- ii) Compare top down and bottom up approach for the nanomaterial synthesis. 4
- iii) Justify the statement "the properties of bulk material differ from nanomaterial". 4

3. A) Solve the following multiple choice questions.

- i) Bakelite is a thermosetting polymer. 1
True/False
- ii) The monomer present in natural rubber is----- 1
 - a) Iso butyl
 - b) Styrene
 - c) Isoprene
 - d) Poly isoprene

B) Solve **any two** questions of the following.

- i) Describe the classification of polymers on the basis of structure and tacticity. 4
- ii) Identify the product and explain the free radical mechanism of addition polymerization reactions.
 $\text{CH}_3 - \text{CH} = \text{CH}_2 \rightarrow ?$ 4
- iii) Explain the preparation, properties and uses of (1) Bakelite (2) Butyl Rubber 4

4. A) Solve the following multiple choice questions.

- i) Which toxic compound is not found in e-waste? 1
 - a) Mercury
 - b) Cadmium
 - c) Neon
 - d) Lead
- ii) The element lead has the greatest impact on the central nervous system. 1
True/False

B) Solve **any two** questions of the following.

- i) Explain any four principles of green chemistry with examples. 4
- ii) Estimate the % atom economy with respect to (a) ethylene and (b) ethanol of given reaction.
 - a) $\text{CH}_3\text{CH}_2\text{OH} \rightarrow \text{CH}_2 = \text{CH}_2 + \text{H}_2\text{O}$
 - b) $\text{C}_6\text{H}_{12}\text{O}_{6(\text{aq})} \rightarrow 2\text{C}_2\text{H}_5\text{OH}_{(\text{aq})} + 2\text{CO}_{2(\text{g})}$
- iii) Explain with the help of reaction "The green synthesis of adipic acid is more environmentally friendly than conventional one". 4

5. A) Solve the following multiple choice questions.

- i) Renewable resources include---- 1
 - a) Solar Energy
 - b) Petroleum
 - c) Coal
 - d) Mineral

- ii) Biodiversity is preserved due to deforestation. 1
True/False

B) Solve **any two** questions of the following.

- i) Explain the various uses of forest resources and causes of deforestation. 4
- ii) Explain the effect of over-utilization of surface and ground water resources. 4
- iii) Discuss the major environmental impacts of mineral extraction. 4

6. A) Solve the following multiple choice questions.

- i) Which of the following is not a primary air pollutant? 1
 - a) CO
 - b) NO
 - c) O₃
 - d) O₂

- ii) Most ozone gas about 90% is located in the atmospheric layer of---- 1
 - a) Ionosphere
 - b) mesosphere
 - c) Stratosphere
 - d) troposphere

B) Solve **any two** questions of the following.

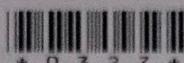
- i) Explain in detail various act for prevention and control of air pollution. 4
- ii) Explain the causes & consequences of ozone layer depletion. 4
- iii) Describe the salient features of watershed management. 4

B.Tech. First Year (First Semester) Artificial Intelligence & Data Science /
Computer Science & Engineering / ML
Mathematics for Computing-I
(AI24101 / CS24101 / ML24101)

AIM24183.

Total Pages : 4

Time : Three Hours



* 0327 *

Max. Marks : 60

Instructions to Candidates :

1. Assumes suitable data wherever necessary.
 2. Use of calculator is permitted.
 3. Use of pen Blue/Black Ink/refill only for writing the answer book.

1. A) Solve the following multiple-choice question/s.

B) Solve **any two** questions of the following-

- i) Find the rank and Nullity of matrix A

Where $A = \begin{bmatrix} 0 & 1 & -3 & -1 \\ 1 & 0 & 1 & 1 \\ 3 & 1 & 0 & 2 \\ 1 & 1 & -2 & 0 \end{bmatrix}$

ii) Identify the values of λ and μ so that the equations $x + y + z = 6$, $x + 2y + 3z = 10$, $x + 2y + \lambda z = \mu$ have

 - i) No solution
 - ii) Unique solution
 - iii) Infinite Number of solution

- iii) Apply the Cayley Hamilton theorem to find inverse of matrix $A = \begin{bmatrix} 1 & 3 & 7 \\ 4 & 2 & 3 \\ 1 & 2 & 1 \end{bmatrix}$ 4

2. A) Solve the following multiple-choice question/s.

- i) Idempotent matrix is-
 a) Non singular matrix b) Singular matrix
 c) Symmetric matrix d) Non symmetric matrix
- ii) If M is matrix and $MM^T = I$ then M is-
 a) Idempotent Matrix b) Orthogonal Matrix
 c) Symmetric Matrix d) Row matrix

1

1

B) Solve **any one** question of the following-

- i) Find the Eigen values and Eigen vectors for the matrix
- $$\begin{bmatrix} 4 & 6 & 6 \\ 1 & 3 & 2 \\ -1 & -4 & -3 \end{bmatrix}$$

8

- ii) Solve $4x + y - z = 13$, $3x + 5y + 2z = 21$, $2x + y + 6z = 14$ using LU decomposition method.

8

3. A) Solve the following multiple-choice question/s.

- i) The nth derivative of $y = \frac{1}{(ax+b)}$ then y_n is
- a) $\frac{a^n n! (-1)^n}{(ax+b)^{n+1}}$ b) $\frac{a^n n! (-1)^{n+1}}{(ax+b)^{n+1}}$
 c) $\frac{a^n n! (-1)^{n+1}}{(ax+b)^n}$ d) $\frac{a^{n+1} n! (-1)^{n+1}}{(ax+b)^{n+1}}$

1

- ii) The series $x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots$ is defined for function
- a) $\sin x$ b) $\cos x$
 c) e^x d) e^{-x}

1

B) Solve **any two** questions of the following.

- i) Evaluate the nth derivative of $e^x \cos x \cos 2x$.
- ii) If $y = \sin(m \sin^{-1} x)$ then show that
- i) $(1-x^2)y_2 - xy_1 + m^2 y = 0$
 ii) $(1-x^2)y_{n+2} - (2n+1)xy_{n+1} - (n^2 - m^2)y_n = 0$
- iii) Expand $7 + (x+2) + 3(x+2)^3 + (x+2)^4 - (x+2)^5$ in power of x using Taylor's series.

4

4

4

4. A) Solve the following multiple-choice question/s.

- i) If equation is $Mdx + Ndy = 0$ and $\frac{\partial M}{\partial y} = \frac{\partial N}{\partial x}$ then equation is called 1
 a) Homogeneous differential equation b) Exact differential equation
 c) Linear differential equation d) Variable separable form
- ii) Integrating factor for the equation $\frac{dy}{dx} + Py = Q$ is 1
 a) $e^{-\int P dx}$ b) $e^{\int dx}$
 c) e^x d) $e^{\int P dx}$

B) Solve any two questions of the following.

- i) Solve $\frac{dy}{dx} = (4x + y + 1)^2$ 4
- ii) Solve $(2x^2 + 6xy - y^2)dx + (3x^2 - 2xy + y^2)dy = 0$ 4
- iii) Solve $x^2 \frac{dy}{dx} = 3x^2 - 2xy + 1$. 4

5. A) Solve the following multiple-choice question/s.

- i) For equation $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = 4u$, the degree of equation is 1
 a) 0 b) 1
 c) 4 d) -4
- ii) $f(x, y, z) = x^2 + y^2 + z^2$ is called as 1
 a) Non homogeneous function b) Implicit function
 c) Explicit function d) Homogeneous function

B) Solve any two questions of the following.

- i) If $u = 2(ax + by)^2 - (x^2 + y^2)$ and $a^2 + b^2 = 1$ then show that 4

$$\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = 0$$
- ii) If $u = \log(x^3 + y^3 - x^2y - y^2x)$ then show that 4

$$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = -3$$
- iii) Verify the Euler's theorem for the function $\sqrt{x} + \sqrt{y} + \sqrt{z}$. 4

6. A) Solve the following multiple-choice question/s.

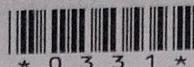
- i) If \vec{V} is Solenoidal vector then $\nabla \cdot \vec{V}$ is 1
- a) 0 b) 1
 c) -1 d) 2
- ii) If $\vec{F} = 3xi + 5yj + 6zk$, then $\nabla \times \vec{F}$ is 1
- a) 3 b) 0
 c) 14 d) 2

B) Solve **any two** questions of the following.

- i) Find the directional derivative of $f(x, y, z) = x^2 - y^2 + 2z^2$ at the point P(1, 2, 3) in the direction of the line PQ where Q is the point (5, 0, 4). 4
- ii) Find $\text{div } \vec{F}$ and $\text{Curl } \vec{F}$ if $\vec{F} = \text{grad}(x^3 + y^3 + z^3 - 3xyz)$. 4
- iii) Construct the angle between the surfaces $x^2y + z = 3$ and $x\log z - y^2 = -4$ at point of intersection (-1, 2, 1) 4

**B.Tech. First Year (First Semester) Artificial Intelligence & Data Science /
Computer Science & Engineering / ML
Introduction to Data Analysis
(AI24105 / CS24105 / ML24105)**

Total Pages : 2



* 0 3 3 1 *

Time : One & Half Hour

Max. Marks : 30

Instructions to Candidates :

1. All the questions are compulsory.
2. Illustrate your answer wherever necessary with the help of neat sketches.
3. Assume suitable data whenever necessary.

1. A) Solve the following multiple-choice question/s.

- i) What is the main purpose of Microsoft Excel? 1
- a) Writing documents b) Calculating, organizing and analyzing data
c) Editing images d) Designing websites

- ii) What is the Ribbon in Microsoft Excel? 1
- a) A type of cell formatting tool
b) A collection of tabs containing tools for managing and formatting data
c) A function for running calculations
d) A feature for inserting charts

B) Solve **any two** questions of the following.

- i) Explain the functions of SUM and IF in Excel, with examples. 4

- ii) Explain the difference between VLOOKUP and HLOOKUP functions in Excel, with examples. 4

- iii) Explain the functions of the Title Bar, Menu Bar, and Standard Toolbar and Ribbon in Excel. 4

2. A) Solve the following multiple-choice question/s.

- i) Which feature in Excel allows you to hide rows that do not meet specific criteria? 1
- a) Data Validation b) Sorting
c) Filter d) Text to Columns

- ii) A Pie Chart is best used to display: 1
- a) Comparisons between different categories
b) Proportions of a whole
c) Trends over time
d) The relationship between two variables

B) Solve any two questions of the following.

- j) Describe the following types of charts available in Excel with example. 4

a) Column Chart b) Line Chart

ii) Describe the process of sorting data in Excel. How does sorting help in data analysis? 4

iii) What is Data Validation in Excel? How can it be used to ensure data accuracy? 4

3. A) Solve the following multiple-choice question/s.

- i) How are multiple-sheet files useful in Excel? 1

 - a) They help separate data into different workbooks
 - b) They allow users to work with different sets of related data in a single file
 - c) They prevent users from editing data in a workbook.
 - d) None of the above

ii) Which of the following options is available in the “Print” setup to prepare a worksheet for printing? 1

 - a) Set print areas
 - b) Adjust margins and scaling
 - c) Select the printer
 - d) All of the above

B) Solve **any two** questions of the following.

- i) Explain the process of creating a Pivot Table in Excel. How can you change the properties of a data field in a Pivot Table? 4

ii) Explain how to create and display a Pivot Chart in Excel. 4

iii) Explain what a 3-D reference is and provide an example of its use in Excel. 4

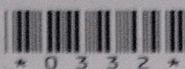
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**B.Tech. First Year (First Semester) Computer Science & Engineering / Artificial Intelligence
& Data Science / ML**

Professional Communication Skills

(AI24106 / CS24106 / ML24106)

Total Pages : 3



* 0 3 3 2 *

Time : One & Half Hour

Max. Marks : 30

Instructions to Candidates :

1. All question carry equal marks.
2. Q. 1 A, Q. 1B (i), Q. 2A & 3A are compulsory to solve.
3. Q. 1 B (ii) and Q. 1 B (iii) are optional **any one** need to solve.

1. A) Solve the following question/s.

i) Write two words with prefix: Micro.

1

ii) Find the correct spelling?

- | | |
|---------------|----------------|
| a) acomodate | b) accomodate |
| c) acommodate | d) accommodate |

1

B) i) Read the following passage to answer the given questions based on it **any four**.

4

The yearly festival was close at hand. The store room was packed with silk fabrics, gold ornaments, clay bowls full of sweet curd and platefuls of sweetmeats. The orders had been placed with shops well in advance. The mother was sending out gifts to everyone. The eldest son, a government servant, lived with his wife and children in far off lands. The second son had left home at an early age. As a merchant he travelled all over the world. The other sons had split up over petty squabbles, and they now lived in homes of their own. The relatives were spread all across the world. They rarely visited. The youngest son, left in the company of a servant, was soon bored, left her and stood at the door all day long, waiting and watching. His mother, thrilled and excited, loaded the presents on trays and plates, covered them with colourful kerchiefs, and sent them off with maids and servants. The neighbours looked on.

The day came to an end. All the presents had been sent off.

The child came back into the house and dejectedly said to his mother, "Maa, you gave a present to everyone, but you didn't give me anything!" His mother laughed, "I have given all the gifts away to everyone, now see what's left for you." She kissed him on the forehead. The child said in a tearful voice, "Don't I get a gift?" "You'll get it when you go far away." "But when I am close to you, don't I get something from your own hands?" His mother reached out her arms and drew him to her. "This is all I have in my own hands. It is the most precious of all."

- 1) Why did the woman's second son travel?
 - a) He was restless by nature
 - b) He did not want to stay at home
 - c) He was rich and could afford to travel
 - d) His job was such that he had to travel

- 2) Why did the woman's eldest son not attend the festival?
- He was not on good terms with his youngest brother who lived at home
 - He had quarreled with his mother
 - His wife did not allow him to return home
 - None of these
- 3) Which of the following can be said about the woman?
- She was a widow who had brought up her children single handedly
 - She was not a good mother since her children had left home at an early age
 - She enjoyed sending her family gifts at festival time
 - She gave expensive presents to show that she was wealthy
- 4) What did the boy receive from his mother?
- She taught him the value of patience
 - She encouraged him to grow up and live independently like his brother
 - She showed him the importance of giving expensive gifts
 - She gave him a hug to express her love
- 5) Which of the following is TRUE in the context of the passage?
- The woman somehow ignored her youngest son
 - The woman's eldest son lived abroad
 - The members of the woman's family did not care about her
 - The woman made all the preparations herself since she did not want to burden the servants

Solve **any one** question of the following.

- ii) 1) Identify the errors and write in it's correct form.
- The people has lived without electricity for many years.
 - English is teached to us by Miss Mary.
 - She was a weakest participant in all.
 - I will wait for you until you comes.

OR

iii) Do as Directed:

- I ~~did not~~ finish my homework before dinner. (use modal verb showing obligation)
- If you ~~speak~~ English, you will get along with them perfectly
(Use correct form of verb-speak)
- Trees release oxygen. (Change the voice)
- He has had his breakfast early in the morning. (Identify the tense)

2. A) Solve the following question/s.

- i) Define communication.

- ii) Write elements of communication process.

B) Solve **any two** questions of the following

- i) What are the aspects of body language. 4
- ii) What are language barriers? Explain each with suitable example. 4
- iii) Explain any four principles of effective communication. 4

3. A) Solve the following question/s.

- i) What role does a letterhead play in a formal letter? 1
 - a) It serves as decorative border.
 - b) It includes the sender's address and contact information
 - c) It indicates the urgency of the letter
 - d) It provides water proofing to the letter
- ii) What is the use of carbon copy (cc) 1
 - a) Recipients are invisible to all of the other recipients of the message in cc
 - b) Recipients are visible to all of the other recipients of the message in cc
 - c) Recipients are invisible to only one recipient of the message in cc
 - d) None of the above

B) Solve **any two** questions of the following.

- i) Develop a paragraph on any One of the following in 75 words. 4
 - a) Pen drive.
 - b) Importance of Internet.
- ii) Place an order to 'Abhay Computer Private Ltd, Pune' for computer hardware materials. 4
- iii) Draft an email to Chief Guest of college social gathering, for enquiring his time availability for the program. 4
