

Q1. Write down the format of the functions used in MS Excel to perform the following tasks: [5]

- a) To calculate the average of 85,65, 67,45, 97.
- b) To find the sum of square of first 5 even numbers.
- c) To determine the lowest value of the cell reference from A10 to A12.
- d) To determine the first five multiples of 8.
- e) To find the number of numeric data in the cell range A10 to C10.

Q2. State whether the following statements are True or False. If false correct The underlined word and rewrite it. [6]

- a) Records of a worksheet in MS-Excel can be sorted in random order.
- b) A set of rows and columns on a datasheet can be grouped together to make them invisible.
- c) Hardware is directly controller by the user.
- d) Inserting rows don't increase the total number of rows in a worksheet.
- e) To create an absolute cell reference % symbol is used before the parts of a formula.
- f) A hacker gains unauthorized entry to a computer network to steal information or corrupt files and systems.

Q3. Write Algorithm and draw Flowchart : [3]

a) Take any two numbers and calculate their sum. If the sum of the numbers is more than 10 calculate the cube of the sum otherwise calculate the square of the sum. Display the results.

b) Find the area of a circle and rectangle. [3]

(Area of circle= radius X radius)

(Area of rectangle = length X breadth)

Q4. Answer the following :

- a) Cell, Cell Address and Cell pointer [3]
- b) Worksheet and Workbook [2]
- c) Among Star, Ring and Bus topologies which is the best in terms of performance and stability. Which topology is most vulnerable? [2]
- d) Any two disadvantages of computer network. [2]
- e) Any three advantages or features of Electronic Spreadsheet. [3]
- f) What is a chart? Give its uses. Name any two charts. [3]
- g) Explain about multiprogramming and multiprocessing operating system. [4]
- h) Define Operating system. Write down any three features of OS. [4]
- i) What is Cyber Crime? Name any three types of it. [2]
- j) What is a firewall? Mention its use. [2]
- k) List any three advantages of a computer Network. [3]

Q5. Explain these Mathematical functions with suitable examples: [10]

- i) SUM() ii) MIN iii) MAX iv) COUNT v) AVERAGE

Q6. Differentiate between :

- i) Star Network and Ring Network(diagram) [2]
- ii) Wire-based transmission media and wireless transmission [2]
- iii) Sender and Receiver (function) [1]
- iv) Local Area Network and Wide Area Network(2 points) [2]

Q7. Write full form [6]

- a) WIFI
- b) DSL
- c) VDSL
- d) BSNL
- e) VSNL
- f) GPRS

Please attach this sheet along with the answer booklet.

Q8. Solve the crossword using the given clues:

[10]

Across

1. The electronic device that is used to connect computers to the internet.
2. Layout pattern in which computers are connected in a network.
7. The software that can detect virus.
8. The topology in which all computers are connected to a central node.

Down

1. The 'M' in MAN type of network.
3. A set of rules used by computers on a network to communicate with each other.
4. All computers are connected to a single central cable.
5. One who breaches computer security.
6. This prevents unauthorized access to computer networks.
9. Element of communication system

