



Summer Vacation Homework No. 1

Guidelines:

- Home Work-1 has been designed for the month of June and has to be completed till 30th June.
- It comprises all the compulsory questions and carries 50 Marks.
- Students must write answers/ responses on foolscap sheets.
- Both, Home Work 1 & 2, collectively, will carry 10 Marks in Mid-Term / Pre-Send Up exams.
- Submission Date will be due **20th July, 2022**.
- Students must drop their home work at school gate till submission Date.

Note: Home work is designed according to the requirements of BISE LHR

Q no. 1: Write short answers to any four (4) Questions:

- I. Define an algorithm?
- II. Write two strategies for planning a solution?
- III. What is problem analysis?
- IV. Write the basis of two metrics for the efficiency of the algorithm?
- V. Which five questions are necessary to understand a problem?
- VI. Define what is meant by a candid solution?

Q no. 2: Write short answers to any four (4) Questions:

- I. What is a preposition? Explain with an example?
- II. What is meant by the number system?
- III. What is meant by volatile memory?
- IV. Differentiate between memory and storage?
- V. $(11000001)_2$ convert it into a decimal.
- VI. $(11100011)_2$ convert it into hexadecimal.

Q no. 3: Write short answers to any four (4) Questions:

- I. $(72)_{10}$ convert it into binary.
- II. $(99)_{10}$ convert it into hexadecimal.
- III. $(2D)_{16}$ convert it into binary.
- IV. $(7A)_{16}$ convert it into decimal.
- V. Define the byte?
- VI. Define a computer network?

Note: Attempt any four (4) questions:

Q no. 4: Write in detail about the laws of Boolean Algebra?

Q no. 5: Write a note on the measurement of computer memory size?

Q no. 6: Write a note on Data representation in Computer Memory?

Q no. 7: Explain the routing process in detail?

Q no. 8: Explain network topologies?