Name:	Subject: Computer	Class: 9 <sup>th</sup>	Time: 80 minutes	Total Marks:	40
Chapter No.1	MJDexpert.com			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

### **Objective Section**

### Question #1: Choose the Best Option $(1 \times 12 = 12)$

- 1. The word "algorithm" is derived from the name of which famous Arabic scientist?
  - A) Al-Beroni

- B) Jabir-bin-Hayan
- C) Muhammad Ibn Musa Al-Khwarizmi
- D) Al-Kandi
- 2. The visual representation of an algorithm is called a:
  - A) Matrix
- C) Flowchart B) Graph
- D) Solution
- 3. Which type of error causes the program to run but not produce correct results?
  - A) Random error
- B) Logical error
- C) Syntax error
- D) Runtime error
- 4. What checks if the desired solution exists or not?
  - A) Verification

A) Analysis

- B) Logarithm
- C) Validation
- D) Flowchart
- 5. Before solving a problem, what should be done?
- B) Planning C) Both A and B
- D) None of these
- 6. Which symbol indicates the stopping point in an algorithm?
  - A) Stop
- B) Start
- C) Set
- 7. In a flowchart, which symbol indicates decision-making?

D) Goto

- A) Decision making
- B) Connector
- C) Process
- D) Terminal

- 8. What is used to test the solution?
- C) Verification
- D) Testing
- 9. Algorithm provides us with a collection of:
  - A) Text B) Steps

A) Symbols

- C) Symbols
- D) None of these

D) Set

- 10. Which symbol is used for the start and end of a flowchart?
  - A) Terminal
- B) Connector

B) Computation

- C) Process
- D) Diamond
- 11. Flowcharts use different ... to check the sequence of steps:
  - A) Test
- B) Symbols
- C) Logarithm

A) Ready solution B) Candid solution C) Strategic solution

- 12. Which solution cannot be written with proper algorithm planning?
- D) Best solution

#### **Subjective Section**

# Question #2: Answer the Following Short Questions $(10 \times 2 = 20)$

- 1. List three disadvantages of using a flowchart.
- 2. How can you check if the flowchart meets its requirements?
- 3. Define an algorithm.
- 4. What is the purpose of the set symbol in formulating an algorithm?
- 5. How do you choose the best solution if multiple solutions exist for a problem?
- 6. Define a flowchart.
- 7. Explain the importance of flowcharts in problem-solving.
- 8. List three advantages of using an algorithm.
- 9. What are Output and Input in the context of flowchart requirements?
- 10. What is meant by the planning of a solution?

# Question #3: Answer the Following Long Questions $(4 \times 2 = 8)$

- a) List the symbols used in the formulation of an algorithm and explain their purposes.
- b) Write a program to take a number from the user as input and find its factors.