

M.C.A. - I (2 Years) New CBCS Pattern Semester-I  
**PSMCAT101 - Paper-I - Java concepts**

P. Pages : 2

Time : Three Hours



**GUG/W/24/13635**

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram wherever necessary.
  3. Avoid vague answers and write answers relevant and specific to questions only.

**Either:**

1. a) What is class? Explain accessibility modifiers in details. 8
- b) Explain in details various control structure in Java. 8

**OR**

- c) What is array? Explain two dimensional array in details. 8
- d) Define JVM? Explain garbage collection in details. 8

**Either:**

2. a) Discuss in details about various data types of Java. 8
- b) Write about Java.lang\*; package in details. 8

**OR**

- c) Write in details about Hybrid inheritance. 8
- d) What is multithreading? Explain the life cycle of thread in details. 8

**Either:**

3. a) Write a program to demonstrate linked list class. 8
- b) What is collection class? Explain collection framework in details. 8

**OR**

- c) What is stream? Explain the concept of stream view in Java. 8
- d) Write a program to demonstrate the Runnable interface. 8

**Either:**

- |           |    |   |          |
|-----------|----|---|----------|
| <b>4.</b> | a) | Draw and explain the architecture of Applet.                  | <b>8</b> |
|           | b) | Explain cookies and session tracking in details with example. | <b>8</b> |

**OR**

- |           |    |   |          |
|-----------|----|---|----------|
|           | c) | Explain how get and post request is handled.        | <b>8</b> |
|           | d) | What is JOBC? Explain JOBC drivers in details.      | <b>8</b> |
| <b>5.</b> |    | Solve all the question.                             |          |
|           | a) | What is variable? Explain their types in details.   | <b>4</b> |
|           | b) | Write about finalize () method.                     | <b>4</b> |
|           | c) | Write short notes on :                              | <b>4</b> |
|           |    | a) Linked hashmap                                   |          |
|           |    | b) Tree map classes.                                |          |
|           | d) | Define container; explain their methods in details. | <b>4</b> |

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