

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

P. Pages : 2

Time : Three Hours



**GUG/W/23/13635**

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labeled diagram and use supporting data wherever necessary.
  3. Avoid vague answer and write specific points/ answer related to questions.

**Either:**

1. a) Explain in detail various control structures in Java. 8
- b) Write a Java program to check whether seller made a profit or loss if sales price and purchase price is inputted through keyboard. 8

**OR**

- c) Explain for loop with its syntax & example in detail. 8
- d) What is array? Explain two dimensional array in detail. 8

**Either:**

2. a) Define package. Explain in detail user defined package. 8
- b) Describe exception classes in detail. 8

**OR**

- c) Write in detail about Hybrid inheritance. 8
- d) Write a program in Java to demonstrate exception handling. 8

**Either:**

3. a) Explain following. 8
  - i) Linked list.
  - ii) Tree list.
- b) What is serialization? Explain the steps involved in object serialization. 8

**OR**

- c) Write a note on. 8
  - i) Array list class.
  - ii) Priority queue class.
- d) Write a program to demonstrate. Linked list class. 8

**Either:**

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|-----------|----|---|----------|
| <b>4.</b> | a) | Draw and explain applet life cycle methods in detail. | <b>8</b> |
|           | b) | Write a program to pass parameter to applet.          | <b>8</b> |

**OR**

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|-----------|----|--|----------|
|           | c) | Explain cookies and session tracking in detail.                            | <b>8</b> |
|           | d) | Explain how get and post request is handled.                               | <b>8</b> |
| <b>5.</b> |    | Attempt all questions.   |          |
|           | a) | Write short note on Java virtual machine.                                  | <b>4</b> |
|           | b) | Write a note on multithreading.  | <b>4</b> |
|           | c) | What is serialization? Explain the steps involved in object serialization. | <b>4</b> |
|           | d) | Explain JDBC connectivity with sample code.                                | <b>4</b> |

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