

6E6094

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B. Tech. (Sem. VI) (Back) Examination, April-May 2018  
Computer Sc. & Engg.  
6CS4(O) Programming in Java CS, IT

Time : 3 Hours

Maximum Marks : 80  
Min. Passing Marks : 26

*Attempt any five questions, selecting one question from each unit. All Questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used / calculated must be stated clearly. Use of following supporting material is permitted during examination. (Mentioned in form No. 205)*

1. NIL 2. NIL

### UNIT - I

- ✓ 1 (a) What is JAVA Virtual machine ? Explain the features of JAVA. 8
- (b) What are JAVA byte code ? Explain different JAVA applications in detail. 8

OR

- 1 (a) Explain relational, bitwise and assignment operators with a suitable example. 8
- (b) Write a JAVA program to implement matrix multiplication if matrix is the order of 2x2. 8

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**UNIT - II**  
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- 2 (a) What is constructor ? Write a program to pass an object as a parameter. 8  
(b) What is abstract class ? Explain in detail. 8

**OR**

- 2/ (a) What is inheritance ? Explain its type in detail. 8  
(b) What is the use of final keyword in inheritance ? Also explain method overloading with a suitable example. 8

**UNIT - III**  
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- 3/ (a) What is package ? Explain various inbuilt packages in detail. 8  
(b) What are the advantages of interface in JAVA ? Explain with a suitable example. 8

**OR**

- 3 (a) What is string Buffer Class ? Explain. 8  
(b) Explain atleast 5 string functions and its operation in detail. 8

**UNIT - IV**

- 4/ (a) What is exception ? What are the difference between error and exception ? 8  
(b) What are the different keywords used to handle an exception in exception handling ? 8

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**OR**

- 4 (a) What are the types of exception in a user program ? 8
- (b) Explain different file modes in detail with a suitable example. 8

**UNIT - V**  
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- 5 (a) What are applets ? Write an applet program to draw a polygon. 8
- (b) What are threads ? Explain the life cycle of thread with different thread functions. 8

**OR**

5 Write short notes on : (any two) 8×2=16

- (i) Thread synchronization
- (ii) Applet Architecture
- (iii) Thread object and thread priority

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