

Unit-III

6. (a) What is a *Thread*? Can we create multiple threads in a single program? If yes, show by example and if no, give reasons to justify your answer.
- (b) Write a Java code that stores and retrieves objects from a file.
- 8,8
7. Explain the Applet life cycle with suitable diagrams and names of the methods that need to be implemented. Explain with suitable Java Program so that every Applet function works.
- 16

Unit-IV

8. What are AWT classes? How are these related to Window objects? Write Java Program to generate even numbers and odd numbers in text field "T1 and T2 respectively" while pressing button 'Even' and 'Odd'.
- 16
9. Write short notes on the following:
- (i) Layout Managers
- (ii) Font metrics
- (iii) Graphics
- (iv) Frame
- 4×4=16

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Roll No. :

Total No. of Questions : 9]

[Total No. of Pages : 4

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MCA (Regular) 3rd Semester
Examination, February-2022
(Current CBGS Scheme w.e.f. Dec-2017-18)
Paper-17MCA33C5

OBJECT TECHNOLOGY

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :- Attempt five questions in all, selecting one question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Write short answers to the following questions:
- (a) What is a keyword in Java?
- (b) What is the significance of automatic garbage collection?
- (c) What is the use of final keyword?

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(1)

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- (d) Explain the significance of making packages in Java.
- (e) Write the importance of *thread synchronization*.
- (f) What is the name of class that is used to read the output stream using Java code ?
- (g) Write a statement in Java that declares a 2D array with name Matrix having 5 one dimensional arrays having 6 elements each.
- (h) Write statement in Java that is used to draw a line while working in Graphics. $2 \times 8 = 16$

Unit-1

2. (a) What is platform independence ? Is Java platform independent ? Explain in light with the the role of terms JVM and bytecode.
- (b) Declare array of integers having 20 elements. Write Java code snippet that finds the maximum and minimum value that is in the elements. 8,8

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3. (a) What are operators ? Draw the operator precedence table of Java and use the precedence to evaluate the value of expression : $2 * 13 + 2 - 7 / 4 + 5$
- (b) What is String ? How can we declare and initialize a String ? Give examples. When do we prefer to use String Buffer class instead of String class objects ? Explain. 8,8

Unit-II

4. (a) What is a *inheritance* ? Explain different types of inheritance allowed in Java. Can one implement multiple inheritance ? If no, why, if yes, why ?
- (b) What is CLASSPATH ? Explain its importance. How can we see the current CLASSPATH and change it from command prompt ? 8,8
5. Write short notes on the following :
- (i) Base class
- (ii) Interface
- (iii) Exception Handling
- (iv) Creating User-defined exception 4*4=16

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(3)

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