

M.Sc. (Part-I) Semester-II (CBCS Scheme) Examination

COMPUTER SCIENCE

Paper-2 MCS 1 Java Programming

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) Illustrate your answers with the help of suitable examples/diagrams wherever necessary.
 (2) Assume suitable data wherever necessary.

1. (A) What is the necessity of break and continue statement ? Explain. 6
- (B) Describe and compare while and for loops provided by Java. 8

OR

2. (A) Explain the purpose of switch statement. Write suitable program. 7
- (B) Describe the scope and lifetime of variables in Java. Give examples. 7
3. (A) Explain the structure of Java class with suitable example. 7
- (B) How objects can be passed to a method ? Explain with suitable example. 7

OR

4. (A) What is constructor ? Explain all its variants. 7
- (B) What is Recursion ? How is it implemented in Java ? Give suitable example. 7
5. (A) Explain :
 - (i) Abstract class
 - (ii) Command Line argument 6
- (B) What is package ? How to create and use it ? Explain. 7

OR

6. (A) What is meant by run-time polymorphism ? Explain with suitable example. 7
- (B) Explain with example :
 - (i) super
 - (ii) this
 - (iii) final. 6

7. (A) Write an applet for displaying a square embedded in a circle. 7
(B) Explain in brief the color and font class. 6

OR

8. (A) Describe the HTML APPLET tag with example. 7
(B) Describe in brief the AWT class. 6
9. (A) Explain the following methods of Thread class :
(i) join
(ii) sleep
(iii) start
(iv) isAlive. 8
(B) Describe Java's way of handling errors. 5

OR

10. (A) Explain in brief I/O classes of Java. 6
(B) What is meant by synchronization ? How do you achieve it in Java ? Explain. 7
11. (A) Write an applet demonstrating handling of mouse events. 7
(B) Explain the controls : Label, TextArea, Checkbox. 6

OR

12. (A) What is delegation event model ? Explain. 7
(B) Explain List control. Describe all constructors of List class. 6