Code: 17F00204

MCA II Semester Regular & Supplementary Examinations May/June 2019

JAVA PROGRAMMING

(For students admitted in 2017 & 2018 only)

Time: 3 hours Max. Marks: 60

Answer all the questions

*****

1 (a) Illustrate the use of different operators used in java with an example.

(b) Write a java program that accepts four integers from the user and prints equal if all four are equal, and not equal otherwise.

OR

2 (a) Explain the important features of java.

(b) Demonstrate the use of while and do-while statements for displaying all the prime numbers up to n.

3 Write a java program to create a two-dimensional array of order m x m and assign the elements of array A[][] such that A[i][j] is true if i and j are prime and have no common factors, otherwise A[i][j] becomes false.

OR

4 (a) Explain various access specifiers supported by java with an example.

(b) Write a java program to perform the following functions using classes, objects, constructors and destructors wherever necessary:
(i) Read 5 subjects marks of 5 students.
(ii) Calculate the total and print the result on the monitor.

5 (a) Define an interface named IntStack with two operations Push() and Pop(). Define a class called stack that implements IntStack. Write a java program to reverse the array elements using the above class.

(b) Distinguish between method overloading and method overriding with an example.

OR

6 (a) Write the steps for creating and accessing packages in java.

(b) What are the various types of exceptions available in java? Demonstrate the use of exception handling mechanism used in java with an example program.

7 Write an applet application which will display colours in list box and a scrolling banner which scrolls from left to right within a browser. When user selects any colour from the list, it should change the colour of scrolling banner.

OR

8 (a) Explain thread life cycle and thread creation in java.

(b) Write a java program to concatenate two given files. Give names of files using command line arguments.

9 (a) Write a program to create a frame for a simple arithmetic calculator using swing components and layout managers.

(b) Write a program to handle keyboard events.

OR

10 (a) What is the significance of layout managers? Discuss briefly various layout managers.

(b) Write an example java program that displays four push buttons and a text field. Each button displays an icon that represents the flag of a country. When a button is pressed, the name of that country is displayed in the text field.

*****