END TERM EXAMINATION

THIRD SEMESTER [MCA] NOVEMBER-DECEMBER 2018

Subject: *Java Programming*

Paper Code: MCA-205

Maximum Marks: 75

Time: 3 Hours

Note: Attempt any five questions including Q.No1 which is compulsory. Select one question from each unit.

(10x2.5=25)

Q1 Answer the following:-
(a) Java Programs are platform independent. Comment on this statement.
(b) What are interfaces and write two differences between abstract class and interface.
(c) How are objects handled that go out of scope in java.
(d) Compare C# and Java.
(e) Is multithreading supported by Java? If yes, mention the ways of creating thread.
(f) What do you understand by server socket? How is it different from client socket?
(g) Why are swing components said to be light weight components?
(h) Differentiate between Applet and Application in java.
(i) What is object serilization? When is it required?
(j) What is Java Beans? Why it is used?

UNIT-I

Q2 (a) Explain the class file format in detail. **(5)**
(b) Differentiate between string and string buffer class with the suitable example. **(4)**
(c) Discuss the various access specifiers in Java. **(3.5)**

Q3 (a) Explain the super keyword in the context of constructor, variable and methods. **(5)**
(b) Write a program to explain the multiple inheritances in Java. **(5)**
(c) What is the use of wrapper classes in java and mention any two class.**(2.5)**

UNIT-II

Q4 (a) Write a program to raise the user defined exception when the given input is not equal to "GGSIPU" and handle that exception. **(6)**
(b) Write a program to display odd and even number in a particular interval using threads. **(4)**
(c) What is synchronization? How it is achieved in JAVA. **(2.5)**

OR

Q5 (a) Write a chat program using TCP/IP. **(6)**
(b) Write a java program for comparing the contents of two file and display the appropriate messages. **(5)**
(c) Differentiate between sleep and wait method? **(1.5)**

UNIT-III

Q6 (a) Create a registration form that accepts name, course and college when click on submit button data has to be submitted in the database. **(6.5)** 2
(b) Explain the lifecycle of an applet with the help of an example. **(6)** 4

OR

Q7 (a) Give examples of situations when you would use the collections. Hashmap, HashSet, TreeMap and TreeSet. **4)**

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(b) What is the principles of the event delegation model? Explain the source of the event and event listeners. (8.5)

UNIT-IV

Q8 (a) Explain the RMI Architecture. (4)

(b) Write a RMI application to query the availability of a book in a book store. The reference to the book store object is to be made available remotely to the client application. (8.5)

OR

Q9 (a) **Explain** the architecture of java bean. Write an example to create a java bean and how to add customizable properties to a java bean. (10)

(B) Compare AWT and Swing. (2.5)

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