(Following Paper ID and Roll No. to be filled in your Answer Book)

Paper ID : 214304   Roll No. ☐☐☐☐☐☐☐☐☐

MCA

(SEM. VII) THEORY EXAMINATION 2015-16

INTERNET & JAVA PROGRAMMING

[Time:3 hours]   [Total Marks:100]

SECTION-A

1. Attempt **all** parts. Write answer of each part in brief.

(10x2=20)

(a) Write two advantages of JSP over Servlet.

(b) What is the difference between an Abstract class and an Interface?

(c) Which containers use a border layout as their default layout?

(d) What is more advisable to create a thread, by implementing a Runnable interface or by extending Thread class?

(e) Define the purpose of following protocols or services. FTP, HTTP

(f) What are the main components of an Email?

(g) How does "WWW" differ from Internet?

(h) What are wrapped classes?

(i) Define a package. Explain pre-define and user define package.

(j) Define Abstraction? Give one example.

SECTION-B

Attempt **any five** questions from this section.   (5x10=50)

2.   What is Constructor? Why constructor does not have return type as method returns? Explain it with an example.

3.   (a) Java uses "garbage collection" for memory management. Explain what is meant here by garbage collection. What is the alternative to garbage collection?

   (b) Given are two one-dimensional arrays A and B which are stored in ascending order. Write a program to merge them into a single sorted array C that contains every item from arrays A and B, in ascending order.

4. What is JDBC? Explain types of Java driver available for database connectivity. Also write a program as an example.

5. Write a program in Java to create a button using Swing; on clicking on this button the current application should be closed. Explain the output also.

6. (a) Illustrate with the help of program code how a JText Field is created and is added to the content pane?

   (b) Explain what is meant by *input focus*? How is the input focus managed in a Java GUI program?

7. Define Java Bean? Write the difference between Java Bean and Enterprise java Bean. Also write steps to create jar file in java Beans.

8. Define polymorphism? Explain function overloading and overriding as runtime and compile time polymorphism in Java? Give an example for it.

9. What do you mean by Servlet Context? How it is different from Servlet Config explain with an example?

SECTION-C

Attempt **any two** questions from this section.   (2x15=30)

10.   What is Servlet? Explain the life cycle of Servlet. Write a login web page using Servlet.

11.   What do you mean by Session Tracking? Explain session tracking techniques with the help of example.

12.   What do you understand by event handling in Java? Explain mouse or keyboard events with example.

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