

Printed Pages : 4

MCA-314

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

PAPER ID : 7311

Roll No. 1045914054

M.C.A.

(Semester-III) Theory Examination, 2011-12

INTERNET & JAVA PROGRAMMING

Time : 3 Hours]

[Total Marks : 100

Note : Attempt questions from each Section as indicated.

Section-A

1. *Attempt all parts of this question. Each parts carries 2 marks. Define each answer precisely in 50-75 words :*

$2 \times 10 = 20$

- (a) Explain the various services of internet.
- (b) Can ISP provide the same IP addresses to two different machines over internet ? Justify your answer.
- (c) Why Java is known as pure object oriented language?
- (d) Define JVM. What do you mean by Byte codes?
- (e) Consider the following program. Will the program run successfully ? Justify your answer, if it is yes then explain, if not explain the substitute method to run the program successfully.

```
abstract sortable
{
    public abstract int compare To(object O);
}
class employee extends sortable
{
    .....
    .....
}
class helper extends employee
{
    .....
```

- (f) What is the importance of swing in Java programming? Write the code to display button and checkbox.
- (g) Why JDBC/ODBC bridge is used for database connectivity?
- (h) Describe Java bean API.
- (i) What is Jar File? Explain briefly.
- (j) Define Cookies. Explain the role of HTTP.

Section-B

2. Attempt any *three* parts of this question. Each question carries 10 marks. Define each answer in 100–200 words: 10×3=30

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(2)

- (a) What constitutes an internet ? Explain in brief the role of Domain Name System (DNS) over internet with a suitable block diagram.
- (b) What is an exception ? What are the methods of handling exception in java ?
- (c) What are the steps of database connectivity in Java ? Explain with suitable example.
- (d) What is the difference between Application and Applet ? Explain how will you write a simple applet to display hello word message.
- (e) What is Servlet ? Explain the life cycle of Servlet.

Section-C

Attempt *all* questions of this Section. Each question carries 10 marks. Define each answer in 300–500 words :

$$10 \times 5 = 50$$

3. What do you understand by Streams ? Explain the purpose of various types of streams.

Or

What are packages in Java ? Illustrate with appropriate example, how can you create and use your packages in Java.

4. Explain how can you set background color of an applet. What are the ways to draw and fill shapes with colored marker ?

Or

What is the life cycle of an Applet ? Illustrate common methods to create the applet.

5. What do you mean by EJB ? Explain in detail with the help of the suitable diagram.

Or

What do you understand by Layout manager ? Illustrate three types of layout available in Java with the help of suitable syntax.

6. What is the difference between RPC and RMI ? Which one is light weighted ? Explain steps to establish a connection between client and server using RMI.
7. What is Java Server Page ? Explain with suitable code.