

Roll No.

Total No. of Questions : 13]

[Total No. of Pages : 02

Paper ID [A0221]

(Please fill this Paper ID in OMR Sheet)

BCA (501) (S05) (O) (LE) (Sem. - 5th)

INTERNET APPLICATION AND JAVA

Time : 03 Hours

Maximum Marks : 75

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Nine** questions from Section - B.

Section - A

Q1)

(15 × 2 = 30)

- a) What is bytecode and why is it important to Java's use for Internet programming?
- b) What are the three main principles of object-oriented programming?
- c) What is Internet and why we use internet?
- d) What are E-mail applications?
- e) Define TCP/IP in detail.
- f) How do you create a block of code?
- g) Can a **short** be assigned to an **int** without a cast? Can a **byte** be assigned to a **char** without a cast?
- h) What is difference between method overloading and method overriding?
- i) Why does Java strictly specify the range and behaviour of its primitive types?
- j) What is difference between C++ and Java?
- k) Does a superclass have access to the members of a subclass? Does a subclass have access to the members of a superclass?
- l) What is thread? How it differ from process?
- m) Show how a method called **my Meth ()** is declared if it has a return type of **double** and has two **int** parameters called **a** and **b**.
- n) What is exception? What are various types of exception?
- o) Can the bitwise operators be applied to the **double** type?

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P.T.O.

Section - B

(9 × 5 = 45)

- Q2)** Explain internet architecture and working of internet.
- Q3)** Write a program that reads characters from the keyboard until a period is received. Have the program count the number of spaces. Report the total at the end of the program.
- Q4)** What you mean by internet protocol? Give the name of those protocols which help in web and explain working of those protocols?
- Q5)** What are advantages of WWW? How web works? Explain elements of WWW?
- Q6)** Discuss various data types available in Java.
- Q7)** What is inheritance? What are different types?
- Q8)** What is Applet? How it is embedded in an HTML Document. How parameters are passed to it?
- Q9)** Can interfaces be extended? Give example.
- Q10)** What is Java Virtual Machine? How it helps to obtain platform independence?
- Q11)** How a thread class used to attain multithreading? Illustrate with suitable example?
- Q12)** Explain how inheritance, method overriding, and abstract classes are used to support polymorphism?
- Q13)** What are the important issues to be considered in designing a database that is to be accessed through a web page? Explain.

