

B. Tech 4th Semester Examination

Internet Technology (Java) (NS)

CS-223

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Candidates are required to attempt five questions in all selecting one from each of the sections A, B, C & D. And all subparts of the questions in section E.

SECTION - A

1. Explain various operators available in Java. (20)
2. Explain the concept of recursion taking one suitable example. (20)

SECTION - B

3. What do you understand by Exception Handling in Java? Explain the use of multiple "catches" in a Java program. What happens if a user does not "try" and "catch" an exception? (20)
4. Explain the following:
 - (a) Super keyword
 - (b) Final class
 - (c) Abstract class (20)

SECTION - C

5. What do you mean by synchronization? Explain the concept of synchronization with the help of Java Program. (20)
6. Write note on Interthread Communication. (20)

SECTION - D

7. Explain two-tier and three-tier database design mechanism taking suitable example. (20)
8. Write note on:
 - (a) JDBC API
 - b. JDBC Drivers (20)

SECTION - E

9. (a) What is the Java API?
 - (b) How to convert String to Number in Java program?
 - (c) What is implicit casting?
 - (d) Which class is the superclass of every class?
 - (e) How does Java handle integer overflows and underflows?
 - (f) How can one prove that the array is not null but empty?
 - (g) Can an application have multiple classes having main method?
 - (h) When is static variable loaded? Is it at compile time or runtime? When exactly a static block is loaded in Java?
 - (i) Can I have multiple main methods in the same class?
 - (j) Which package is always imported by default?

(2×10=20)