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December 2022
BCA Vth SEMESTER
Object Technologies & Programming Using JAVA (BCA-17-301)

Instructions:
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
2. Answer any four questions from Part -B in detail.
3. Different sub-parts of a question are to be attempted adjacent to each other.

PART –A

Q1 (a) Describe the scope of Java variables. (1.5)

(b) What is **final** keyword used for? (1.5)

(c) Distinguish between the methods of a thread : wait(),sleep(),yield() (1.5)

(d) What is method overriding? (1.5)

(e) What is the role of **this keyword**? (1.5)

(f) List 3 built in exception classes. (1.5)

(g) What is an abstract class? (1.5)

(h) List three methods of String class. (1.5)

(i) Explain '**super**' keyword. (1.5)

(j) What is Garbage Collection? (1.5)

PART –B

Q2 (a) Differentiate between Object Oriented and Procedure Oriented Programming (5)

(b) Explain various features of JAVA (10)

Q3 (a) What is a package? How do we create it? (5)

(b) What is inheritance? Describe different forms of inheritance supported by JAVA with example (10)

Q4 Define class. Write a program using **constructor** to create a class called "**room**" having two data members **length** and **breadth** and one member function **cal_area**. Create its object and calculate area. Demonstrate constructor overloading. (15)

Q5 (a) What is an exception? Explain various keywords of exception handling mechanism (10)

(b) Write a program to sort an array of strings. (5)

Q6 (a) What is a File? Write a program to write data from a file to a console (10)

(b) What is JVM? (5)

Q7 (a) What is an interface? Explain 2 ways of creating interfaces. (10)

(b) Explain thread prioritization (5)