

II B. Tech I Semester Regular Examinations, Feb/March - 2022**OBJECT ORIENTED PROGRAMMING WITH JAVA**

(Com to CSE (AIML), AI, DS, CSE (AIDS), AIDS, AIML)

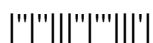
Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions each Question from each unitAll Questions carry **Equal** Marks

- ~~~~~
- 1 a) Explain the features of Object-Oriented Programming Languages in detail? [7M]
 b) Describe type promotion rules of Java and write an example program. [7M]
- Or
- 2 a) What are the drawbacks of procedural languages? Explain the need of object-oriented programming with suitable program. [7M]
 b) Explain various control structures used in JAVA with suitable examples. [7M]
- 3 a) Write a Java program to demonstrate method overloading using varargs? [5M]
 b) With suitable code segments illustrate various uses of 'final' keyword. [5M]
 c) Discuss about anonymous inner classes and nested classes. [4M]
- Or
- 4 a) What is a constructor? What is its requirement in programming? Explain with program. [7M]
 b) Write about class, object, methods, constructor and destructor. [7M]
- 5 a) What do you understand by super key word? Write use of super key word. [3M]
 b) Differentiate between Interface and Abstract class. When Interface is preferred over Abstract class. [4M]
 c) Write an Abstract class named Person and its two subclasses named Student and Employee. [7M]
 A person name, address, phone number and email address. A student has enrollment, course. An employee has an office, salary and designation. Define constructors and methods for input and display for both classes. Write a main program to give demonstration of all.
- Or
- 6 a) Define inheritance with diagrammatic illustration and java programs to illustrate the different types of inheritance with an example. [7M]
 b) Write the Java program to create anonymous objects using an Interface. [7M]
- 7 a) Describe the process of importing and accessing a package with suitable examples. [7M]
 b) Write the differences between the following classes Date, Calendar and Gregorian Calendar and usage of time package. [7M]

Or



- 8 a) Create a Car class in Package p1 which has its private member variables like boolean central_locking, byterain_sensors, Boolean automatic_headlight and has abstract methods defined for getting and setting the values for these variables. Create a concrete class implementation called as Gallardo in package p2, which extends Car class and give the implementation for the abstract methods. Create a main class to display the values of these variables using Gallardo object and Car's reference. [7M]
- b) Differentiate between an Exception and an Error? How are Runtime exceptions handled? Explain the syntax? [7M]
- 9 a) Create a Bank Application program to illustrate the use of multithreading. [7M]
- b) Explain the difference between String, String Buffer and String Builder classes? [7M]
- Or
- 10 a) Assuming that there are a list of 10 student objects, where each student object has the following member variable {Name, roll no, attd%, CGPA}. You have to write the logic for displaying the list of students whose attd% is less than 65% using a JTable in increasing order of attendance [7M]
- b) Write a JDBC program to search for an attribute in a table and display the entire tuple to the user. For example, display all the details of the student given his/her roll number. [7M]

