

Total No. of Questions : 8]

SEAT No. :

PD-4282

[Total No. of Pages : 2

[6403]-79

T.E. (Electronics) (E & TC Engineering)

FUNDAMENTALS OF JAVA PROGRAMMING

(2019 Pattern) (Semester - V) (304185 (c)) (Elective - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Assume suitable data, if necessary.

Q1) a) Describe different types of inheritance in Java. Explain syntax of hierarchical inheritance. **[9]**

b) What is abstract class in Java? How it is used in Java program? Explain with suitable example. **[9]**

OR

Q2) a) Write a Java program to create a player class. Use the concept of inheritance and create cricket player and Hockey player classes from the player class. **[9]**

b) Explain difference between method overloading and method overriding. Also provide example of each. **[9]**

Q3) a) What are the ways to access a package from another package? Explain with suitable programming example. **[9]**

b) What is an interface in Java? Compare interface and class in Java. **[8]**

OR

Q4) a) Explain the need of an interface in Java. With suitable example, explain how to create and use an interface. **[9]**

b) What is a package? With the help of suitable example, explain how to create a package. **[8]**

P.T.O.

- Q5) a)** What is life - cycle of an applet? Explain with suitable diagram. **[9]**
- b)** With suitable programming examples, explain the terms try, catch and finally. **[9]**

OR

- Q6) a)** What is an exception in Java? Why exceptions occur in a Java program? Explain with suitable example. **[9]**
- b)** Explain the concept of single threaded and multithreaded program in Java. Also explain the difference between multiprocessing and multithreading. **[9]**

- Q7) a)** Explain the use of File class in Java. What are the different methods in Java File class? **[9]**
- b)** Write a Java program using AWT to create one button and add it on the Frame object inside the main () method. **[8]**

OR

- Q8) a)** Explain the hierarchy of AWT package in Java. **[9]**
- b)** What are byte stream and character stream in Java? Explain. **[8]**

