PB-3820

[6262]-82

T.E. (Electronics/E&TC)

FUNDAMENTALS OF JAVA PROGRAMMING

(2019 Pattern) (Semester - I) (304185C) (Elective-I)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7or Q8.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Black figures to the right indicate full marks.*
4) *Assume suitable data, if necessary.*

Q1) a) Explain Inheritance and types of Inheritances in java. **[8]**

b) With the help of proper example, explain use of super keyword. **[5]**

c) Write a program to calculate the length of a string. **[5]**

OR

Q2) a) Explain static and dynamic polymorphism with suitable example. **[8]**

b) What is an array? How to declare an array in Java? Compare C array with Java Array **[5]**

c) Write a program using command line argument to add two number **[5]**

Q3) a) What is the difference between interface and class? **[4]**

b) Design a package containing a class which defines a method to find area of circle. Import it in java application to calculate area of a circle. **[8]**

c) How do we add class or interface to a package? Explain with suitable example **[5]**

OR

P.T.O.

Q4) a) What is an interface in java ? How do we create it? Give the example to create and to implement the interface. **[8]**

b) What is a package? Explain with the help of a simple example. **[9]**

Q5) a) Differentiate between multithreading and Multitasking **[5]**

b) Explain life cycle of an applet **[8]**

c) Explain try and catch block. **[5]**

OR

Q6) a) What is Multithreading? Explain ways to create a thread in java. **[9]**

b) Write a program to handle arithmetic exception. **[5]**

c) Write a simple java program to create an applet. **[4]**

Q7) a) List difference between swing and AWT in Java. **[5]**

b) Write a Java program using Swing to create text field. **[8]**

c) Explain the classes associated with file handling **[4]**

OR

Q8) a) Create application to create window in Java deriving from Frame class to display message "Welcome to World of Java" **[7]**

b) Explain the hierarchy of AWT. **[5]**

c) Write a code in Java to open a file for writing **[5]**

❧❧❧❧