Total Number of Pages : 02

B.Tech
PCS3I102

3rd Semester Regular / Back Examination 2018-19
OBJECT ORIENTED PROGRAMMING UNISING JAVA
BRANCH : CSE
Time : 3 Hours
Max Marks : 100
Q.CODE : E932
Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part- I

Q1 **Short Answer Type Questions (Answer All-10)** **(2 x 10)**
a) What is garbage collection? What is the process that is responsible for doing that in java?
b) Name the access modifiers in java.
c) How do you comparing two strings by ignoring the case? Give an example.
d) What are the restrictions that are applied to the Java static methods?
e) What is the difference between StringBuffer and StringBuilder class?
f) Differentiate between checked and unchecked exception.
g) How java supports inter-thread communication?
h) What is the difference between object oriented programming language and object based programming language?
i) What is constructor chaining and how is it achieved in Java?
j) What will happen if static modifier is removed from the signature of the main method?

Part- II

Q2 **Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**
a) Briefly explain various features of java.
b) Write an application that executes two threads. one thread displays "GOOD MORNING" in every 1000 milliseconds and another thread displays "GOOD AFTERNOON" in every 3000 milliseconds. Create the thread by implementing the Runnable interface.
c) Write a java program to print prime number up to 100.
d) Explain method overloading and method overriding with the help of example.
e) Compare string with string buffer. Write a java program to count occurrence of character in a string.
f) Write a java program to convert the given temperature in Fahrenheit to Celsius using the following conversion formula C = (F - 32)/1.8 and display the values in a tabular form.
g) How exceptions are handled in java? Explain the important methods used to handle exceptions.
h) Write a java program which draws a dashed line and dotted line using applet.
i) What is package? How do you create a package? Explain about the accessprotection in packages?
j) Write a program that will read an unspecified number of integers and will de-termine how many positive and negative values have been read. Your programends when the input is 0.
k) Discuss the various types of operators in java and explain with suitable example.
l) What is layout manager? Explain different types of layout managers.

Long Answer Type Questions (Answer Any Two out of Four)

Q3 **a)** Write a Java program to create user defined exception. **(8)**
b) Explain the types of inheritances in java with example. **(8)**

Q4 **a)** What is interface? How do you achieve multiple inheritance through interface? **(8)** Explain with an example.
b) Write a program to replace all "word1" by "word2"to a file without using temporary file **(8)** and display the number of replacements.

Q5 **a)** Briefly explain the various components of swing. **(8)**
b) What is multithreading? briefly explain the different states of a thread. **(8)**

Q6 **a)** Explain the different features of object oriented programming. **(8)**
b) What is an applet? Explain the life-cycle of an applet. **(8)**