

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name : Object Oriented Programming with Java

Subject Code : 4TE04OPJ1

Branch: B.Tech (CE)

Semester : 4

Date : 02/11/2018

Time : 10:30 To 01:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1 Attempt the following questions: (14)

- a) What is use of super?
- b) What is garbage collection in Java.
- c) Why Java is a platform independent language?
- d) Give use of static keyword.
- e) What is the use of Left-shift operator in Java?
- f) What is method overriding?
- g) Differentiate application and applet.
- h) What is the difference between private and protected visibility modifiers in Java?
- i) Define abstract class.
- j) What is the use of throws and thrown in exception handling?
- k) What is collection in Java?
- l) What is object?
- m) Define encapsulation.
- n) List various types of layouts in applet.

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (07)

- (a) Explain features of Java in brief. (07)
- (b) What is polymorphism? What is the use of polymorphism? Explain static and dynamic binding with suitable example. (07)

Q-3 Attempt all questions (05)

- (a) What is difference between checked and unchecked exceptions? Explain with suitable example. (05)
- (b) Explain use of final keyword in detail. (03)
- (c) Write a program that displays each alphabets of one String with the delay of 1000 Milliseconds and each alphabets of another String with the delay of 500 Milliseconds. Create two threads to implement this work. (06)

Q-4 Attempt all questions (07)

- (a) What is difference between constructor and method of class? Define method overloading and its purpose. Explain constructor overloading (07)



with suitable example.

- (b) Explain interface in JAVA. How do interfaces support polymorphism? (07)

Q-5 Attempt all questions

- (a) What is the use of finalize() method? (03)

- (b) Write a program in Java that will copy one array into another in reverse order and display them. (04)

- (c) Explain various types of inheritance supported by Java with suitable example. (07)

Q-6 Attempt all questions

- (a) Explain thread life cycle in detail. What is multithreading? Write a program that creates three threads. Make sure that the main thread executes last. (07)

- (b) What is a package? Explain packages in Java with suitable example. (07)

Q-7 Attempt all questions

- (a) What is thread synchronization in Java? Explain with join() and isAlive() method. (07)

- (b) Write a program that creates File and Edit menus in an Applet. (07)

Q-8 Attempt all questions

- (a) Explain execution cycle of an applet in detail. Also explain boarder layout (07)

- (b) What do you mean by event delegation model in Java? Explain in detail use of adapter class, inner class and anonymous inner class with suitable example. (07)

