



NU-M2010101

Seat No. _____

B. C. A. (Sem. IV) (Non CBCS) Examination

February – 2017

CS - 20 : Programming with Java

Time : 3 Hours]

[Total Marks : 100

- 1 Attempt the following questions : (any four) 20**
- (1) Explain components of JDK.
 - (2) Explain Keyword: native, volatile, transient.
 - (3) Explain different Data Types in Java.
 - (4) Explain Garbage Collection and finalize() method.
 - (5) Discuss different access specifiers in Java.
- 2 Attempt the following questions : (any four) 20**
- (1) Explain abstract class and methods with example.
 - (2) What is interface ? Explain role of interface.
 - (3) Discuss difference between Method overloading & Method overriding.
 - (4) What is Exception in java ? Explain Exception Handling Mechanism in Java.
 - (5) What is Thread ? Discuss Thread Life Cycle with state diagram.
- 3 Attempt the following questions : (any four) 20**
- (1) Explain Synchronization in Multiple Threads with example.
 - (2) Explain use of Vector and Enumeration class in detail.
 - (3) List various classes of java.lang packages and discuss Wrapper class with example.
 - (4) Explain event delegation model.
 - (5) Discuss the Graphics class with different methods and example.

- 4 Attempt the following questions : (any **four**) **20**
- (1) Explain Applet Life Cycle.
 - (2) Discuss difference between CharcterStreams and ByteStreams.
 - (3) Difference between Swing & AWT.
 - (4) What is use of Layout Manager ? List various Layout Manager and Explain GridBagLayout with example.
 - (5) Discuss Menu related different classes in swing with example.
- 5 Attempt the following questions : (any **four**) **20**
- (1) Write a program to display name of course (BCA) and related fees of course using StringTokenizer class.
 - (2) Write a program to copy the content of one file of another file.
 - (3) Write a Applet program with JScrollbar to adjust background color.
 - (4) Write a Applet program that allows to draw five triangles of different size. Each triangle should be filled with different color.
 - (5) Write a Applet program to accept integer as a parameter and display a message "it is integer".
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