



**HDE-P3010**

Seat No. \_\_\_\_\_

**M. C. A. (Sem. III) (CBCS) Examination**

**November / December – 2017**

**P3010 : Core Java**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- 1 (a) Attempt the following : 4
- (1) Explain "this"
  - (2) What is constructor ?
  - (3) Define Abstract class.
  - (4) What is multi level inheritance ?
- (b) Attempt any one of the following : 2
- (1) Define overriding
  - (2) What is final ? Explain its usages
- (c) Attempt any one of the following : 3
- (1) Briefly explain Object class.
  - (2) Explain public static void main()
- (d) Attempt any one of the following : 5
- (1) How parameters can be pass to the method? List all the methods. Explain any one of them with suitable example.
  - (2) What is access specifier ? List and explain it in detail.
- 2 (a) Attempt the following : 4
- (1) Define CLASSPATH
  - (2) Explain import.
  - (3) Name two java built in exception class.
  - (4) What is checked exception ?

- (b) Attempt any one of the following : **2**
- (1) What is throw ? Explain it with suitable example.
  - (2) Differentiate throw Vs throws
- (c) Attempt any one of the following : **3**
- (1) What is finally ? Explain it with suitable example.
  - (2) Explain try-catch block with suitable example.
- (d) Attempt any one of the following : **5**
- (1) What is package ? Discuss the access specifier with respect to package in detail.
  - (2) What is exception handling ? Write a Java program to catch an exception created by division by 0.
- 3** (a) Attempt the following : **4**
- (1) List the state of thread.
  - (2) Name the method, how thread can be created.
  - (3) Explain join()
  - (4) What is wait ?
- (b) Attempt any one of the following : **2**
- (1) Explain sleep( ) method in detail.
  - (2) Explain the use of synchronize statement.
- (c) Attempt any one of the following : **3**
- (1) What is synchronization ? Explain in brief.
  - (2) What is dead lock ? Explain it with suitable example.
- (d) Attempt any one of the following : **5**
- (1) Explain the thread life cycle in detail.
  - (2) Write a java program to create the thread of two process i.e. sum and average of the array of size n.

- 4 (a) Attempt the following : 4
- (1) What is listener ?
  - (2) What is an event ?
  - (3) Explain line control of AWT.
  - (4) What is appletviewer ?
- (b) Attempt any one of the following : 2
- (1) Explain applet tag.
  - (2) Only list the component of delegation event model.
- (c) Attempt any one of the following : 3
- (1) Explain the class hierarchy for applet.
  - (2) What is inner class ? Explain its utility.
- (d) Attempt any one of the following : 5
- (1) Explain life cycle of applet.
  - (2) Create a Java applet that will display the banner of your name.
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- 5 (a) Attempt the following : 4
- (1) What is stream in Java ?
  - (2) List the constructors of Label.
  - (3) What is Byte Stream ?
  - (4) What is character stream ?
- (b) Attempt any one of the following : 2
- (1) Name four classes of Byte Stream.
  - (2) Explain console class in brief.
- (c) Attempt any one of the following : 3
- (1) Write a Java program to copy one file to another file.
  - (2) Write a Java program that will take the input from the keyboard and print it on the screen.
- (d) Attempt any one of the following : 5
- (1) What is layout manager ? List the different layouts supported by Java. Explain any one of them.
  - (2) Explain checkbox and checkbox Group with suitable examples.