

004544 - 1a1ji



CS-20

MK-171

003-003402

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

April / May - 2012

CS - 20 : Programming with Java

(New Course)

Faculty Code : 003

Subject Code : 003402

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

[Total Marks : 70] (26)

Instruction:

- (1) There are 3 Questions.
 - (2) All are compulsory.
 - (3) Answer of both Section in main answers sheet
 - (4) Mention your options clearly

Section -I

Q- 1 Attempt the following MCQ's:

Section II

2 Attempt the following:

- (a) Write any three out of six:

 - (i) What is OOP? Explain OOP Principles.
 - (ii) Explain Java features.
 - (iii) Explain components of JDK.
 - (iv) Explain data types of Java.
 - (v) Explain operator precedence with example.
 - (vi) Explain method overloading with example.

(b) Write any three out of six:

 - (i) What is constructor? Explain constructor overloading.
 - (ii) Explain static keyword with example.
 - (iii) Explain final keyword.
 - (iv) Explain garbage collection and finalize() method.
 - (v) Explain various access specifiers available in Java.
 - (vi) Explain method overriding with meaningful example.

(c) Write any two out of five:

 - (i) Explain abstract class and methods with example
 - (ii) How can define a package? Explain with example.
 - (iii) What is interface? Explain role of interface.
 - (iv) What is an exception in Java? Explain exception handling mechanism in Java.
 - (v) Explain any four methods of String class with example.

3. Attempt the following:

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- (a) Write any three out of six:
- ✓ (i) Explain wrapper classes.
 - (ii) Explain Math class with any five methods.
 - (iii) Explain difference between Array and Vector.

- (iv) Explain synchronization and deadlock.
- (v) What is Stream in Java?
- (vi) Explain StringTokenizer class with example.

(b) Write any three out of six:

09 (1)

- (i) Explain Thread life cycle with state diagram.
- (ii) Explain any three methods of Graphics class
- (iii) Explain event delegation model.
- (iv) Explain difference between Applet and Swing.
- (v) Explain List class with example.
- (vi) Explain difference between CharacterStream and ByteStream.

(c) Write any two out five:

10 (1)

- (i) Explain difference between String and StringBuffer
- (ii) Explain any three methods of Date class with example.
- (iii) Explain Runnable Interface with example.
- (iv) What is use of Layout Manager? Explain GridBagLayout.
- (v) Explain keywords: native, volatile and transient.