

(6 pages)

Reg. No. :

Code No. : 30692 E Sub. Code : SMCA 31

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2020.

Third Semester

Computer Application – Core

JAVA PROGRAMMING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ are used to perform manipulation of individual bits of a number
 - (a) Assignment operator
 - (b) Bitwise operator
 - (c) Logical
 - (d) Boolean

2. _____ conversion takes place when two datatypes are automatically converted
- (a) widening (b) automatic type
(c) explicit (d) both (a) and (b)
3. _____ variables are variables within a class but outside any method
- (a) class (b) instance
(c) local (d) new
4. _____ is a process of hiding the implementation details and showing only functionality to the user
- (a) Abstraction (b) Encapsulation
(c) Polymorphism (d) All the above
5. _____ is a Java features that allows concurrent execution of two or more parts of a program
- (a) Multithreading
(b) Interface
(c) Single thread
(d) Thread object

6. The _____ keyword in Java provides locking, which ensures mutually exclusive access to the shared resources
- (a) Synchronization (b) Pointer
(c) Multithreaded (d) Volatile
7. _____ have strict security rules that are enforced by the web browser
- (a) Main () (b) Applet
(c) Base applet (d) HTML
8. The object of _____ class is a component for placing text in a container
- (a) super class (b) base class
(c) label (d) adapter class
9. The _____ component presents the user with a scrolling list of text items
- (a) text field (b) list
(c) checkbox (d) canvas
10. _____ encapsulates a blank window upon which you can draw
- (a) frame (b) canvas
(c) window (d) list

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain Boolean and character literals.

Or

- (b) What is modulus operator with an example?

12. (a) Write short notes on Garbage collection.

Or

- (b) Discuss Recursion with an example.

13. (a) What is java-nested try statements with example?

Or

- (b) Write a java program to demonstrate deadlock using main thread.

14. (a) Write a program to create a Hello World applet.

Or

- (b) Write a java program to create on Button Click using action listener.

15. (a) Explain the different types of containers.

Or

- (b) Explain the flow layout in layout manages.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the Multidimensional arrays in Java with example.

Or

- (b) Explain the overview of java object oriented programming.

17. (a) Explain the methods in Java with example.

Or

- (b) Write a java program to demonstrate overriding and access modifiers.

18. (a) Discuss the types of exception in Java with example.

Or

- (b) Explain multithreading in java with examples.

19. (a) What is Applet? Explain the life cycle of an applet.

Or

- (b) Explain HTML / applet tag with example.

20. (a) Explain the concept of window and advanced component in Java.

Or

- (b) Explain in detailed about menu bars in Java.
-