

**2017**

3

*Time : 3 hours*

*Full Marks : 50*

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are of equal value.*

*Answer any **five** questions.*

1. (a) How can you define a constant in JAVA ?  
(b) What is type casting ? Why is it required in programming ?
2. (a) What is native method ? Explain with suitable example.  
(b) What do you mean by overloading a constructor ? Describe with suitable example.
3. (a) Describe different forms of inheritance with example.

- (b) What is the difference between an IS-A and HAS-A relationship? Give example.
- 4. (a) What is thread? How is it different from process? Explain.  
 (b) What do you mean by package? How to create and access package?
- 5. (a) Define an applet. Write difference between applet and application in JAVA.  
 (b) What do you mean by stream? Explain all types of stream in JAVA.
- 6. (a) How can we set priorities for threads? Describe thread synchronization in details.  
 (b) Illustrate the use of Stack Class and Linked list Class.
- 7. (a) Compare between local and remote applet.  
 (b) Discuss the steps involved in developing and running a local applet.
- 8. Write a program in JAVA to obtain the minimum among three user defined numbers using command line arguments.

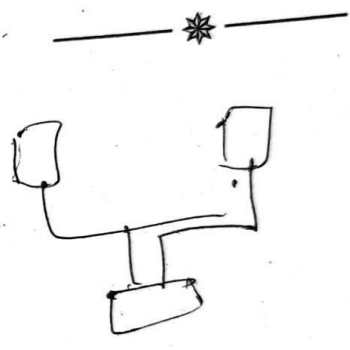
WJ - 122/2

(2)

Contd.

9. Write short notes on the following :
- (a) JDK tools
  - (b) Life Cycle of an Applet
  - (c) GUI program and CUI program in JAVA
  - (d) Problems in multithreading

(4)



END

WJ - 122/2 (500)

(3)

UDHC - CA (10)

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2017

Time : 3 hours

Full Marks : 50

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer any **five** questions.

1. (a) What are Constructor used for ? What do you understand by constructor overloading ? Write a program to show overloading of constructor. 5
- (b) Differentiate between method overloading and overriding. Give example. 5
2. (a) Differentiate between final, finally and finalize. Give example of each. 5
- (b) Explain super keyword with all its usages. Support explanation with a program. 5

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3. (a) What is an interface ? Why is it required in Java ? Write the difference between a class and an interface. 5
- (b) Can an interface have variables ? If "Yes" "YES" write a program to show the use of variable in an interface. 5
- (a) Write a program to show the use of multiple try-catch blocks to handle exceptions. 5
- (b) What is Polymorphism ? Explain with the help of example(program), how Java implements run-time polymorphism. *method override* 5
5. (a) What do you understand by Multithreading ? Explain the use of isAlive() and join() method in context of multithreading. 5
- (b) Explain the functions of the imct(), Pmnt(), stop() and destory() methods of Applet class. 5
6. (a) Write a program to input 10 strings and print them in sorted alphabetical order. 5

- (b) Explain the types of inheritance supported in Java. 5
7. (a) What do you understand by static variables and static methods ? Explain. 5
- (b) Create a user defined package having a class to calculate the factorial (recursive method). Use the package created in another class. 5
8. Write short notes on the following :  $5 \times 2 = 10$
- (a) Wrapper Class
- (b) Life cycle of an applet *int start -> paint - stop - destroy*
- (c) Class and object

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