

# 314317

**24225**

**3 Hours / 70 Marks**

Seat No. 

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Answer each next main Question on a new page.  
(3) Illustrate your answers with neat sketches wherever necessary.  
(4) Figures to the right indicate full marks.  
(5) Assume suitable data, if necessary.  
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

- 1. Attempt any FIVE of the following :** **10**
- a) List any four features of Java.
  - b) Define static import. Give its syntax.
  - c) Define exceptions. List its type.
  - d) Define type casting. List its types.
  - e) Write any two differences between Awt and Swing.
  - f) Define proxy server, reserved socket.
  - g) Write any four methods of statement.

P.T.O.

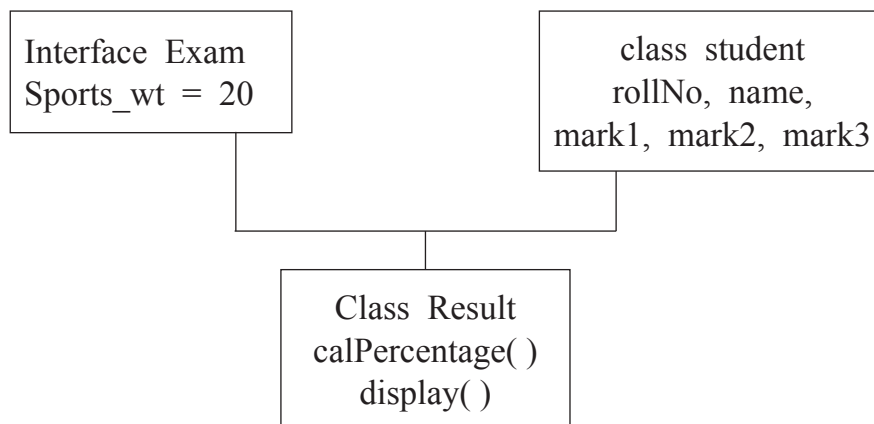
- 2. Attempt any THREE of the following :** **12**
- a) Write a program to accept age from user and throw an exception if age is less than 18.
  - b) Explain garbage collection in Java.
  - c) Write a program to use Label, TextField and Button to create login form. When user clicks the button, login successful/ unsuccessful message should be displayed.
  - d) Differentiate between TCP and UDP.
- 3. Attempt any THREE of the following :** **12**
- a) Explain constructor with its types. Give example.
  - b) Write a program to create two threads. Thread A should print even numbers from 1 to 50 and thread B should print odd numbers from 1 to 50. Each thread should relinquish control to the other frequently.
  - c) Explain final with respect to inheritance. Describe how final method is different from abstract method.
  - d) Write a program to list five states using JComboBox. Display selected item in Jtextfield.
- 4. Attempt any THREE of the following :** **12**
- a) Write a program to use JTextField, JLabel and JButton to add two numbers and display the output. Use GridLayout.
  - b) Define package. Explain how to create and access user defined package in java.
  - c) Write a program to read and display content from the url "http://www.google.com"
  - d) Explain the different types of JDBC drivers.
  - e) Write a program to use keylistener to display characters entered by user.

**5. Attempt any TWO of the following :****12**

- a) Write a program to display the list of employees of deptno 10 from the table employee (eno, ename, salary, deptno). Use prepared statement.
- b) Write a program to implement the following :
  - i) Create vector and add 2 Integer, 2 Double and 1 Float objects.
  - ii) Add string object to 3<sup>rd</sup> position.
  - iii) Remove element specified by user.
  - iv) Display all elements in vector.
  - v) Remove all elements from vector.
  - vi) Display capacity of vector.
- c) Explain the life cycle of Thread.

**6. Attempt any TWO of the following :****12**

- a) Write a program to implement the following Fig. No. 1

**Fig. No. 1**

- b) Write a program to display folder structure of computer using JTree.
- c) Write a program to implement the following using serversocket and socket.
  - i) Client should send a number to server.
  - ii) Server should check if the number is even or odd and send response to client.
  - iii) Client displays output.