

17515

11920

3 Hours / 100 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

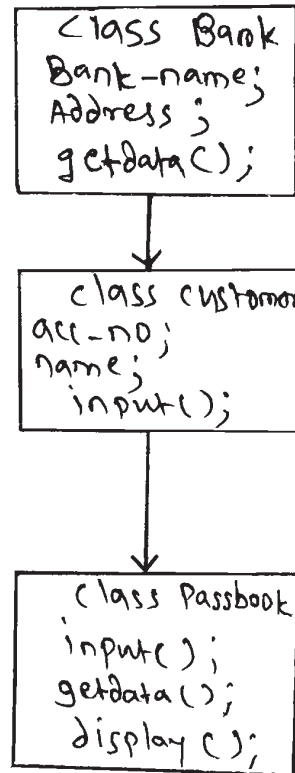
1. a) **Attempt any THREE of the following:** **12**
- (i) Describe any four features of Java.
 - (ii) Describe file output stream class with one example.
 - (iii) Enlist all mathematical function and write a program based on pow() function.
 - (iv) Explain try- catch statement with one example.
- b) **Attempt any ONE of the following:** **6**
- (i) Explain constructor with its type, Give example of parameterized constructor.
 - (ii) Enlist Build-in packages of java, explain any four in details with example.

P.T.O.

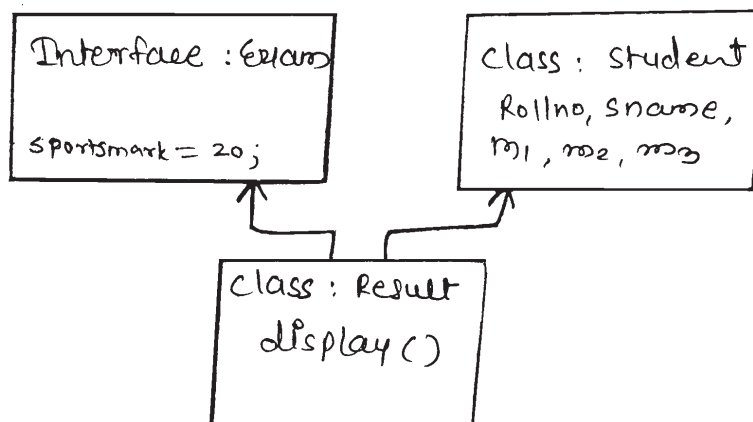
2. Attempt any TWO of the following:

16

- a) Write a program to implement following inheritance. Refer Figure No. 1

Fig. No. 1

- b) Write a java program for following Figure No. 2

Fig. No. 2

- c) Write an applet program that accepts string as a input using <param> tag and reverse the string and display it on status window.

3. Attempt any FOUR of the following: 16

- a) State any four methods of wrapper class.
- b) Write a program to find out whether entered no. is prime or not.
- c) Write a program to copy contents of one file to another file using character stream classes.
- d) Explain Life-cycle of an applet.
- e) Compare between string and string buffer class.

4. a) Attempt any THREE of the following: 12

- (i) Explain robust and secure feature of java.
- (ii) Explain the following terms w.r.t exception handling:
 - (1) Try - catch
 - (2) Throw
 - (3) Throws
 - (4) Finally
- (iii) Explain the use of ternary(?:) operator with example.
- (iv) Explain following thread methods with suitable example.
 - (1) setpriority (int max)
 - (2) getpriority()

b) Attempt any ONE of the following: 6

- (i) Write a program to generate following output using drawLine() method. Refer Figure No. 3

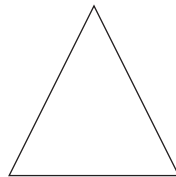


Fig. No. 3

- (ii) Explain in detail garbage collection mechanism in java.

5. Attempt any TWO of the following:**16**

- a) How synchronization is achieved in multi threading? Explain with suitable example.
- b) Write a program to create user defined exception “Minimum Balance” if the account balance is less than Rs.1000/-.
- c) Write an applet program to draw a rectangle filled with different colors randomly on the applet window.

6. Attempt any FOUR of the following:**16**

- a) How command line argument passed to the java program, explain with suitable example.
 - b) Give the difference between Buffered Reader and Buffered Writer class.
 - c) Write an applet program for each of the following graphics method:
 - (i) drawOval()
 - (ii) drawLine()
 - d) Design a package containing a class which defines a method to find area of circle. Import it in java application to calculate area of circle.
 - e) Write a program to find out sum of even and odd numbers. Use suitable range.
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