

- (b) Write an Applet program to draw human face. (5)
- (c) Develop an Applet that receives two numeric values as an input from the users and then displays the sum of the two on the screen. Write the HTML page and test the applet. (5)

SUPPLEMENTARY EXAMINATION : JUNE-JULY, 2018

JAVA PROGRAMMING

Time : 3 Hrs.

Maximum Marks : 70

Note: Attempt questions from all sections as directed.

SECTION – A (30 Marks)

Attempt any five questions out of six.

Each question carries 06 marks.

1. (a) What is object oriented programming? How it is different from procedure oriented programming. (3)
- (b) Describe how data hiding is achieved in java. Does data encapsulation and data abstraction means same. (3)
2. (a) Write a java program To check whether a given String is a palindrome or not. (3)
- (b) Java API Package provide a large number of classes grouped into different packages explain any three with there functionality. (3)

P.T.O.

3. Write a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 10 numbers.
4. How Applet is different from Application? Also Explain various stages in the life cycle of an Applet.
5. Write short note on :
 - (a) Layout Manager
 - (b) Event-handling model in Java
6. (a) Differentiate between default and parameterized constructor with example. (3)
- (b) Define swing in java .Also write some features of swings? (3)

SECTION – B (20 Marks)

Attempt any **two** questions out of **three**.

Each question carries **10** marks.

7. (a) Write a java program to implement multilevel inheritance in java. (5)
- (b) Write a java code to make calculator program by making use of switch and break. (5)

8. (a) Why Interface is required? Which kind of data member and member functions are their in interface. Also write the benefits of using interface. (5)
- (b) Write a program in java implementing multiple inheritance. (5)
9. Discuss the following :
 - (a) FocusEvent & FocusListener
 - (b) MouseEvent & MouseListener
 - (c) WindowEvent & WindowListener
 - (d) KeyEvent & KeyListener
 - (e) ActionEvent & ActionListener

SECTION – C (20 Marks)

(Compulsory)

10. (a) What is the importance of thread synchronization in multithreading? (3)
 - (i) Give some examples of resource corruption when multiple thread conflict. (3)
 - (ii) How do you synchronize Conflicting threads? (4)