**A1.**

a) Keywords which defines the accessibility of a class or its members in OOP.

b) Private

**A2.**  String,Array

**A3.**

* 1. Invalid
  2. Valid
  3. Invalid
  4. Invalid
  5. Valid

A4. a) Student\_name

1. $Studentname
2. Studentname1

A5. Error: i. the return type ‘void’ is used

ii. the second parameter ‘y’ is not declared.

iii. the variable ‘sum’ is not declared.

iv. undefined variable ‘total’ is used.

A.6

1. if(age<18)

{

System.out.print(“you are under age”);

}

1. public static boolean attackEnemy(float b,float c)
2. total=total+20;
3. Button quit = new Button(“exit”);

A7.

switch(code)

{

case ‘E’: case ‘e’: extrapoint=4; break;

case ‘N’: case ‘n’: extrapoint=2; break; default:

extrapoint=0;

}

A.8

i) Arithmetic

ii) Relational /comparison iii)Logical

iv) Assignment

B

**B1.**

**a)**

public class Dowhile

{

public static void main(String [] args)

{

int x=20;

do

{

System.out.println(x);

x--;

}while(x>=4)

}

}

**b)**

An endless loop is known as an infinite loop that iterates endlessly when its terminating condition is always true.

E.g.

int i=1;

while(i==1)

{

System.out.println(i);

}

**c)-**

public class oddNum

{

public static void main(String [] args)

{

for(int i=1;i<=45;i+=2)

{

System.out.println(i);

}

}

}

**d)-**

i)- It is the feature that allows a class to have two or more methods having same name if their argument list are different.

ii)-Polymorphism

iii)-

class A

{

public static void display()

{

}

public static void display(String message)

{

}

}

**B2.­**

* 1. -

init() : first method which runs after executing applet using applet viewer .Used for initialization.

start() : executes after init method. Executes every time applet is active.

stop() : pauses applet when user leaves the page or minimize the page.

Destroy() : called when browser or applet viewer is closed. It releases all resources allocated by applet.

* 1. –

code : name of the compiled code to be called.

width : width of the panel in which applet runs.

height : height of the panel in which applet runs.

* 1. -

GridLayout : components are placed in rectangular grid.

FlowLayout : arrange components in directional flow.

BorderLayout: arrange components is north,south,east,west and center. d.)

* 1. –

import java.awt.\*;

import java.applet.\*;

public class Drawrect {

public void paint(Graphics g) extends Applet

{

g.drawRect(50,65,30,60);

setBackground(Color.blue);

g.setColor(color.yellow);

g.fillRect(50,65,30,60);

}

}

**B3.**

**a)**

- Page no25 in book.

**b)**

**-** if…else, switch

**c)**

1. parseInt()

**ii)-**  UpperCase()

iii)- concat()

iv)- equals()

**d)**

**-**

length attribute gives the number of elements in an array whereas the length() method gives the number of characters in a string.

Example of length attribute

int[] num={1,3,5};

System.out.println(“No of elements in num array: ” + num.length);

Output: No of elements in num array: 3

Example of length() method

String name= “Superman”.

System.out.println(“No of characters in ‘Superman’ is: ” + name.length());

Output: No of characters in ‘Superman’ is 8

**e)-**

**i)** int[] number=new int[100];

ii)

for(int i=0;i<number.length;i++)

{

if(number[i]>55)

{

System.out.println(number[i]);

}

}

**f)-**

Block comment is used to comment across multiple lines.

**g)-**

**i)- {}**

**ii)- ,**