

Question 1

- a) What do you mean by a class? [2]
- b) Define Polymorphism. [2]
- c) What is Encapsulation? [2]
- d) Write down the difference between unary and binary operators. [2]
- e) Why a class is called an object factory? [2]

Question 2

- a) Name two types of Java programs. [2]
- b) What is inheritance? [2]
- c) What do you mean by Java Byte code? [2]
- d) Define character set in Java. [2]
- e) What do you mean by a token in Java? [2]

Question 3

- a) Name Boolean literals in Java. [2]
- b) What is a literal? [2]
- c) What do you mean by an identifier? [2]
- d) Differentiate between an operator and an expression. [2]
- e) Define a block in java. [2]
- f) Write down the difference between an Integer literal and a floating point literal. [2]
- g) What is abstraction in java? [2]
- h) Write *one* difference between / and % operator. [2]
- i) Write down the *name* of the following *literals*. [2]
- 1) 'p' 2) "p"
- j) What do you mean by data types in java. [2]

Question 4

Check whether the following identifiers are *valid* or not. If *invalid* write down the reason: [4]

- 1) sum of digits 2) 2017August
- 3) myfile 4) class

Question 5

Write down the *name* of the separator and the *symbol* for the following:

[6]

- 1) statement terminator
- 2) to separate list of variables
- 3) to enclose arguments in a method
- 4) to make compound statements
- 5) used as array subscript
- 6) to represent floating point literals

Question 6

Write down the *output* of the following:

[4]

```
System.out.println("The king said \"Begin at the beginning!\" to me.");
```

```
System.out.print(" Have a \n nice day");
```

```
System.out.println("Sum of 3+4 is\t seven");
```

```
System.out.print("Your answer is correct");
```

Question 7

- a) Write an *algorithm and draw a flow chart* to input 2 numbers and find their sum and average.
- b) Write an *algorithm and draw a flow chart* to input a number. If the number is even calculate square of the number otherwise calculate cube of the number.
- c) Write an *algorithm and draw a flow chart* to input number of hours worked and rate per hour. Calculate and print the total wages of the worker.
Total wages=hours worked * rate per hour.
- d) Write an *algorithm and draw a flow chart* to input the price(price) and quantity(qty) of articles purchased from a shop.
 - a) Calculate the total cost as price*qty
 - b) 15% discount on total cost if the total cost is greater than Rs.2500
 - c) net amount to be paid after deducting the discount.

Question 8

Write a *java program to print* that

The 14 th President of India is

Ram Nath Kovind .