

Half-yearly Test Feb 2021

Computing year 9

WHERE NECESSARY ALWAYS SHOW THE WORKING

- 1) Name two input devices and two output devices [2]
- 2) Consider the following tasks related to the computer: input, processing, output, storing, retrieving, and communicating within a network. Which of these tasks is being performed in the following sentences? [3]
 - a) The user opens a document.
 - b) The user double clicks the mouse.
 - c) A document is saved on the hard disk.
 - d) The computer inserts a word in the middle of a paragraph.
 - e) The user sends an email.
 - f) A document is printed.
- 3) What is the difference between primary memory and secondary storage? [2]
- 4) Given that $A=1$, $B=0$ and $C=1$, what is the value of the following Boolean expressions: [2]
 - a) $A.B' + C'$
 - b) $B.(A'.C' + B')$
- 5) For the expression $A'.B + C$
 - a) Draw the logic circuit. [2]
 - b) Find its truth table [2]
- 6) Fill in the spaces with the correct representation. [3]

Denary	Binary	Hexadecimal
53		
	10001100	
		5B

- 7) Perform the following binary operations
 - a) $100110 + 10111$ [1]
 - b) $10100 - 1010$ [1]

- 8) Associate the term on the left column with the meaning on the right column. [6]

TERM	MEANING
1) type	a) It is used to enter a value as input.
2) System.out.println	b) This is an assignment statement
3) "St Edward College"	c) Examples are int and double
4) Keyboard class	d) Used to display sentences on the screen.
5) radius = 7.5;	e) This is a declaration.
6) int rate;	f) This is called a string.

- 9) Enter the missing parts in the following Java program. The program calculates the perimeter of a rectangle. [3]

```
public class PerimeterOfRectangle
{
    public static void main (String[] args)
    {
        double length, breadth, per;
        System.out.println ("Enter the length");
        length = _____;
        System.out.println ("Enter the breadth");
        breadth = _____;

        per = _____;

        System.out.println ("The perimeter is " + per);
    }
}
```

- 10) Associate the term on the left column with the meaning on the right column. [7]

1) Program	a) It is the container of all kinds of information.
2) Digital	b) The computer picks the desired piece of information immediately from its position.
3) Analogue	c) A representation of a value by means of a number.

4) File	d) A printout
5) Sequential access	e) A sequence of instructions.
6) Direct access	f) A representation of a value by means of a physical quantity.
7) Soft copy	g) To get to a searched item you need to start from the first item and go through other items until you arrive at the desired item.

- 11) Write the following terms from smallest to biggest: Gigabyte, Kilobyte, Megabyte. [1]
- 12) Write a program in Java that calculates the total cost of purchasing yogurt that is sold with a special offer. The price of one cup of yogurt is 80c. If you buy more than 10 it is sold at 75c per cup. The program asks the user to enter the number of cups to be bought and it outputs the total cost. [6]