



Name / Index No. :

- Answer all the questions on this paper itself.
- Underline the correct answer.

(01) (i) The binary equivalent of the decimal number 59_{10} is,

(1) 11100_2 (2) 110001_2 (3) 10100_2 (4) 111011_2

(ii) The decimal equivalent of the binary number 1111_2 is,

(1) 17 (2) 14 (3) 16 (4) 15

(iii) What is done to check the properties of a file?

(1) Double Click on the file.
(2) Right-click on the file and click Open.
(3) Right-click on the file and click Properties.
(4) Right-click on the file and click Edit.

(iv) Which is not an application software error?

(1) Full interface not visible. (2) Not operating on user commands.
(3) Taking a long time to open. (4) Monitor is not working.

(v) Which one is used to connect external storage devices to computer?

(1) HDMI port (2) RJ45 port
(3) eSATA port (4) Micro USB port

(2 x 5 = 10 marks)

(02) Write the following Decimal Numbers in Expanded Form,

(i) 154

.....
.....
.....

(ii) 305

.....
.....
.....

(2 x 2 = 4marks)

(03) Convert the following decimal numbers into binary numbers. (Mention your answer step by step in the box below.)

(1) 25_{10}

(2) 124_{10}

(5 x 2 = 10 marks)

(04) Convert the following binary numbers into decimal numbers. (Mention your answer step by step in the box below.)

(1) 10110_2

(2) 100001_2

(5 x 2 = 10 marks)

(05) (i) Name the following Computer Ports used to connect a Monitor.

(1)



(2)



(3)



(2 x 3 = 6 marks)

(ii) Fill in the blanks using the words from the word list.

(1) port is used to connect many devices in modern computers.

(2) port is used to transmit audio and video data simultaneously.

(3) port is used to connect mouse and keyboard in old computer.

(4) port is used to connect a computer with the internet.

(5) is a property of a file.

(File size, HDMI, USB, PS/2, RJ45)

(2 x 5 = 10 marks)

(06) (i) Match the symbols given for the tools available in the word processing software with the function.

- (1) Word Art
- (2) Undo
- (3) Picture
- (4) Open
- (5) Save



(2 x 5 = 10 marks)

(ii) If the following statements are True, Put (✓) mark and if they are false put (✗) mark.

- (1) Microsoft Word software is used to type a letter. (.....)
- (2) To save a letter click File - Save. (.....)
- (3) It is unable to get any shape using Insert - Shapes. (.....)
- (4) Word processing software is not application software. (.....)
- (5) Print Preview provides a preview of a document. (.....)

(2 x 5 = 10 marks)

(07) (i) Consider finding the area of a rectangle as a problem and write its input, process and output.

- (a) Input :-
- (b) Process :-
- (c) Output :-

(2 x 3 = 06 marks)

(ii) Name 3 control structures used to build algorithms.

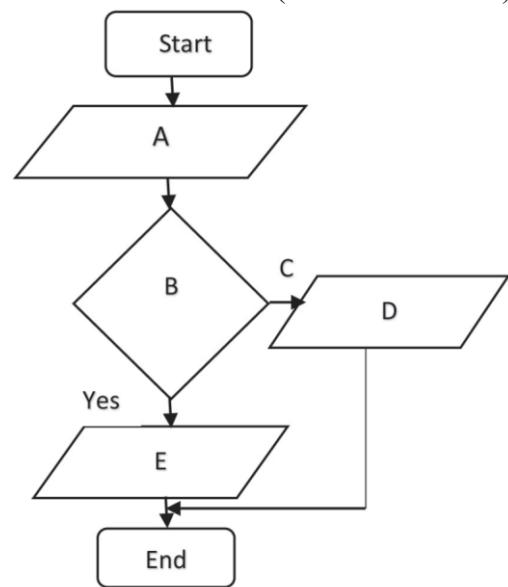
.....
.....
.....

(2 x 3 = 06 marks)

(08) (i) Enter the marks for a subject and write the appropriate words in brackets in the flow chart to indicate that if the marks are more than 50, it is a pass and if it is less than 50, it is a fail.

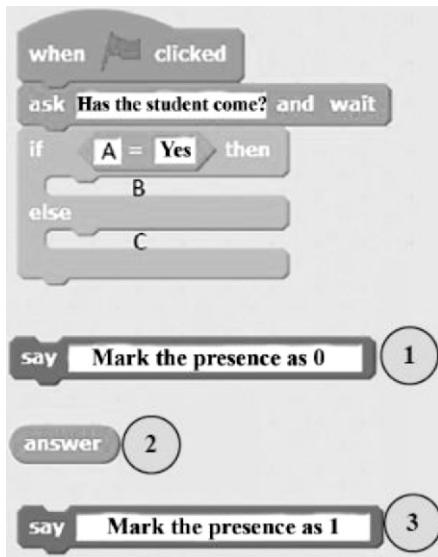
- (A)
- (B)
- (C)
- (D)
- (E)

[Display Pass, Is Marks>50?,
Input Marks,
No, Display Fail]



(2 x 5 = 10 marks)

(ii) When marking the attendance of a class, 1 is recorded if the student is present and 0 if he is absent. The corresponding Scratch program is given out of order. Arrange them in the correct order. Indicate the number of the instruction corresponding to the positions A, B and C.



A -

B -

C -

(2 x 3 = 06 marks)

(iii) Give 2 examples of mobile and smart devices.

1.

2.

(2 x 1 = 02 marks)

Answer Paper

(01)	(i) 4 (ii) 4 (iii) 3 (iv) 4 (v) 3	(2 x 5 = 10)
02	$ \begin{aligned} \text{(i)} \quad 154 &= 1 \cancel{\times 10^2} + 5 \cancel{\times 10^1} + 4 \cancel{\times 10^0} \\ &= 1 \cancel{\times 100} + 5 \cancel{\times 10} + 4 \cancel{\times 1} \\ &= 100 + 50 + 4 \\ &= 154 \end{aligned} $ $ \begin{aligned} \text{(ii)} \quad 305 &= 3 \cancel{\times 10^2} + 5 \cancel{\times 10^1} + 5 \cancel{\times 10^0} \\ &= 3 \cancel{\times 100} + 0 \cancel{\times 10} + 5 \cancel{\times 1} \\ &= 100 + 0 + 5 \\ &= 305 \end{aligned} $	(2 x 2 = 04)
03	$ \begin{array}{r} \text{(i)} \quad 25_{10} \\ \begin{array}{r} \begin{array}{r} 2 \overline{)25} \\ 2 \overline{)12} \\ 2 \overline{)3} \\ 2 \overline{)1} \\ 0 \end{array} \quad -1 \\ -0 \\ -1 \\ -1 \\ \hline \end{array} \end{array} $ $ \begin{array}{r} \text{(ii)} \quad 124_{10} \\ \begin{array}{r} \begin{array}{r} 2 \overline{)124} \\ 2 \overline{)62} \\ 2 \overline{)31} \\ 2 \overline{)15} \\ 2 \overline{)7} \\ 2 \overline{)3} \\ 2 \overline{)1} \\ 0 \end{array} \quad -0 \\ -0 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ \hline \end{array} \end{array} $ $ \begin{array}{l} 25_{10} = 11001_2 \\ 124_{10} = 1111100_2 \end{array} $	(5 x 2 = 10)
04	$ \begin{aligned} \text{(i)} \quad 10110_2 &= 1 \cancel{\times 2^4} + 0 \cancel{\times 2^3} + 1 \cancel{\times 2^2} + 0 \cancel{\times 2^0} \\ &= 1 \cancel{\times 16} + 0 \cancel{\times 8} + 1 \cancel{\times 4} + 1 \cancel{\times 2} + 0 \cancel{\times 1} \\ &= 16 + 0 + 4 + 2 + 0 \\ &= 22 \end{aligned} $ $ \begin{array}{l} \text{(Give marks for calculations done as mentioned in page 6 of} \\ \text{the text book.)} \end{array} $ $ \begin{aligned} \text{(ii)} \quad 100001_2 &= 1 \cancel{\times 2^5} + 0 \cancel{\times 2^4} + 0 \cancel{\times 2^3} + 0 \cancel{\times 2^2} + 0 \cancel{\times 2^1} + 1 \cancel{\times 2^0} \\ &= 1 \cancel{\times 32} + 0 \cancel{\times 16} + 0 \cancel{\times 8} + 0 \cancel{\times 4} + 0 \cancel{\times 2} + 1 \cancel{\times 1} \\ &= 32 + 0 + 0 + 0 + 0 + 1 \\ &= 33 \end{aligned} $	(5 x 2 = 10)
05	$ \begin{array}{ll} \text{(i)} \quad 1 - \text{VGA} & \text{(ii)} \quad 1 - \text{USB} \\ 2 - \text{HDMI} & 2 - \text{HDMI} \\ 3 - \text{DVI} & 3 - \text{PS / 2} \\ & 4 - \text{RJ 45} \\ & 5 - \text{File size} \end{array} $	$ \begin{array}{l} \text{(i) } (2 \times 3 = 6) \\ \text{(ii) } (2 \times 5 = 10) \end{array} $

(06)	<p>(i) (1) Word Art →  (2) Undo →  (3) Picture →  (4) Open →  (5) Save → </p> <p>(ii) 1 - ✓ 2 - ✓ 3 - X 4 - X 5 - ✓</p>	(2 x 5 = 10)
07	<p>(i) Input – Length , Width Process- Area=Length x Width (Give marks if written as Finding area by multiplying length and width) Output - Area</p> <p>(ii) Sequence, Selection, Repetition</p>	(2 x 3 = 6)
08	<p>(i) A Input Marks B Is Marks>50 ? C No D Display Fail E Display Pass</p> <p>(ii) A - 2 B - 3 C - 1</p>	(2 x 5 = 10)
	<p>(iii) Smart TV/Smart camera/Smart Phone etc. (As mentioned in the Text Book [Page 51])</p>	(2 x 1 = 2)