

# Model Question of HSC Examination-2020(All Board)

Time : 2 hours 35 Minutes

Information and Communication Technology

Subject Code : 275

Creative Question

Marks : 50

[N.B. Answer any five questions. The figures in the right margin indicate full marks.]

1. ► Abir was surprised to see Doctor's chamber functioning as doctor entered into the room by not touching his any organs of body and after entering into the room the calling Bell rang automatically.



- a. What is Plagiarism? 1
- b. Explain the treatment by sitting at home. 2
- c. Describe the technology of figure of the stem. 3
- d. By which Technology Abir was surprised? Describe its various types with examnples. 4

2. ★

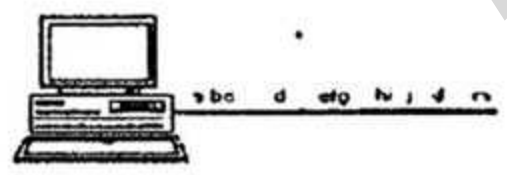


Figure 1



Figure 1.2

- a. What is Bandwidth? 1
- b. Which Topology will give you the maximum support on your Computer Lab and Why? 2
- c. Differentiate between other transmission method with the figure-01's method. 3
- d. Describe characterized features of the technology used for the apps on figure-1, 2 indicating its types. 4

3. ★ ICT lecturer wrote three positional numbers on Board as  $(1011011.1111)_2$ ,  $(546.735)_8$ ,  $(5D.AF)$  respectively. But a student wrote on his Notebook  $(345.625)_{10}$  and  $(1010100.11101)_2$  respectively.

- a. What is code? 1
- b.  $\bar{B}C + \bar{B}\bar{C} + BC$ . Simplify this expression. 2
- c. Convert Teacher's 1st number of Decimal and 2nd number to Hexadecimal. 3
- d. Subtract from Student's 1st number to 2nd number in binary and with this result add Teacher's 3rd number in binary. 4

4. ★ `<html>`

`<h3 align = "center"><u> Cadet Information</u></h3>`

`<table align="center" style=width:"500px">`

`<tr>`

`<td>`

`<form align="center">`

`<b>Cadet No:<input type="Number"></b><br>`

`<b>Cadet Name:<input type="text"></b><br><br>`

`<b>Select Game</b>`

`<input type="radio" > Handball`

`<Input type="radio">Badminoton<br><br>`

`<b>Cadet College</b>`

`<input type="checkbox">MGCC`

`<input type="checkbox">JGCC`

`<input type="checkbox">FGCC<br>`

`<br>`

`<input type="Submit" value="Submit">`

`</form>`

`</td>`

`</tr>`

`</table>`

`</html>`

- What is Web Server? 1
- What do you mean by Web Hosting? 2
- Describe any 10 tag from above stem. 3
- If you open the above stem's html document using any browser then what will be the output page. 4

5. ★

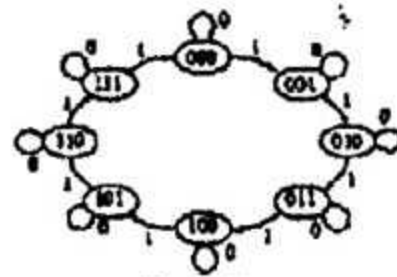
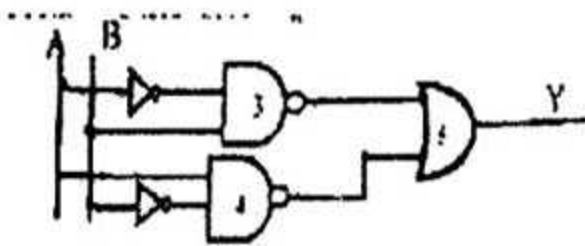
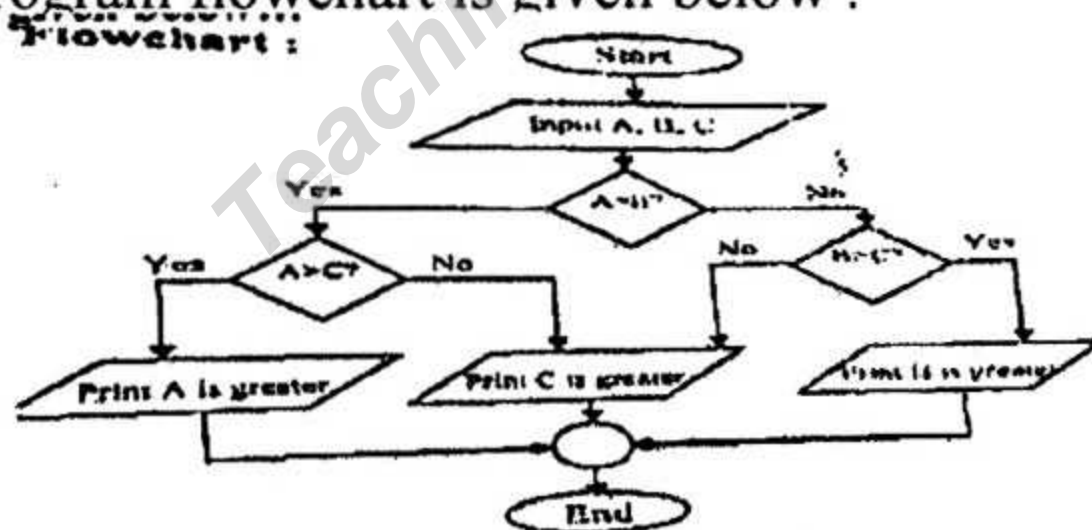


Figure 2

- What is Flip-Flop? 1
- Prove the universality of NOR gate. 2
- Express the value of Y in Boolean Expression and simplify. 3
- Describe the working procedure of the digital device used for functionality of figure-2. 4

6. ► A Program flowchart is given below :



- What is Looping? 1
- Explain the rules for declaring a variable validity. 2
- Explain the Symbols of the above flowchart with their usage. 3
- Write C program to get the result of above flowchart if the numbers are expanded to D. 4

7. ► Billah coded the following programs.

```
#include<stdio.h>
#include<conio.h>
Main()
{
int i, sum=0;
int n=100;
i = 1
i=i+2
sum=sum+i
printf(Total of the series is %d, sum)
getch();
}
```

- What is Algorithm? 1
- What is the significance of scanf("%d"); 2
- Write the flowchart of the program Billah coded. 3
- Write the program of the stem using While and Do While Loop taking the value of n from keyboard. 4

8. ► Table-1

Item Code	Item Name
301	Pen
302	Pencil

Table-2

Item Code	Manufacturer	Unit Price	Quantity	Total
301	Matador	100/-	40	4000/-
302	Notoraj	200/-	60	12000/-

- What is Cipher text? 1
- What are the methods to input data in database management? 2
- Explain what problems would have occurred if there had been no "Item Code" field in table-2? 3
- According to the stem what relation can be made with Table-1 and Table-2? Explain. 4

[N. B. Answer all the questions. Each question carries one mark. Block fully, with a ball point pen, the circle of the letter that stands for the correct/best answer in the "Answer Sheet" for Objective Type Examination.]

1. **Physical Biometrics can be—**

- i. Voice
- ii. DNA
- iii. Person's behavior

**Which one is correct?**

- (a) i & iii
- (b) ii
- (c) i & iii
- (d) i, ii & iii

2. **★ The technology to convert the Human thoughts into Machinery Functions?**

- (a) Artificial Intelligence
- (b) Biometrics
- (c) Virtual Reality
- (d) Bio-Informatics

3. **What is used in gene research?**

- (a) Bio-Informatics
- (b) Bio-metrics
- (c) Genetic Engineering
- (d) Nano technology

4. **What will be the mode if someone hears a song from Bluetooth Speaker?**

- (a) Half Duplex
- (b) Multicast
- (c) Unicast
- (d) Broadcast

5. **★ Storage Devices are requires in—**

- (a) Synchronous
- (b) Asynchronous
- (c) Isochronous
- (d) Cryptochronous

**Read the following stem and answer the question no 6**



6. **Which device should be used on missing point?**

- (a) Encoder

(b) Decoder

(c) Register

(d) Counter

7. **The possibility of Data Collision can be reduced by—**

- i. Hub
- ii. Router
- iii. Switch

**Which one is correct?**

- (a) i & iii
- (b) ii & iii
- (c) i & ii
- (d) iii

8. **Which one is used in twisted pair cable connection?**

- (a) RJ45
- (b) BNC
- (c) ST
- (d) T-type

9. **Wich generation has the limited Handoff?**

- (a) 1st
- (b) 2nd
- (c) 3rd
- (d) 4th

$$A + \bar{A}B + \bar{A}\bar{B}$$

10. **The simplification of above expression is—**

- (a) A
- (b) B
- (c) 1
- (d)  $\bar{A} \mp \bar{B}$

11. **★ What will be the result if we subtract 1.001 from 10.1000 in Binary?**

- (a) 11.0100
- (b) 01.0110
- (c) 01.0100
- (d) 11.1101

12.  **$(2.7 + 1.7)_8 = ?$**

- (a) 3.6
- (b) 4.7
- (c) 4.6
- (d) 3.7

13. **Parts of main() function are—**

- i. Declaration
- ii. Build
- iii. Link

**Which one is correct?**

- (a) i & ii
- (b) ii & iii
- (c) i & ii
- (d) i, ii & iii

14. Choose the correct HTML tag of left align the content of cell?

- (a) <td = left>
- (b) <td left align>
- (c) <td valign="left">
- (d) <td align="left">

15. Which tag is used to divide a document in different sub section?

- (a) <pre>
- (b) <sub>
- (c) <sup>
- (d) <div>

16. To create a combo box (drop down box) which tag will you use?

- (a) <select= "dropdown">
- (b) <list= "dropdown">
- (c) <dropdown="input type">
- (d) <input type="dropdown">

# for (i=3; i<10; i=i+2)

Printf("%d", i);

17. Which of the following sequence will be the output?

- (a) 2, 4, 6, 8....
- (b) 3, 4, 6, 8, 9
- (c) 3, 5, 8, 9
- (d) 3, 5, 7, 9

18. When should you use path along with file name of picture in IMG tag?

- (a) path is optional and not necessary
- (b) the location of image and html file are different
- (c) image & html file both are on same location
- (d) path is always necessary when interesting image

19. >= is ..... Operator?

- (a) Arithmetic
- (b) Relational
- (c) Conditional
- (d) Logical

20. Query relates to

- (a) Updaing data
- (b) Searching anything from database
- (c) Representing database differently
- (d) Sorting table

21. For comparing two things, which one is used?

- (a) if
- (b) else if
- (c) if else
- (d) nested if

Read the following stem and answer the questions no 22 and 23

# include <stdio.h>

```
Main() {
    in a, s=0;
    for(a=0;i<=5; a++)
        s=s+a;
    Printf("%d", s);
}
```

22. What will be the output of the program above?

- (a) 5
- (b) 6
- (c) 10
- (d) 15

23. Output will be 6 when—

- (a) a=1, a=a+2
- (b) a=2, a=a+1
- (c) a=2, a=a+2
- (d) a=0, a=a+2

24. Which are example of DBMS software?

- i. Ms-Access
- ii. MySQL
- iii. Informix

Which one is correct?

- (a) i & ii
- (b) ii & iii
- (c) i & iii
- (d) i, ii & iii

25. The — is used to access one record at a time?

- (a) Quarry
- (b) Form
- (c) Filter
- (d) Report

Ans.	1	(b)	2	(a)	3	(a)	4	(d)	5	(a)	6	(a)	7	(d)	8	(a)	9	(b)	10	(c)	11	(b)	12	(c)	13	(c)
	14	(d)	15	(d)	16	(a)	17	(d)	18	(b)	19	(b)	20	(b)	21	(c)	22	(d)	23	(c)	24	(d)	25	(c)		