

# Barishal Board-2017

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. ► Dr. Jamil is an agricultural researcher. By using his invented seed, a farmer gets more crops than before. One day Jamil go to his friend for mole's operation in the cheek. His friend does the operation very shortly in -20' C temperature. He instantly go to his house.

- a. What is robotics? 1
- b. Explain the technology of person identification. 2
- c. Which type of technology is used in Dr. Jamil's research-explain. 3
- d. Give analytical opinion with logic about the treatment method of Dr. Jamil's friend. 4

2. ★ ICT dependent knowledge and technology takes people to the path of prosperity. After reading in ICT, Arif comes to know about a communication medium where animated images can be sent along with sound. But in this medium data is not pass in curved path, that's why it requires to establish tower on the high rising building whose frequency is around 300 MHz to 300 GHz. After that it is combined with a new invented technology that connects a continent with others under the sea level.

- a. What is bridge? 1
- b. Why is it not possible to receive and talk over waki-toki at the same time? Explain. 2
- c. Explain the 1<sup>st</sup> medium of the stem. 3

- d. The 2<sup>nd</sup> medium is comparatively convenient.-Evaluate with logic. 4
3. ► Atik sir use bed switch to run fan in his bed room. He has switched off the bed switch for the reason of feeling cold. As a result fan has switched off. Though a switch of the fan is in on position, it(fan) has switch off. He is thinking how could it possible.
- a. What is encoder? 1
- b. XOR gate is more convenient comparing to OR gate-explain. 2
- c. Explain the reason of the fan's being switched off by drawing the circuit of the stem. 3
- d. What changes of the circuit will become take the fan in an unstoppable situation even if a switch is not working? Explain. 4
4. ★ Asif's father is a ICT teacher. When his father ask him about his ICT marks he told that he has obtained  $(112)_8$  and  $(7A)_{16}$  marks in the half yearly and year final examination respectively.
- a. What is register? 1
- b. Among the equivalent BCD code and binary number of  $(14)_{10}$  which one needs more bits? Explain. 2
- c. Convert Asif's half yearly obtained marks in hexadecimal number. 3
- d. How much less or greater than of Asif's obtained mark in the year final examination comparing to  $(80)_{10}$ . Give logic on behalf of your answer. 4
5. ► Two friends Anis and Iqbal takes the training of web page creation. Anis takes fig-1 web structure and Iqbal takes

fig-2 web structure to create web page.

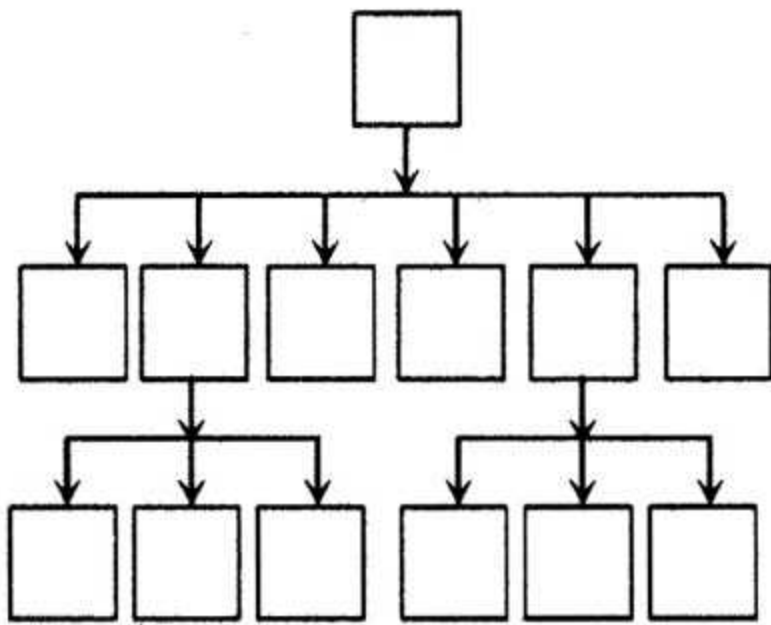


Fig-1

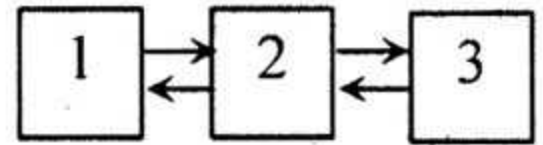


Fig-2

- a. What is IP address? 1
- b. Explain the relation between web page and browser. 2
- c. Explain Iqbal's web page structure by identifying it. 3
- d. Which of the above structure is the most convenient- Give your analytical answer. 4

6. ✪ Nafisa madam is talking about programming language in the ICT class. She has told that 0 and 1 is used to write programme previously. Nowadays C programming is very popular. After taking a long descriptive class on C language, she has told her students to write a programme in the C language for calculating the LCD of the two numbers 6 and 12.

- a. What is 4GL? 1
- b. What is understand by the function's header file of C programming language. 2
- c. Write descriptively about the first language mentioned in the stem. 3
- d. Write the C language code of the above problem. 4

7. ► Look at the following code and answer questions:—

```
# include < stdio. h>
```

```

main ( )
{
int SUM, N;
printf ("Enter the last number");
scanf("%d", &N);
SUM = 0;
for (i = 1; i ≤ N; i = i + 3)
{
SUM = SUM + i;
}
printf ("Result: % d", SUM);
}

```

- What is pseudo-code? 1
- Compiler is more suitable as a translator language- explain. 2
- Write the flow-chart of the above code. 3
- What changes of the code need to take for printing the output of the above code by using do.....while loop. Analyze. 4

8. ★

Roll	Name	City
101	Rifat	Khulna
102	Fahmid	Dhaka
103	Fahima	Habigonj
104	Istiaq	Barisal

Table-1

Roll	Total Marks	Grade
101	800	A+
102	660	A-
103	775	A
104	800	A+

Table-2

- What is SQL? 1
- Database index file can update automatically. Explain. 2
- Explain the data type on the light of the stem. 3
- Evaluate the possibility and advantage to create relation among the two tables of the stem. 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. Which type of domain is understand by .edu?

- (a) Military      (b) Organizational
- (c) Educational   (d) Business

2. Suitable format for adding image in the website is —

- i. .jpg
- ii. .img
- iii. .png

Which is the following is correct?

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

3. Which one is the correct variable in C language?

- (a) st\_name          (b) \$ stname
- (c) lstname          (d) lst-name

Read the following stem and answer question nos. 4 and 5.

In the 4<sup>th</sup> page of a website, a image named Pic.jpg is attached whose size is 300\*300. But problem is that a person cannot go to other page from one page.

4. Necessary tag for solving the problem of the site is —

- (a) <a> ---- </a>   (b) <b> ---- </b>
- (c) <i> ---- </i>   (d) <li> ---- </li>

5. HTML code of the 4<sup>th</sup> page is —

- (a) <img src "pic.jpg" height = 300 width = 300 >
- (b) <img src = "pic.jpg", height = "300" width = "300">
- (c) <img src = "pic.jpg" height = "300" width = "300" >
- (d) <img src = "pic.jpg" height = 300, width = 300 >

6. Which one is the necessary header file for getch()?

- (a) stdio.h
- (b) conio.h
- (c) math.h
- (d) graphics.h

7. Can do by using query —

- i. Data Input
- ii. Data Update
- iii. Data Delete

Which is the following is correct?

- (a) i & ii              (b) i & iii

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

Read the following stem and answer question nos. 8 and 9:

```
#include <stdio. h>
```

```
main ( )
```

```
{
```

```
int a, s = 0;
```

```
for (a = 1; a < = 5; a ++)
```

```
s = s + a;
```

```
printf ("%d", s);
```

```
}
```

8. What is the output of the programme?

- (a) 1                    (b) 5
- (c) 10                  (d) 15

9. Output will become 6 after changing the value of 'a' to which one?

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

10. Necessary element for establishing global village —

- i. Connectivity
- ii. Data
- iii. Capability

Which is the following is correct?

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

11. Full form of GSM is —

- (a) General System for Mobile Communication
- (b) Global Standard for Mobile Communication
- (c) General Standard for Mobile Communication
- (d) Global System for Mobile Communication

12. Used machines of cryosurgery are —

- i. cryoprob
- ii. Spray-device
- iii. accumulator

Which is the following is correct?

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

Read the following stem and answer question nos. 13 and 14:

Roll	Name	Dist
1	Zafar	Dhaka
2	Ali	Comilla
3	Kamal	Rangpur
4	Bijoy	Chittagong

Table-A

Roll	Sec	GPA
1	A	5.00
2	A	3.50
3	B	4.00
4	C	5.00

Table-B

13. Which type of relation are there among the tables?

- (a) One to one
- (b) One to many
- (c) Many to one
- (d) Many to many

14. If sorting is done from A → Z on the Dist field of Table-A, then serial of roll field will be —

- (a) 2, 3, 4, 1
- (b) 4, 2, 1, 3
- (c) 3, 1, 2, 4
- (d) 4, 3, 2, 1

15. One nanometer is equal to —

- (a)  $10^{-7}$  m
- (b)  $10^{-8}$  m
- (c)  $10^{-9}$  m
- (d)  $10^{-10}$  m

16. Advantage of asynchronous transmission —

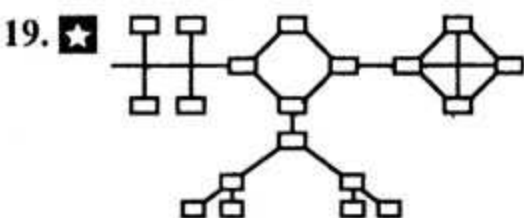
- (a) Primary storage device is not required
- (b) Data transmission speed is high
- (c) Data is sent as block
- (d) More suitable to use in satellite

17. Example of broadcast mode —

- (a) Television telecast
- (b) Video conferencing
- (c) Telephone conference
- (d) SMS sending

18. Which medium is suitable to establish comparatively low costing active network in the hilly areas?

- (a) Optical fiber
- (b) Radio wave
- (c) Wi-fi
- (d) Wi-Max



How many network topology are there in the above figure?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

20. 111 number can be —

- i. Binary
- ii. Octal
- iii. Decimal

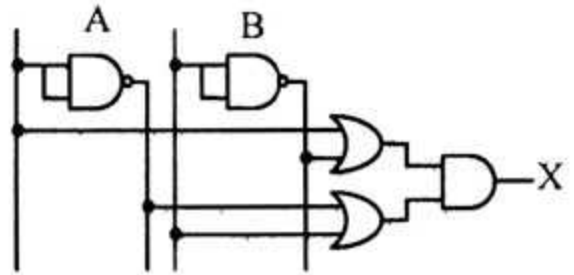
Which of the following is correct?

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

21. Which one is a basic theorem?

- (a)  $A + 1 = A$
- (b)  $A + 0 = A$
- (c)  $A + A = 0$
- (d)  $A + A = 1$

22.



- (a)  $A \oplus B$
- (b)  $\overline{A \oplus B}$
- (c)  $\overline{A} \oplus B$
- (d)  $A \oplus \overline{B}$

Read the following stem and answer question nos. 23 and 24:

A and B are two circuits. A helps to present two numbers in computer's understandable language and B helps to express two numbers multiplication.

23. B circuit is —

- (a) Adder
- (b) Encoder
- (c) Register
- (d) Counter

24. Circuit A is connected where?

- (a) Monitor
- (b) Key-board
- (c) Printer
- (d) Speaker

25. Full form of SQL —

- (a) Sequential Query Language
- (b) Structured Query Language
- (c) Serial Query Language
- (d) Select Query Language

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