

# Model Question of HSC Examination-2016 (All Board)

## Subject: Information & Communication Technology

Sub Code : 

2	7	5
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Time : 2 hours 10 minutes

Full Marks : 40

1. ► Mr. Raihan is a old record keeper of a office. He is experience in typing different papers of office, store this, secret this information and maintain these files. He knows if a file is stolen or lost it is harmful to related person and office and even he also responsible for that.

- What is computer crime? 1
- What are the main issues of morality using information and communication technology? 2
- Explain how Mr. Raihan effects if any type of information is lost or stolen. 3
- What types of steps in necessary for proper utilization of computer and secured storage of information give your own opinion? 4

2. ► Read the given stem and answer question.

Khairul and Amzad designed a web page for helping farmers in Bangladesh. They want to publish their site. But some step is necessary before Web publishing. They knew that informaiton Misu, Mim and Sathi published their site.

- What is Web publishing? 1
- What steps are necessary for web publishing? 2
- According to stem. why did they want to publish their site? 3
- According to stem, briefly describe the Web hosting and domain name. 4

3. ► Read the given stem and answer question.

```
= include<stdio.h>
int main()
{
int year;
Printf("Enter the year(4 digit) to check:");
scanf("%d",& year);
if (year%400== 0||(year%100!=0 && year%4== 0))
printf("year%d is a leap year",year);
else
printf("year%d is not a leap year",year);
return 0;
}
```



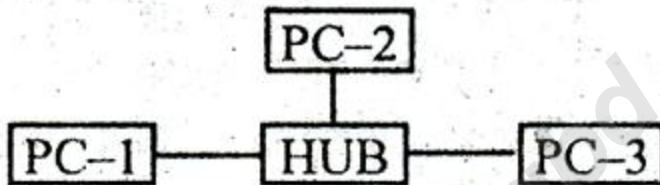
- a. What is variable? 1
- b. Write the difference between variable & constant. 2
- c. Explain the 8 number line of the program. 3
- d. Which statement can be used in 8 number line replace it. 4

**4. ► Read the given stem and answer the question:**

i)  $(777)_{10}$  ii)  $(FFF)_{16}$

- a. What is Unicode? 1
- b. What is the importance of 2's complements? 2
- c. Express (i) and (ii) into Octal form. 3
- d. Add the number (i) and (ii) of the above stem in binary system and express the result in hexadecimal form. 4

**5. ►**



- a. What is network topology? 1
- b. Explain the features of GSM. 2
- c. Describe the function of above topology. 3
- d. Explain the advantages and disadvantages of the above stem. 4

**6. ►** i)  $X = (\bar{A} + \bar{B} + \bar{C})$  ii)  $Y = (\bar{A}, \bar{B}, \bar{C})$

- a. What is encoder? 1
- b. NAND gate is universal Gate-Explain with figure. 2
- c. Draw the logic circuit of (i) and (ii) 3
- d. According to the stem, in picture (i) and (ii) how many gates have been used? Show the truth table of both pictures. 4

Time: 35 Minutes

[Answer all the questions. Each questions carries 1 marks. Tick with ball point pen into the correct answer in the answer sheet.]

- (c) <TH>                      (d) <BR>
- The person who gave the concept of global village?
    - Michel Luis
    - David Luis
    - Marshal McLuhan
    - James Atherton
  - The software used in bioinformatics--
    - MS-Excel                      (b) Photoshop
    - SQL                              (d) Perl
  - Which is used in cryosurgery?
    - Liquid Nitrogen
    - Liquid Oxygen
    - Liquid Ammonia
    - All
  - Who is the father of artificial intelligence?
    - Allan Turing
    - Steffen Hackings
    - Bill gates
    - Marshal Mcluhan
  - Röbot is a-
    - Space exploration device
    - Human alternative device
    - Artificial intelligence device
    - Automatic device
  - Who suggest about the Global Hypertext Project?
    - Eric Bina
    - Tim Barners Lee
    - Mark Anderson
    - Bill gates
  - Which year WBC was established?
    - 1989                              (b) 1990
    - 1993                              (d) 1994
  - When the first website created?
    - 1989                              (b) 1990
    - 1991                              (d) 1992
  - Which tag is used for table heading?
    - <TR>                              (b) <TD>
  - Read the following paragraph and answer question 10-11.  
A company makes a website for their organization but of is not found in Google search at first page.
    - Which HTML tag is not used in website?
      - HEAD                              (b) BODY
      - META                              (d) SEARCH
    - Which is the search engine?
      - Yahoo                              (b) Norton
      - Microsoft                              (d) Amazon
    - C program is created in--
      - 1980                              (b) 1970
      - 1820                              (d) 1920
    - What is the mian aim of the program?
      - Solving problem
      - Finding problem
      - Creating problem
      - Fast solution of the problem
    - The program that creates the machine language is called-
      - Assembler                              (b) Compler
      - Interpreter                              (d) Object program
    - The information of Web is stored in-
      - Website                              (b) Web browser
      - Web page                              (d) Web server
    - Which of the following is not the field of the bio metrics?
      - Voter ID                              (b) Driver's License
      - ATMs                              (d) Entertainments
    - Which of the following is used for creating the computer hard disk?
      - Nanotechnology
      - Robotics
      - Cryosurgery
      - Biometrics
    - Where is used HTML tag?
      - start of tag                              (b) end of tag
      - with tag                              (d) within tag



19. Which is the 4-G Language?  
 (a) C++ (b) Python  
 (c) HTML (d) MATLAB
20. In which topology there is no host computer—  
 (a) Star (b) Hybrid  
 (c) Ring (d) Tree
21. Which of the following is the measuring standard of Wimax?  
 (a) IEEE 802.16  
 (b) IEEE 802.16e  
 (c) IEEE 802.16g  
 (d) All the above
22. Which of the following is non positional number system?  
 (a) Binary  
 (b) Roman  
 (c) Ancient Hieroglyphic  
 (d) Octal
23. For telecasting anything in radio and television which transmission is used?  
 (a) Simplex & Unicast  
 (b) Full duplex & Broadcast  
 (c) Half duplex and  $\delta$  Unicast  
 (d) Simplex and Broadcast
24. Which number system is not defined in digital electronics.  
 (a) 0V-08V  
 (b) +0.8V-+2.0V  
 (c) +2V ~ 5V  
 (d) No none of above
25. Which is the binary equivalent of  $(99)_{10}$ ?  
 (a) 1101111 (b) 1010011  
 (c) 1100011 (d) 1101010
26. Which one is decimal equivalent of  $(B5D)_{16}$ ?  
 (a) 3909 (b) 1909  
 (c) 2903 (d) 2909
27. What will be the condition of host computer in case of terminal computer problem?  
 (a) No problem at all  
 (b) Whole network will disorder  
 (c) Partially problem  
 (d) Reconfiguration default
28. How many bits are needed to represent 256?  
 (a) 8 (b) 32  
 (c) 16 (d) 4
29. Which gate gives an output 1 if the input is 0...  
 (a) X-OR  
 (b) NOR  
 (c) NAND  
 (d) X-NOR
30. What is the 2's complement of 7?  
 (a) 0010 (b) 1101  
 (c) 0111 (d) 1001
31. GSM is composed of-  
 (a) FDMA (b) TDMA  
 (c) CDMA (d) a&b
32.  $(100101)_2-(?)_8$   
 (a) 35  
 (b) 40  
 (c) 55  
 (d) 45
33.  $(FB6)_{16}=(?)_2$   
 (a) 10110101000  
 (b) 111110110110  
 (c) 10100111011  
 (d) 111000111101
34. Convert  $(925)_{10}$  into BCD  
 (a) (1001 0010 0101)  
 (b) (1001 1001 0100)  
 (c) (81010 01 10 1111)  
 (d) (1110 0001 1110)
- 35.

X	Y	F
0	0	0
0	1	1
1	0	1
1	1	0

which logic gate support this truth table?

- (a) AND (b) NAND  
 (c) XOR (d) XNOR

1	(c)	2	(c)	3	(a)	4	(a)	5	(c)	6	(b)	7	(d)	8	(c)	9	(b)	10	(d)	11	(a)	12	(b)	13	(a)	14	(a)	15	(d)	16	(c)	17	(a)	18	(b)	19	(a)	20	(c)	
21	(a)	22	(b)	23	(b)	24	(d)	25	(c)	26	(d)	27	(a)	28	(c)	29	(c)	30	(c)	31	(d)	32	(d)	33	(b)	34	(a)	35	(c)											