

INTRODUCTION TO IT SYSTEMS

Time Allowed : 3 Hours

Full Marks : 60

Answer to Question No. 1 of Group A must be written in the main answer script. In Question No. 1, out of 2 marks for each MCQ, 1 mark is allotted for right answer and 1 mark is allotted for correct explanation of the answer.

Answer any Five (05) Questions from Group-B

GROUP-A

1. Choose the correct answer from the given alternatives and explain your answer (any ten): 2x10=20

- (i) Which of the following is NOT a web browser?
 a) Google Chrome b) Mozilla Firefox
 c) Microsoft Word d) Microsoft Edge
- (ii) Which protocol is used for secure web communication?
 a) HTTP b) HTTPS c) FTP d) SMTP
- (iii) What is the invalid number representation?
 a) (12)₁₀ b) (AB)₁₀ c) (10)₁₀ d) (87)₁₀
- (iv) Which symbol is used to represent a decision in a flowchart?
 a) Rhombus b) Oval c) Parallelogram d) Rectangle
- (v) Hard copy means
 a) Output on VDU b) Output on hard disk c) Output on paper d) None of these
- (vi) In Binary coded decimal, each digit of a decimal is represented with a group of
 a) 3 binary digits b) 4 binary digits c) 5 binary digits d) 6 binary digits
- (vii) Which of the following is NOT a function of an operating system?
 a) Process management b) Memory management
 c) Compiling code d) File management
- (viii) Which HTML tag is used to create a hyperlink?
 a) < link > b) < a > c) < h1 > d) < p >
- (ix) Which of the following is not the characteristics of Computer?
 a) Accuracy b) Versatility c) Diligence d) IQ
- (x) Which of the following is an example of phishing?
 a) A hacker breaking into a system b) A fake email asking for personal details
 c) A computer virus spreading d) A software update notification
- (xi) Equivalent Gray Code representation of the Binary code 0110 is
 a) 0101 b) 1000 c) 1010 d) 1111
- (xii) A small program that gets loaded in the computer without the user knowledge and replicate itself repeatedly called
 a) Worms b) Virus c) Browser d) None of these
- (xiii) The number of steps on Algorithm should be
 a) Finite b) Infinite c) Fixed d) None of these
- (xiv) Which of the following is used for connecting computers in a large area such as country, continent etc.?
 a) LAN b) PAN c) MAN d) WAN

iv) In how many ways can CSS be written in?

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

GROUP-B
Answer any Five (05) Questions.

5 x 8 = 40

2. (a) Describe De Morgan's law.

3 + 5

(b) i) What do you mean by Universal Logic Gates?
ii) Implement AND gate using only NOR gate.

3. a) Write down a flowchart to find the greatest among three given numbers.

3 + 5

(b) Define algorithm? Write an algorithm to find out area of a Triangle.

4. (a) What are the differences between Primary Memory and Secondary Memory?

3 + 5

(b) Write down the full form of *ASCII*, *SSD*, *WWW*, *UPS*, and *SMPS* in the context of computer system.

5. (a) What is operating system? Explain functions of an Operating System.

5 + 3

(b) What are the differences between multiprogramming and time-sharing system?

6. (a) Subtract 25 - 16 using 2's complement method.

4 + 4

(b) Perform the following conversion-

(i) $(21C)_{16}$ to Octal Number
(ii) $(34.25)_{10}$ to Binary Number

7. (a) What is HTML? How many types of list in HTML?

1 + 2 + 5

(b) Write down the HTML code to create the given table.

Animals	Birds	Fruits
Cow	Parrot	Banana
Dog	Pigeon	Mango
Horse	Crow	Apple
Deer	Cuckoo	Grapes

8. (a) What is CSS? Write the HTML code to implement CSS.

2 + 3 + 3

(b) Design a HTML page with Java Script to calculate the sum of two integer numbers.

9. (a) How can you protect your computer from being hacked? <https://www.wbscteonline.com>

2 + 3 + 3

(b) Write short note on Denial of service attack works.

(c) What is a Malware and types of Malwares?

10. (a) Differentiate Worm and Virus.

4 + 4

(b) What do you understand by the term Fraud, Abuse and Cyber stalking?