201(N)

JULY 2023

INTRODUCTION TO IT SYSTEMS

Time Allowed: 2.5 Hours *Full Marks: 60*

Answer to Question No. 1 is compulsory and Answer any Five (05) Questions from the rest.

1. Answer any five questions: **(3×5=15)**

a) How may type of Software? Give some example.
b) What is meant by a cache memory? Explain.
c) What are the characteristics of computers?
d) Give some importance functions of Operating System.
e) What is cyber stalking? What is Spam?
f) How many ways you can apply CSS to an HTML document?
g) Explain De Morgan's Theorem.

2) (i) Prove: $\bar{A}\bar{B}\bar{C} + \bar{A}B\bar{C} + A\bar{B}\bar{C} + AB\bar{C} = C$ 3
(ii) What is the difference between Batch Processing System and Realtime Processing System? 4
(iii) Convert Binary to Gray Code: $(1101101)_2 = (?)_G$ 2

3) (i) Write down the various formatting tags in HTML. 4
(ii) Write an HTML code to display in Web Browser following table: 5

MATH	PHYSICS	IT
80	90	95
65	78	65
89	76	70

4) (i) Draw a flow Chart to find out Largest number of three given number. 3
(ii) Algorithm & Flowchart to convert temperature from Celsius to Fahrenheit. 4
(iii) Distinguish between loop and branching statements. 2

5) (i) Name some CSS style components. 4
(ii) Design a HTML page with Java Script to calculate sum of n natural numbers. 5

6) (i) Draw the logic diagram of an Ex-NOR gate and discuss its operation. 3
(ii) Simplify the Boolean expression: $(X + Y)(X + \overline{Y})(\overline{X} + Z)$ 4
(iii) Draw the logic diagram the Boolean expression: $AB + ABC + A\overline{B}C + A\overline{C}$ 2

7) (i) What is a Malware and types of Malwares? 3
(ii) What is DoS Attack? What are the security measures against DoS attack? 4
(iii) What is Computer Hacking? 2

8) (i) Convert : $(27.23)_{10} = (?)_2$ and $(542)_8 = (?)_{16}$ 4
(ii) Write the main difference between Multitasking and Multiprogramming. 3
(iii) What are ASCII and EBCDIC Codes? 2

9) (i) State the difference between (a) HDD and SDD memory (b) DRAM and SRAM 8
(ii) Name the gates that are used as universal gates. 1