ICS [B1] MID TERM ASSIGNMENT Spring 2021-2022

*Answer the following questions. Total Marks:20. Each question carries 5 marks.

*Deadline: 11.30 am, 10 March 2022 ***No LATE SUBMISSION

1. Convert the followings using proper method (no shortcut) –

    I. $(171)_{10} = (?)_2 = (?)_{16}$

    II. $(FACE)_{16} = (?)_{10} = (?)_2$

2. Draw flowcharts for the following problem –

    Take three integer numbers as input, identify the largest and smallest among the three numbers, also identify whether the largest and smallest numbers are even or odd. If the input is zero, then exit.

3. Draw flowcharts for the following problem –

    You are provided with the marks of 8 subjects (maximum 100 marks for each subject) of a student, you need to find out whether the average mark of those 8 subjects are a) good, b) average or c) bad, based on the following conditions –

    I.   if the average mark is greater than 84 – Output "good"

    II.   if the average mark is greater than 69 and less than 85 – Output "average"

    III.   if the average mark is greater than 50 and less than 70 – Output "bad"

4.   Select any one topic from the following options and write a short note of maximum handwritten 02 pages along with question number –

a) Image Processing	j) Distributed Computing
b) Machine Learning	k) Cloud Computing
c) Big data handling	L) Parallel Computing
d) Artificial Intelligence	m) Web Development
e) Deep Learning	o) IoT
f) Data Mining.	p) Android Development
g) Wireless sensor networks	
h) Cyber Securities	
i) Bio-Informatics	

*You can take help from online resources for question 4. **But direct copy-paste is strictly prohibited. Use pen and paper to solve question 1, 2,3 and 4 with proper steps and necessary symbols**. Submit the hard copy. Only **handwritten** assignment will be accepted.

*The assignment must contain a cover page with your NAME, ID, Class Serial, COURSE NAME and SECTION.