

**MGM University, Jawaharlal Nehru Engineering College, Chhatrapati Sambhajinagar**  
**CA-1 Examination**

Class: SY-B. Tech (All)

Course Code: 20UCC401B

Course Name: Engineering Statistics

Date:02.02.2024

Sem: IV

Max.Marks:10

Time:10.00 -10.45

Read the instructions carefully.

1. Use of nonprogrammable calculator is allowed.
2. Digits on right hand side indicate the marks.

Q.1 Solve any **Two** questions.

- A) A car travels 25 miles at 25 miles per hour (mi/h), 25 miles at 50 mph, and 25 miles at 75 mph. Find the arithmetic mean of the three velocities and the harmonic mean of the three velocities. Which is correct? (5M)

- B) The points given to the students belonging to two management institutes on the overall performance in a year are as follows: (5M)

Institute A	60	64	75	82	48	66	81	92	44	80
Institute B	70	65	54	72	80	68	79	77	71	74

The performance of which management institute is more consistent (Use coefficient of variation)? Which management institute has higher level of performance?

- C) The first four moments of a distribution about the value 5 of the variable are 2, 20, 40 and 50. Show that the mean is 7. Also find the other moments,  $\beta_1$  and  $\beta_2$ . (5M)

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**MGM University Aurangabad**  
Center MGM JNEC

Program Name: - SY-AIDS  
Duration: 45m

Course: Data Analysis  
Max Marks: 10

Class: SY  
Date: - 02/02/2024

Q	Solve any two Questions	CO	BL	Mark
1	Define Random Variable. Give example of Discrete and Continuous Random Variable	1	2	1 X 5
2	What are the two types of Estimation Methods? Mention the properties of good Estimators	1	2	1 X 5
3	Explain Null and Alternate Hypothesis with example	1	1	1 X 5
4	Two cards are drawn successively with replacement from a well shuffled pack of 52 cards. Find the probability distribution of number of Queens.	1	1	1 X 5

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11 MAR 2024 SY/AIDS/CA-I/II/23-24(ECT)



MGM UNIVERSITY  
J.N.E.C. AURANGABAD  
DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION  
S.Y(AI&DS & ECE)

Year: 2023-24 (Semester -III)

Course Code: 22UET403D, 21UET403D

Microprocessors and Microcontrollers

TEST: CA I

Max Marks: 10

Time: 45 Minutes

Date: 02.02.2024

N.B.

(I) Solve any two questions.

(II) Each question carries equal marks.

(III) Assume suitable additional data if necessary.

Q.No.	Questions	Level	CO
1	Compare Harvard and Von Neuman architecture.	L1	1
2	How you will demultiplex the multiplexed address- data bus AD0 –AD7 in 8085 microprocessor?	L1	1
3	What is 8085 programming model? Explain in detail.	L1	1
4	What are different addressing modes available in 8085? Explain with the help of instructions under each mode.	L1	1

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SX/AI&DS/CA-I/II/23-24(ECT)

**MGM University Aurangabad**  
Center MGM JNEC

Program Name: - SY-AIDS  
Duration: 45m

Course: PTRP  
Max Marks: 10

Class: SY  
Date: - 03/02/2024

Q	Solve any two Questions	CO	BL	Mark
1	Define Mutually Exclusive events with example	1	2	1 X 5
2	Enlist any 5 elementary properties of Probability	1	2	1 X 5
3	Define i)Elementary event ii) Certain event iii) Impossible event	1	1	1 X 5
4	There are two bags. First bag contains 5 red, 6 white balls and the second bag contains 3 red, 4 white balls. One bag is selected at random and a ball is drawn from it. What is the probability that it is (i) red, (ii) white.	1	1	1 X 5

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Program Name: - SY-AIDS  
Duration: 45m

Course: PTRP  
Max Marks: 10

Class: SY  
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Max Marks: 10

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SY/AIDS/CA-I/II/23-24(ECT)



MGM UNIVERSITY  
J.N.E.C. AURANGABAD  
Department of Electronics & Telecommunication  
S.Y.- B.TECH. ECE/AIDS  
Year: 2023-24 (Semester -IV) Part II

Course : Object oriented Programming.

Max Marks: 10

N.B.

(I) Solve any two questions.

(II) Each question carries equal marks.

(III) Assume suitable additional data if necessary.

Time: 45 Minutes

TEST: CA I

Date: 03 /02/24

Q.NO	Questions	Level	CO
1	Write a program in C++ to display Hello word and explain significance of each statement	L1	1
2	Explain need of object oriented programming	L1	1
3	Write a program in c++ to add two integer numbers, input data from user	L1	1
4	Write any five keywords used in c++ and explain it	L2	1

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Time: 45 Minutes

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