

ASSESSMENT TEST FOR PG 2021-2022

Each question carries 2 marks

Time : 30minutes

1. In a _____ the vertex set and the edge set are finite sets.

- a) finite graph
- b) bipartite graph
- c) infinite graph
- d) connected graph

2. Graph consists of a?

- A. non-empty set of vertices
- B. empty set of vertices
- C. Both A and B
- D. None of the above

3. What is the number of edges present in a complete graph having n vertices?

- A. $(n*(n+1))/2$
- B. $(n*(n-1))/2$
- C. n
- D. None of these

4. Which of the following graphs is not a regular graph?

- A. Isolated Graph
- B. Complete Graph
- C. Cycle
- D. Wheel

5. what will be the number of edges in a complete bipartite graph $K_{m,n}$

- A. $m+n$
- B. $m.n$
- C. none of these

6. For what value of λ , do the simultaneous equation $2x + 3y = 1$, $4x+6y = \lambda$ have finite solutions ?

1. $\lambda = 0$
2. $\lambda = 1$
3. $\lambda \neq 2$
4. $\lambda = 2$

7. If A and B are symmetric matrices of same order, then

1. AB is always symmetric
2. AB is never symmetric
3. AB is skew-symmetric
4. AB is symmetric if and only if $AB = BA$

8. A system of linear equations $Ax = b$ is consistent if and only if

- A. b is in the row space of A.
- B. b is in the null space of A.
- C. b is in the column space of A.
- D. none of these.

9. The rank of a matrix A is the

- A. dimension of the row space of A.
- B. dimension of the column space of A.
- C. both A and B
- D. dimension of the null space of A.

10. When the origin and terminus of a walk both are the same, the walk is called?

- (A) Open
- (B) Path
- (C) Closed
- (D) way
- (E) None of these

ASSESSMENT TEST FOR UG 2021-2022

Total : 20 marks

Time : 30 minutes

Answer all questions. Each question carries 2 marks.

1. Find the n^{th} term of the sequence 1,5,9,13,...

2. Find the value of $\lim_{x \rightarrow 2} \frac{x}{x^2-9}$.

3. Differentiate $\cos(x^2 + 2)$.

4. Compute $\begin{vmatrix} 1 & x & x^2 \\ 1 & y & y^2 \\ 1 & z & z^2 \end{vmatrix}$

5. Evaluate the indefinite integral $\int \frac{x^2+3}{\sqrt{x}} dx$.

6. Find $\frac{d}{dx}(\sqrt{x^2 + 2x})$.

7. At what points are function $f(x) = \frac{1}{(x+2)^2} + 4$ continuous.

8. Check the consistency of the following system of equations

$$x + y + z = 9$$

$$2x + 3y + z = 12$$

$$3x + 3y + 3z = -1$$

9. Find the rank of the matrix $\begin{bmatrix} 1 & 1 & 3 \\ 5 & 2 & -1 \\ 4 & 1 & -4 \end{bmatrix}$.

10. Find the sequence if the n^{th} term is given by $a_n = \frac{(-1)^{n+1}}{2^{n-1}}$.

LIST OF ADVANCED LEANERS

SI NO:	NAME	TEST	SEMINAR	TOTAL MARK
1	GOPIKA AJITH	20	10	30
2	AISWARYA V C	20	9	29
3	ARATHI KRISHNA K C	20	10	30
4	FATHIMA BATHOOL K	19	10	29
5	VISMAYA N	19	10	29
6	SNEHA KRISHNAN K	20	10	
7	HASNA V A	20	10	30
8	FATHIMA LUBNA E	20	9	29
9	RIZVANA K	19	9	28
10	RAMYA K P	19	9	28

LIST OF SLOW LEANERS

SI NO:	NAME	TEST	SEMINAR	TOTAL MARK
1	ASWATHY C T	8	4	12
2	AJANYA V S	8	3	13
3	GOPIKA P	5	2	7
4	THEJALAKSHMI E T	6	3	9
5	ANAGHA SHAJITH	7	4	11
6	AMRUTHA VIJITH	6	3	9
7	NAJIYA T K C	5	2	7
8	HUSNA	5	3	8
9	NIHALA FARHATH P T	6	4	10
10	MARJANA K	7	3	10

INTERNATIONAL WEBINAR

An International Webinar on RESOURCE CONSTRAINED SCHEDULING IN FLEXIBLE JOB SHOP SCHEDULING PROBLEMS in association with R&D Cell was conducted on 26th July 2021 under the guidance of Dr. JOBISH VALLIKAVUNGAL, Professor of University of Nuevo Leon, Mexico. The programme commenced at 5pm and successfully made an end around 6:30pm. The session was highly informative which included over 90 students.

Programme Schedule :-

ANCHORING - NIRANJANA

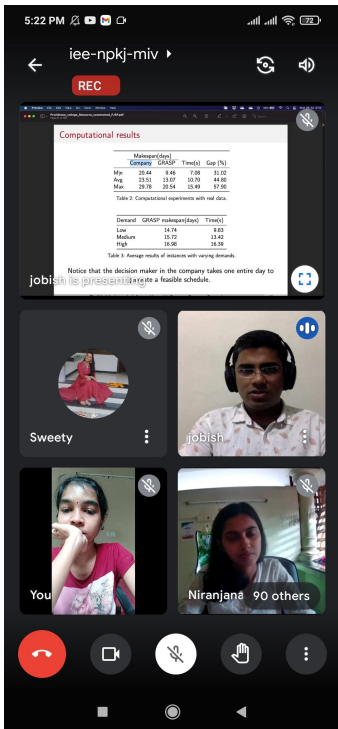
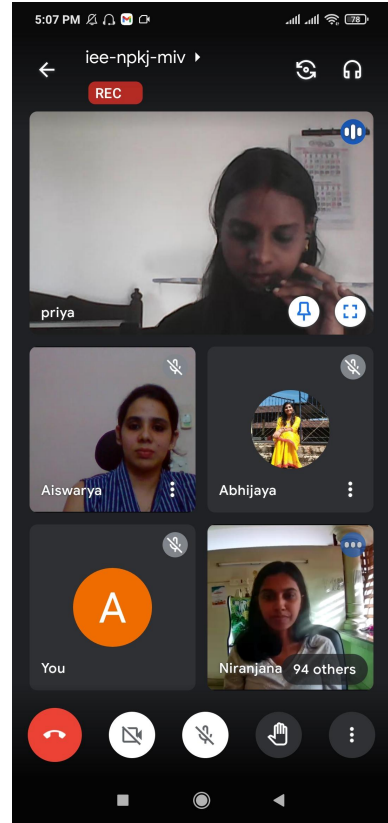
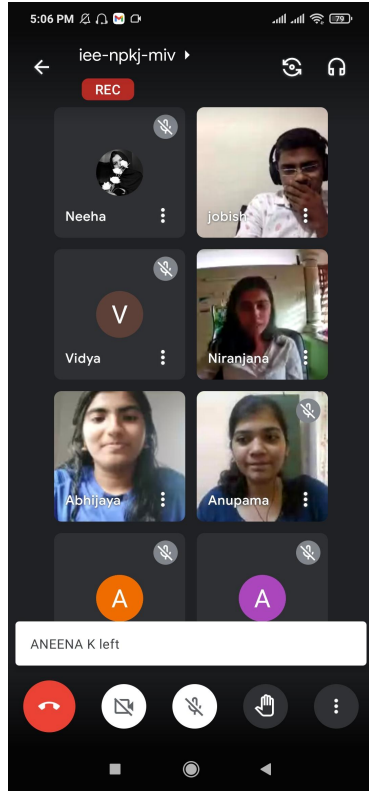
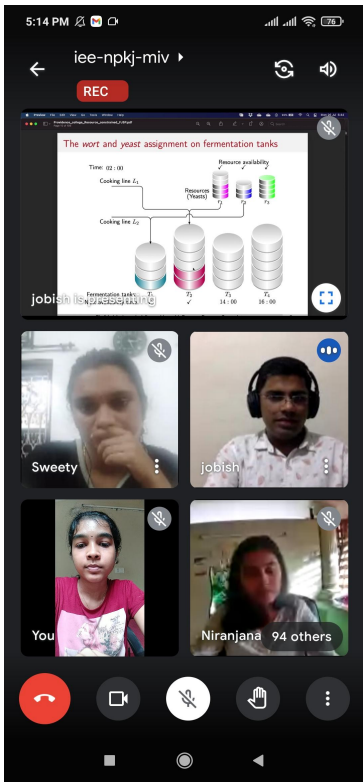
PRAYER - SONAL PREETH

WELCOME SPEECH - ABHIJAYA

PRESIDENTIAL ADDRESS - Ms. PRIYA K

RESOURCE PERSON - DR. JOBISH VALLIKAVUNGAL

VOTE OF THANKS - SWEETY

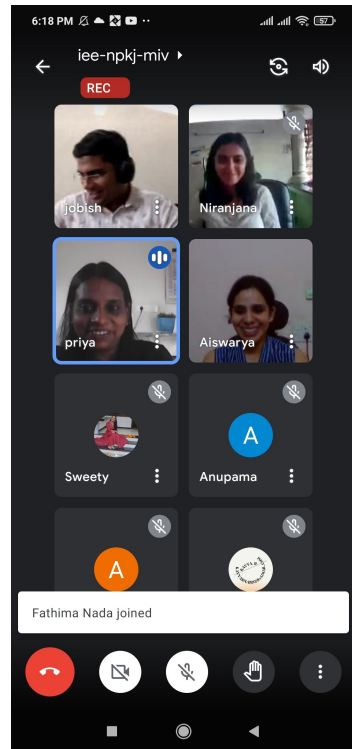


PROVIDENCE WOMEN'S COLLEGE
 Dept of Mathematics & Statistics
 IN ASSOCIATION WITH **R & D CELL**

Topic: Resource constrained scheduling in flexible job shop scheduling problems

DR. JOBISH VALLIKAVUNGAL
 PROFESSOR
 UNIVERSITY OF NUEVO LEON, MEXICO

26 TH JULY 5 PM IST, ON GMEET




TALK

A talk was conducted on 12 March 2022 by PRAJITH P C, Associate Professor, HoD of Mathematics, Malabar Christian College, Calicut on the topic BASIC CALCULUS. The session started at 9:30 am and was conducted for the first year students. The session was really useful in improving one's comprehension of maths.



Providence women's college
Department of Mathematics & Statistics
Presents a talk
on
"Basic Calculus"
DATE -12/3/2022
TIME-9:30 AM

 **PRAJITH PC**
Associate professor & Head of
Department of Mathematics
MCC Calicut