



Prahladrai Dalmia Lions College of Commerce & Economics
(Government Aided & Affiliated to University of Mumbai & AICTE, New Delhi)
NAAC Re-accredited with 'A' Grade (III Cycle) ISO 21001:2018 Certified
University of Mumbai Recognised Research Centre in Accountancy, Commerce & Business
Economics
A Government Approved Hindi Linguistic Minority Institute
52 Years of Sterling Performance in Education

NOTICE

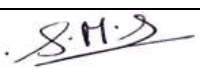
ATKT Internal Examination September, 2025, BMS (SEM. VI)


INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS:

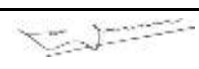
1. Date of Submission of the Projects-, **30th September 2025. Timings 11:00am**
2. Reporting time for students: at least 10 minutes before the mentioned time. Venue: Third floor staffroom.
3. Students have to be present in person for the submission.
4. Internal project topics are also uploaded on the college website.
5. Submission of projects or assignments to be done on proper A4 size paper, handwritten by the candidate himself only. **The Front page should contain details of Roll no, Name of the student, Semester, Subject.**
6. **Print out of the questions uploaded should be attached along with the project. Students should also enclose a photocopy of the ATKT fee paid receipt along with each of his projects.**
7. On the date of submission there will be a viva voce on the given questions/topics.
8. If the student fails to present himself on the given date and time he will be marked **ABSENT** for the said subject.
9. **Any Submissions after the above mentioned date and time will not be accepted and entertained under any circumstances.**
10. NOTE - Students who has paid ATKT fees for internal component but has not been allotted questions or has any query is requested to contact Dr. Sailee Shringarpure/ Mr. Nirav Tawadia on or before, 26th September 2025 by mailing on sailee.s@dalmialionsollge.ac.in and bmsdept@dalmialionscollege.ac.in

Kindly follow the following schedule for your project submission and viva:

SUBJECT	FACULTY
OPERATIONS RESEARCH	Prof. Rahul Yadav
PROJECT MANAGEMENT	Mr. Nirav Tawadia
INTERNATIONAL MARKETING	Mr. Jainish Gotecha


Dr. Sailee Shringarpure
BMS Co-ordinator


Prof. Subhashini Naikar
Vice Principal, SFC
Principal Date -


Prof. (Dr.) D. N. Ganjewar

DI/N-STD/GEN/00

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INTERNATIONAL MARKETING-

Darji Darshan Deepak

1. Explain International Product Life Cycle
2. Discuss bases for market segmentation in international marketing.
3. Explain briefly about the SAARC and its objectives
4. Distinguish between domestic and international marketing?

Elango Melvin

1. Explain any 4 types of International markets entry methods.
2. What is Trading Blocs? Explain any 2 trading blocs.
3. What is the need for developing international strategies?
4. Explain steps in International Marketing Research.

OPERATION RESEARCH

Dsouza Daniel Eugene

a) In a hospital, 4 patients need the services of a private room on a certain day. There are 5 rooms available to the patient. The room charges differ according to their location and services available inside the room and the class of the patient. How should the rooms be allotted so that the hospital earns maximum total room rent? Following table gives the room charges in rupees per day:

Rooms	patients			
	1	2	3	4
P	280	390	580	220
Q	450	550	630	400
R	380	390	820	530
S	730	420	400	450
T	580	350	570	560

b) Factories	markets					Avail.
	M1	M2	M3	M4	M5	
	(cost per unit Rs.)					
x	2	11	10	3	7	4
y	1	4	7	2	1	8
z	3	9	4	8	12	9
reqd.	3	3	4	5	6	

Determine the initial feasible solution using LCM

c) Construct the network diagram comprising activities B,C,, Q and N such that the following constraints are satisfied:

$B < E, F; C < G, L; E, G < H; L, H < I; L < M; H < N; H < J; I, J < P; P < Q$

The notation $X < Y$ means that the activity X must be finished before Y can begin.

d) Distinguish between CPM and PERT

e) Solve the following linear programming problem using simplex method:

Maximize $Z = 10A + 8B$

Subject to constraints:

$$6A + 4B \leq 720$$

$$2A + 4B \leq 400$$

$$A, B \geq 0$$

Manjrekar Loukik Prasad

1) A cigarette manufacturing company has three factories in three different cities C1, C2 and C3. It sells its product in three different markets M1, M2 and M3. The cost of raw materials, labour and transportation costs differ along with the prices at which they are sold in different markets. The margin therefore varies from the place of manufacture and markets as follows:

	M1	M2	M3
C1	29	28	30
C2	25	27	23
C3	35	37	38

The availability in the cities are 2000 units each while the demand in the markets are 1500 units, 3000 units and 1500 units respectively. Find initial feasible solution by Vogel's Approximation Method and then use Modified Distribution method to find optimal solution.

2) Following is the information about cost of performing different jobs on different machines. Find the optimum assignment.

Machines	jobs		
	1	2	3
A	17	8	11
B	21	14	7
C	10	7	6
D	10	18	17

3) Solve the following linear programming problem using simplex method:

$$\text{Maximize } Z = 45A + 55B$$

Subject to constraints:

$$6A + 3B \leq 120$$

$$4A + 10B \leq 180$$

$$A, B \geq 0$$

4) What are the techniques of Operation Research?

1) A city bus service has two bus depots where the buses are parked at night. Each morning the buses have to reach three different starting points. The distance (in kms) between the depot and the starting points is as follows:

Buses	Starting points			Availability
	A	B	C	
X	2	8	4	25
Y	3	7	3	10
Reqd.	15	8	12	

Pereira Novella Gracin

Find initial feasible solution by Least Cost Method and then use Modified Distribution method to find optimal solution.

2) In a hospital, 4 patients need the services of a private room on a certain day. There are 5 rooms available to the patient. The room charges differ according to their location and services available inside the room and the class of the patient. How should the rooms be allotted so that the hospital earns maximum total room rent?

Following table gives the room charges in rupees per day:

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S	730	420	400	450
T	580	350	570	560

3) Explain Scientific approach in decision making and their limitations.

4) A project has the following times schedule:

Activity	Times in weeks	Activity	Times in weeks
(1 – 2)	4	(5 – 7)	8
(1 – 3)	1	(6 – 8)	1
(2 – 4)	1	(7 – 8)	2
(3 – 4)	1	(8 – 9)	1
(3 – 5)	6	(8 – 10)	8
(4 – 9)	5	(9 – 10)	7
(5 – 6)	4		

Draw a critical path for the above.

Prasad Aryan Sanjay

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Buses	Starting points			Availability
	A	B	C	
X	2	8	4	25
Y	3	7	3	10
Reqd.	15	8	12	

2) Distinguish between PERT & CPM

3) Solve the following using simplex method: Maximize $Z = 4000a + 2000b + 5000c$
 Subject to: $12a + 7b + 9c \leq 1260$
 $22a + 18b + 16c \leq 19008$
 $2a + 4b + 3c \leq 396$
 $a, b, c \geq 0$

4) The following details are available regarding a project:

Activity	Predecessor Activity	Duration (Weeks)
A	-	3
B	A	5
C	A	7
D	B	10
E	C	5
F	D,E	4

Draw the critical path

Singh Rishabh Narendra

a. Following table gives the monthly sales revenue generated by salesman in each city in rupees :

	City 1	City 2	City 3	City 4
Salesman P	11	11	9	9
Salesman Q	13	16	11	10
Salesman R	12	17	13	8
Salesman S	16	14	16	12

Which manager should be appointed to which city so as to get maximum sales revenue?

b. Find the optimal sequence (time in minutes):

Job	I	II	III	IV	V
Machine A	90	40	40	30	25
Machine B	70	80	50	10	35

Find the optimal sequence of products manufacturing that minimizes the total elapsed time. Find total elapsed time.find idle time for both the machines.

c) Following payoff matrix refers to a Two player game , player A and Player B. each player has four strategic options.

(Pay off '0000) Player B

	B1	B2	B3	B4
A1	450	230	200	300
A2	-50	-80	-40	240
A3	280	320	150	60
A4	450	380	100	150

d) What are the applications of Operation Research?

Yadav Vandana Rajkumar

1) What are the limitations of LPP?

2) Following table gives the output for worker machine combination:

	Machine 1	Machine 2	Machine 3	Machine 4	Machine 5
Worker A	20	23	27	32	36
Worker B	19	23	29	34	40
Worker C	23	28	35	39	34
Worker D	21	24	31	37	42
Worker E	22	28	31	36	41

Find the worker machine combination that will maximise the total output?

3) Find the optimal sequence (time in hrs):

Job	I	II	III	IV	V
Machine A	25	40	15	20	75
Machine B	15	25	45	30	35

Find the optimal sequence of products manufacturing that minimizes the total elapsed time. Find total elapsed time.find idle time for both the machines.

4) A project has the following times schedule:

Activity	Times in weeks	Activity	Times in weeks
(1 – 2)	4	(5 – 7)	8
(1 – 3)	1	(6 – 8)	1
(2 – 4)	1	(7 – 8)	2
(3 – 4)	1	(8 – 9)	1
(3 – 5)	6	(8 – 10)	8
(4 – 9)	5	(9 – 10)	7
(5 – 6)	4		

Draw a critical path for the above.

PROJECT MANAGEMENT

Sharma Ankush Gopal

1. What do you Mean by Project Selection ? Explain its importance in details?
2. A company is considering two mutually exclusive projects. The Finance director consider that

the project with high Profitability Index should be chosen. Following are the Particulars of both the Projects.

Particulars	Project M (Rs.)	Project N (Rs.)
Cash Outflow	1,00,000	1,50,000
Cash Inflow		
Year-I	20,000	25,000
Year-II	25,000	35,000
Year-III	35,000	65,000
Year-IV	60,000	85,000

Year-V	85,000	1,05,000
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Assume the company's rate of Return is 10%.

3. What is a Matrix Organization? Explain its Merits & Demerits.

Tiwari Harsh Pankaj

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Year-II	25,000	35,000
Year-III	35,000	65,000
Year-IV	60,000	85,000
Year-V	85,000	1,05,000

Assume the company's rate of Return is 10%.

3. What is Matrix Organization? Explain its Merits & Demerits.