PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS

ISO 9001 : 2015 Certified

NOTICE

DATE - 04/09/2023

ATKT Internal Examination September, 2023

BMS (SEM. II)

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS:

1. **Date of Submission of the Projects- 16th September, 2023.**
   Timings 03:00 pm to 04:00 pm. Reporting time for students: at least 10 minutes before the mentioned time. Venue: Second floor staffroom.
2. Students have to be present in person for the submission.
3. Internal project topics are also uploaded on the college website.
4. 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.
5. Print out of the questions uploaded should be attached along with the project.
6. Student 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.

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PRINCIPAL
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Prof. Durgesh Kenkre	Prof. Subhashini Naikar	Prof. (Dr.) Digambar Ganjewar
Exam Convenor	Vice Principal, SFC	Principal

DI/N-STD/GEN/00

Subject Professor details for ATKT project submission:

Name of the subject	**Name of the faculty**
Industrial Law	Ms. Poonam Sharma
Business Mathematics	Mr. Hitesh Sharma

INTERNAL QUESTIONS OF SEM II

BUSINESS MATHEMATICS –

➢ **1061- KHAN ARBAZ IMRAN**

1	Solve the linear equations using Cramer's Rule x +2y + z=0, 2x +y +z=2 , 4x-3y-3z = 20
2	Solve the linear equations using Cramer's Rule 2x+ 3y+2 z=5 , 3x-2y - z=11 ,4x+6y +8z = 20
3	Solve the Equation $\begin{vmatrix} 6 & 5 & 7 \\ 2 & 9 & 31 \\ 9 & 12 & 4X+1 \end{vmatrix} = 0$
4	Using Newton's backward difference interpolation formula find the polynomial f(x) whose graph passes through the points (0,5) (1,4) ,(2,6),(3,8)
5	Find f(70) using Newton's forward difference Interpolation formula

x	19	39	59	79	99
F(x)	61	123	148	208	215

➢ 1087 - PAL VINITA

1	**Solve the Equation** $\begin{vmatrix} 4 & 9 & 7 \\ 1 & 5 & 31 \\ 9 & 15 & 4X+1 \end{vmatrix} = 0$
2	**Solve the linear equations using Cramer's Rule** **2x+ y+ z=5 , 7x-y -3 z=11 ,5x+2y +2z- = 20**
3	**Solve the Equation** $\begin{vmatrix} 2X & 4 & 3 \\ 1 & X & 1 \\ 1 & 1 & 3X \end{vmatrix} = 0$
4	**Write down Minors and Cofactors of each element of the Matrix** $\begin{pmatrix} 0 & 1 & 2 \\ 2 & 4 & 6 \\ 2 & 7 & 1 \end{pmatrix}$
5	**Solve the Equation** $\begin{vmatrix} 3 & 3 & 7 \\ 1 & 7 & 31 \\ 9 & 12 & 2X+1 \end{vmatrix} = 0$

➢ 1090 - PASWAN SUJAL

1	Using properties of determinant solve the following equation $a+x \begin{vmatrix} a-x & a-x \\ a-x & a+x \quad a-x \\ a-x & a-xa+x \end{vmatrix} = 0$
2	Find dy/dx where $y = (x^3+9x-1)/(x^4-27)$.
3	**Solve the Equation** $\begin{vmatrix} 2X & 1 & 1 \\ 1 & X & 1 \\ 1 & 1 & 3X \end{vmatrix} = 0$
4	**Write down Minors and Cofactors of each element of the Matrix** $\begin{pmatrix} 0 & 1 & 2 \\ 1 & 4 & 6 \\ 3 & 5 & 5 \end{pmatrix}$
5	**Solve the Equation** $\begin{vmatrix} 3 & 5 & 7 \\ 7 & 9 & 31 \\ 9 & 15 & 4X+1 \end{vmatrix} = 0$

➢ 1112 - SABAT AARTI

1	Find f(72) using Newton's forward difference Interpolation formula x: 19, 39, 59, 79, 99 F(x): 41, 103, 168, 218, 235
2	**Solve the linear equations using Cramer's Rule** **2x+ y+2 z=5 , 3x-y - z=11 ,4x+7y +8z = 20**
3	**Solve the Equation** $\begin{vmatrix} 3 & 5 & 7 \\ 1 & 9 & 31 \\ 9 & 15 & 2X+1 \end{vmatrix} = 0$
4	Using Newton's backward difference interpolation formula find the polynomial f(x) whose graph passes through the points (0,5) (1,4) ,(2,6)
5	Find f(70) using Newton's forward difference Interpolation formula x: 19, 39, 59, 79, 99 F(x): 31, 106, 178, 208, 235

➢ 1125 - SHAIKH FARHIN

1 .Explain Stage I of INPUT AND OUTPUT analysis .
2.Explain Minors and Cofactors of 3 X 3 Matrix with suitable example.
3. Find f(1.5) using Newtons interpolation formula. (0,1) (1,0) (2,1) ,(3,10) ,(4,33)
4 .Explain Permutation and Combination with suitable example.
5.Explain all types of Annuity.

➢ 1128 - SHAIKH MEHAK

1.Solve the linear equations using Cramer's Rule x +y + z=0, 2x +y +z=2 , 4x-y-3z = 20

2. If A = 3 -1 find Matrix B such that A+B = 0.Define Triangular Matrix.
2 3

3 Write steps to find Inverse of Matrix using Ad joint Method with suitable example 4.Using Newton's backward difference interpolation formula find the polynomial f(x) whose graph passes through the points (0,5) (1,4) ,(2,6) (3, 12)
5.Explain the term Maxima and Minima in detail with suitable example.

➢ **1201 - SINGH RISHABH**

1. Solve the linear equations using Cramer's Rule
2x+ y+2 z=5 , 3x-y - z=11 ,4x+7y +8z = 20
2. Using Newton's backward difference interpolation formula find the polynomial f(x) whose graph passes through the points (0,5) (1,4) ,(2,6)
3. Find dy/dx where y = (x4 +x-1)/(6x4 -8).
4. Write down Minors and Cofactors of each element of the Matrix 0 1 2
   1 4 6
   3 5 5
5. Solve the Equation 3 5 7 7 9 31 = 0 9 15 4X+1

INDUSTRIAL LAW

➢ **1059 - KAWLE HARSH**

1. What is Gratuity? Under what circumstances gratuity is payable?
2. Define Closure and explain the rules of closure.
3. Retrenchment
4. Board of Conciliation
5. What do you understand by Nomination?

➢ **1087 - PAL VINITA**

1. Explain the doctrine of assumed risk and common employment
2. Establishments covered under Payment of Bonus Act
3. Employees covered under Payment of Gratuity Act
4. Explain strikes, lockouts and layoffs
5. Role of trade union relating to industrial disputes.

➢ **1100 - PEREIRA NOVELLA**

1. What is strike ?.What are the procedures for strike.?
2. What is the role of trade union?
3. Explain the term retrenchment in detail.
4. What are the rights and liabilities of a registered trade union?
5.Explain the term factory. What are the procedures for registration of a factory?

➢ **1112 - SABAT AARTI**

1.Write short note on Political fund under trade union.
2. Discuss on Nomination Under Gratuity Act.
3. Distinguish between Individual and Industrial dispute.
4. Give an overview on payment of Bonus under Payment of Bonus Act.
5. State the rules of fixation of wage period under the payment of Wages Act 1936?

NOTE - Students who has paid ATKT fees for internal component but has not been allotted questions is requested to contact Mr. Nirav Tawadia on or before 12th September, 2023 by mailing on nirav.t@dalmialionscollege.ac.in or bmsdept@dalmialionscollege.ac.in