बिरसा मुंडा ट्रायबल युनिवर्सिटी
Birsa Munda Tribal University

राजपिपला, जि॰ नर्मदा **Rajpipla, Dist. Narmda**
Established by Tribal Development Department, Govt. of Gujarat

School of Commerce
B.Com. Programme
Subject Code & Name: - BC02IDCC01: Mathematics for Commerce-II

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme			
Credits				Component Weightage			
				CCE		SEE	
L	T	P	Total	TH	PWE	TH	PWE
4	0	0	4	50	0	50	0

Programme Name	B.Com
Semester	2
Course Code	BC02IDCC01
Course Title	Mathematics for Commerce-II
Course Content Type (Th./Pr.)	Th.
Course Credit	4
Sessions+ Lab. Per Week	4
Total Teaching/Lab. Hours	60 Hours
* 2 Laboratory = 1 Session	

Learning Objectives

1. To Differentiate between the Permutations and Combinations.
2. To Learn the Examples Linear Programming Problem and Transportation Problem.
3. To Understand Between Assignment and Replacement Problems.
4. To study the Concept of Differentiation and Applications.

Prerequisites (if any)

Learning Outcomes

On the Completion of this course, students will able to:

1. Differentiate between the Permutations and Combinations.
2. Calculate the Examples Linear Programming Problem and Transportation Problem.
3. Contrast Between Assignment and Replacement Problems.
4. Apply the Knowledge of Differentiation and Applications.

बिरसा मुंडा ट्रायबल युनिवर्सिटी
Birsa Munda Tribal University

राजपिपला, जि॰ नर्मदा Rajpipla, Dist. Narmda
Established by Tribal Development Department, Govt. of Gujarat

School of Commerce
B.Com. Programme

	Detailed Contents	
UNIT	**TOPIC/SUB-TOPIC**	**TEACHING HOURS**
I	**Permutations and Combinations** Meaning, Fundamental principle of counting, Theorem based on permutation and combination (without proof), Permutations of things not all different, Permutations when repetition is allowed, Circular permutations, Examples of permutation and combination	15
II	**Linear Programming Problem and Transportation Problem:** LPP: Meaning, nature, limitations of LP, uses of LP, Definitions: Solution, constrains, BFS, FS, objective functions solution of LPP by Graphical Method. Transportation Problem - N-W corner rule, Matrix Minima Method	15
III	**Assignment and Replacement Problems:** Definition of balanced Assignment Problem (A. P.), its mathematical form, Application of Hungarian method for solving A. P. in the cases of minimization problem, Meaning of Replacement problem (R. P.), Simple examples of replacement problem	15
IV	**Differentiation and Applications** Definition of derivative, working rules of derivative (without proof), Derivatives of explicit, composite and implicit functions (without involving trigonometric functions), Second derivative, Maxima and Minima of a function	15

Text Book(s)

1.

Reference Books

1. Kapoor, V. K.: Business Mathematics, Sultan Chand and Sons, New Delhi.
2. Soni, R. S.: Business Mathematics, Pitamber Publishing House.
3. Trivedi and Trivedi: Business Mathematics, Pearson India Limited. New Delhi.
4. Business Mathematics-1, Garg Publication, Ahmedabad.
5. Allen R.G.D.: Basic Mathematics, Macmillan, New Delhi.
6. Vohra N.D.: Quantitative Techniques in Management, Tata McGraw Hill, New Delhi.

Web Resources

7. https://youtu.be/86NwKBcOlow
8. https://youtu.be/Ow3XWYnPgSM
9. https://www.youtube.com/live/8npk04bd2XA?feature=share

Required Software(s) (if any)

School of Commerce
B.Com. Programme

Practical(s) (if any)

L:: Lecture, **T::** Tutorial , **P::**Practical

CCE:: Continuous and Comprehensive Evaluation

(CCE Theory includes Mid Semester Examination, Assignment, MCQ quizzes, Seminar, Reflective notes, class participation, case analysis and presentation, slip tests (announced/ surprised), attendance etc. or any combination of these)

PWE:: Practical Work Examination

(PWE includes Laboratory practical work, project work, viva simulation exercise work etc.)

SEE:: Semester End Evaluation