ಕ್ರಮಾಂಕ/ No. : ಎಂಯು/ಎಸಿಸಿ/ಸಿಆರ್ 13/2024-25/ಎ8

ರಿಗೆ:

ಮಂವಿವಿ.ದ ಸಂಯೋಜನೆಗೊಳಪಟ್ಟ/ಘಟಕ/

ಸ್ವಾಯತ್ತ ಕಾಲೇಜುಗಳ ಪ್ರಾಂಶುಪಾಲರುಗಳಿಗೆ.

ಮಾನ್ಯರೆ ,

ವಿಷಯ: ದ್ವಿತೀಯ ಸೆಮಿಸ್ಟರ್ ಬಿ.ಕಾಂ (ವೊಕೇಶನಲ್)ಕಂಪ್ಯೂಟರ್ ಅಪ್ಲಿಕೇಶನ್ ಕಾರ್ಯಕ್ರಮದ

ಪಠ್ಯಕ್ರಮದಲ್ಲಿನ ಮಾರ್ಪಾಡುಗಳ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: 1. ಈ ಕಛೇರಿ ಪತ್ರ ಸಮಸಂಖ್ಯೆ ದಿನಾಂಕ: 25.02.2025

2. ಪದವಿ ಮಟ್ಟದ ವಾಣಿಜ್ಯ ಅಧ್ಯಯನ ಮಂಡಳಿ ಅಧ್ಯಕ್ಷರ ಪತ್ರ ದಿನಾಂಕ: 25.04.2025

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ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿ, ಉಲ್ಲೇಖ (1) ರನ್ವಯ ಜಾರಿಗೊಳಿಸಲಾಗಿರುವ ದ್ವಿತೀಯ ಸೆಮಿಸ್ಟರ್ ಬಿ.ಕಾಂ (ವೊಕೇಶನಲ್)ಕಂಪ್ಯೂಟರ್ ಅಪ್ಲಿಕೇಶನ್ ಕಾರ್ಯಕ್ರಮದ ಪಠ್ಯಕ್ರಮದಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿರುವ Optional ವಿಷಯುವಾದ Quantitative Techniques II ನ ಘಟಕಗಳನ್ನು ಮಾರ್ಪಡಿಸಿ ಶಿರೋನಾಮೆಯನ್ನು Quantitative Analytics ಎಂಬುದಾಗಿ ಬದಲಾಯಿಸಿದ್ದು, ಪಠ್ಯಕ್ರಮವನ್ನು ಮಾಹಿತಿ ಹಾಗೂ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಈ ಮೂಲಕ ಕಳುಹಿಸಲಾಗಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ

R Rebello

ಕುಲಸಚಿವರ ಪರವಾಗಿ

ಪ್ರತಿ:

1. ಪ್ರೊ. ಈಶ್ವರ ಪಿ, ಅಧ್ಯಕ್ಷರು, ಪದವಿ ಮಟ್ಟದ ವಾಣಿಜ್ಯ ಅಧ್ಯಯನ ಮಂಡಳಿ ಹಾಗೂ ಪ್ರಾಧ್ಯಾಪಕರು, ಸ್ನಾತಕೋತ್ತರ ವಾಣಿಜ್ಯ ವಿಭಾಗ, ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ,ಮಂಗಳಗಂಗೋತ್ರಿ

2. ನಿರ್ದೇಶಕರು, DUIMS , ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಮಂಗಳಗಂಗೋತ್ರಿ

3. ಸಹಾಯಕ ಕುಲಸಚಿವರು/ಅಧೀಕ್ಷರು, ಶೈಕ್ಷಣಿಕ ವಿಭಾಗ, ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ,ಮಂಗಳಗಂಗೋತ್ರಿ

II Semester B.Com (Computer Application):

QUANTITATIVE ANALYTICS

Credits 3   **4 Hours per week**   **48 Hours**

COURSE OUTCOMES:

After completing the course, the student will be able to

1. Establish relationships between variables in real-world situations by using methods like regression and correlation.
2. Use the ideas from probability distributions to solve practical issues.
3. Predict future results using time series
4. Recognise the relationship between two variables and how to use ratios and proportions to express it.

COURSE CONTENTS:

Module	Particulars	No of hrs
Module 1	**Descriptive Analysis of Bivariate Data:** Correlation- Meaning and Definition, Linear and Non-linear correlation, Correlation and causation, Scatter Diagram, Karl Pearson's Co-efficient of Correlation, Calculation and Spearman's Rank Correlation.	12
Module 2	**Regression Analysis:** Regression Analysis- Principle of Least Squares and Regression lines, Regression equations and estimation. Properties of Regression Coefficients.	12
Module 3	**Time Series Analysis and Theory of Probability:** Meaning and uses of Time Series, Various components of Time series, determination of Trend using Moving Average and Least square method Theory of Probability: Some important concepts, Addition Theorem of probability for two non-mutually and mutually exclusive events - Multiplication theorem of probability for dependent and independent events. Simple problems	12

	Ratios and Proportions and Theory of Equations:	
Module 4	Definition- Equality of Ratio- Simple Problems. Proportion-definition-Direct Proportion-Inverse Proportion- Continued Proportion- Problems on proportions **Equations**: Definition - Degree of Equation. Types of Equation - Linear equations and its solution-Simultaneous linear equations-Quadratic equation-Solution by method of factorisation and formula method.	12

Skill Development Activities

1. Determine the strength and direction of the relationship between advertisement expenditure and sales income by computing the correlation coefficient.
2. Use historical sales data to create a simple linear regression model to predict future sales based on advertisement expenditure.
3. Utilize a time series model to analyze monthly sales data to identify trends and seasonal patterns and generate a forecast for the upcoming year.
4. Instruct the students to use their knowledge of ratios to determine how much of each ingredient they would require to make the recipe for exactly the number of people in the group
5. The task involves resolving a shelf arrangement issue to maximize visibility by utilizing permutations and combinations to explore various arrangements

Books for Reference:

1. Business Statistics- S.C. Gupta
2. Business Mathematics- D.C. Sancheti& V.K. Kapoor, Sulthan Chand and sons
3. Business Statistics- S.P. Gupta, S.E. Gupta, B.N. Gupta
4. Business Mathematics-Madappa and Sridhara Rao, Shubhash Publications
5. Business Mathematics, S. N Dorairaj, United Publication
6. Financial Mathematics, A Lenin Jyothi, Himalaya Publications, Mumbai
7. Business Mathematics – S.P Gupta
8. Business Mathematics – Dr. Amarnath Dikshit &Dr.Jinendra Kumar Jain, Himalaya Publications
9. Business Mathematics – Kashyap Trivedi, Chirag Trivedi, Pearson Publications
10. Comprehensive Statistical Methods – P.N. Arora, Sumeet Arora &S.Arora, Chand Publications