

**MANGALORE UNIVERSITY ECONOMICS ASSOCIATION**

**Question Bank**

**II BA – IV<sup>th</sup> Semester**

**Statistics for Economics**

**(Course Code: DSC-4.2)**

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## Chapter:1 Introduction to Statistics

Meaning and Importance of Statistics, Functions of Statistics, Types of Statistics: Descriptive Statistics and Inferential Statistics-Variables; Qualitative Variable and Quantitative Variable

### 1 Marks

1. Define Statistics.

ಸಂಖ್ಯಾಶಾಸ್ತ್ರವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

2. Write any two advantages of statistics to economic analysis

ಆರ್ಥಿಕ ವಿಶ್ಲೇಷಣೆಗೆ ಸಂಖ್ಯಾ ಶಾಸ್ತ್ರದ ಯಾವುದಾದರೂ ಎರಡು ಅನುಕೂಲತೆಗಳನ್ನು ತಿಳಿಸಿ.

3. Mention any two types of Descriptive Statistics.

ವಿವರಣಾತ್ಮಕ ಸಂಖ್ಯಾಶಾಸ್ತ್ರದ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಗಳನ್ನು ತಿಳಿಸಿ.

4. Mention any two types of Inferential Statistics.

ತಾರ್ಕಿಕ ಸಂಖ್ಯಾಶಾಸ್ತ್ರದ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಗಳನ್ನು ತಿಳಿಸಿ.

5. Mention any two examples of Qualitative Variable.

ಗುಣಾತ್ಮಕ ಚಲಗಳ ಯಾವುದಾದರೂ ಎರಡು ಉದಾಹರಣೆಗಳನ್ನು ತಿಳಿಸಿ.

6. Mention any two examples of Quantitative Variable.

ಪರಿಮಾಣಾತ್ಮಕ ಚಲಗಳ ಯಾವುದಾದರೂ ಎರಡು ಉದಾಹರಣೆಗಳನ್ನು ತಿಳಿಸಿ.

### 5 Marks

1. What are the functions of Statistics?

ಸಂಖ್ಯಾಶಾಸ್ತ್ರದ ಕಾರ್ಯಗಳು ಯಾವುವು?

### 10 Marks

1. Define statistics. Explain the importance of statistics in the study of economics.

ಸಂಖ್ಯಾಶಾಸ್ತ್ರವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ ಅರ್ಥಶಾಸ್ತ್ರದ ಅಧ್ಯಯನದಲ್ಲಿ ಸಂಖ್ಯಾಶಾಸ್ತ್ರದ ಪ್ರಾಮುಖ್ಯತೆಯನ್ನು ವಿವರಿಸಿ.

## Chapter-2: Data types, Sources and Collection of Data:

Qualitative and Quantitative Data – Cross Section Data, Time Series Data and Panel Data -  
Primary and Secondary sources of Data – Methods of Collecting Primary Data

### 1 Marks

1. What is Primary Data?  
ಪ್ರಾಥಮಿಕ ದತ್ತಾಂಶ ಎಂದರೇನು?
2. What is Secondary data?  
ದ್ವಿತೀಯ ದತ್ತಾಂಶ ಎಂದರೇನು?
3. What is cross section data?  
ಅಡ್ಡ ವಿಭಾಗ ದತ್ತಾಂಶ ಎಂದರೇನು?
4. What is Time series data?  
ಸಮಯ ಶ್ರೇಣಿ ದತ್ತಾಂಶ ಎಂದರೇನು?
5. Write any two secondary sources of data  
ಯಾವುದಾದರೂ ಎರಡು ದ್ವಿತೀಯ ಮೂಲಗಳನ್ನು ಬರೆಯಿರಿ.
6. Write any two methods of collecting primary data  
ಪ್ರಾಥಮಿಕ ಅಂಕಿ ಅಂಶಗಳನ್ನು ಸಂಗ್ರಹಿಸಲು ಬಳಸುವ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಾನಗಳನ್ನು ಬರೆಯಿರಿ.

### 5 Marks

1. Write a note on sources of Secondary Data.  
ದ್ವಿತೀಯ ದತ್ತಾಂಶ ಮೂಲಗಳ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.
2. Explain the methods of collecting Primary Data?  
ಪ್ರಾಥಮಿಕ ದತ್ತಾಂಶಗಳನ್ನು ಸಂಗ್ರಹಿಸುವ ವಿಧಾನಗಳನ್ನು ವಿವರಿಸಿ?

### 10 Marks

1. Explain the sources of Primary and secondary data.  
ಪ್ರಾಥಮಿಕ ಮತ್ತು ಮಾಧ್ಯಮಿಕ ದತ್ತಾಂಶಗಳ ಮೂಲಗಳನ್ನು ವಿವರಿಸಿ.

## Chapter-3: Tabulation and Presentation of Data

Classification and tabulation of data - Frequency distributions – Continuous and Discrete frequency distribution. Graphical presentation- Histogram- frequency polygon - Ogive Curves -Bar Diagram, Pie Chart

### 1 Marks

1. What is Tabulation?

ದತ್ತಾಂಶಗಳ ಪಟ್ಟಿ ಮಾಡುವಿಕೆ ಎಂದರೇನು?

2. What is a multiple bar diagram?

ಬಹು ಸ್ತಂಭ ಚಿತ್ರ ಎಂದರೇನು?

3. What is a Sub Divided Bar Diagram?

ಉಪ ವಿಭಾಗಿತ ಸ್ತಂಭ ಚಿತ್ರ ಎಂದರೇನು?

### 5 Marks

1. The following data relates to the number of children's in families of a particular locality present the information in the form of discrete frequency distribution.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳ ಮಾಹಿತಿಯು ಒಂದು ನಿರ್ದಿಷ್ಟ ಪ್ರದೇಶದಲ್ಲಿನ ಕುಟುಂಬಗಳ ಮಕ್ಕಳ ಸಂಖ್ಯೆಗೆ ಸಂಬಂಧಿಸಿದೆ. ಈ ಮಾಹಿತಿಯನ್ನು ಅಸತತ ಅಥವಾ ಪೂರ್ಣಾಂಕ ಆವೃತ್ತಿಯ ಸಂಖ್ಯಾ ವಿತರಣೆ ರೂಪದಲ್ಲಿ ವ್ಯಕ್ತಪಡಿಸಿ.

2, 3, 4, 10, 9, 8, 5, 7, 6, 7, 6, 6, 4, 5, 6, 4, 6, 5, 1, 3, 5, 2, 4, 5, 7, 6, 8, 6, 9, 3

2. Prepare a discrete frequency table for the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ಪೂರ್ಣಾಂಕ ಆವೃತ್ತಿಯ ಸಂಖ್ಯಾ ವಿತರಣೆಯನ್ನು ತಯಾರಿಸಿ.

0 1 2 3 4 5 6 7 2 3 4 0 2 5 8 4 5 12

6 3 2 7 6 5 3 3 7 8 9 7 9 4 5 4 3 9

3. Prepare a discrete frequency table for the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ಪೂರ್ಣಾಂಕ ಆವೃತ್ತಿಯ ಸಂಖ್ಯಾ ವಿತರಣೆಯನ್ನು ತಯಾರಿಸಿ.

15, 18, 16, 20, 25, 24, 25, 20, 16, 15, 18, 18, 16, 24, 15, 20, 28, 30, 27, 16, 24, 25, 20, 18, 28, 27, 25, 24, 24, 18, 18, 25, 20, 16, 15, 20, 27, 28, 29, 16

4. Prepare a continuous frequency distribution for the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ನಿರಂತರ ಆವೃತ್ತಿಯ ಸಂಖ್ಯಾ ವಿತರಣೆಯನ್ನು ತಯಾರಿಸಿ.

110, 108, 126, 132, 149, 136, 125, 112, 138, 155, 125, 138, 136, 130, 120, 148, 140, 125, 119, 111, 154, 147, 165, 137, 145, 132, 150, 137, 142, 135, 142, 135, 125, 126

5. Prepare a continuous frequency distribution for the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ನಿರಂತರ ಆವೃತ್ತಿಯ ಸಂಖ್ಯಾ ವಿತರಣೆಯನ್ನು ತಯಾರಿಸಿ.

10, 17, 15, 22, 11, 16, 19, 24, 29, 18, 25, 26, 32, 14, 17, 20, 23, 27, 30, 12, 15, 18, 24, 36, 18, 15, 21, 28, 33, 38, 34, 13, 10, 16, 20, 22, 29, 19, 23, 31

6. Find the Mode by Histogram for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಹಿಸ್ಟೋಗ್ರಾಮ ಮೂಲಕ ಬಹುಳಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

CI	F
10-20	15
20-30	20
30-40	30
40-50	25
50-60	5

7. Draw a Frequency Polygon for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಆವೃತ್ತಿ ಸಂಖ್ಯಾ ಬಹುಭುಜಾಕೃತಿ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

CI	F
10-20	15
20-30	20
30-40	30
40-50	25
50-60	5

8. Draw a Simple Bar Diagram for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಸರಳ ಸ್ತಂಭ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Year	Income (Cr)
2000	100
2001	90
2002	110
2003	55
2004	120

9. Draw a Multiple Bar Diagrams for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಬಹು ಸ್ತಂಭ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Year	Income (Cr)	Cost (Cr)
2000	100	90
2001	90	85
2002	110	100
2003	55	50
2004	120	110

10. Draw a Sub Divided Bar Diagram for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಉಪ ವಿಭಾಗಿತ ಸ್ತಂಭ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Year	Wheat	Rice	Ragi
2000	10	9	10
2001	9	8	5
2002	10	10	10
2003	5	8	6
2004	12	11	10

11. Draw a Percentage Sub divided Bar Diagram for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಶೇಕಡವಾರು ವಿಭಾಗಿತ ಸ್ತಂಭ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Year	Wheat	Rice
2000	10	5
2001	5	10
2002	10	10
2003	3	9
2004	9	3

12. Draw a pie chart for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಪೈ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Class	Students
BA	10
B.COM	5
B.SC	5
M.A	10
M.COM	10

13. The following data shows the monthly expenditure of a family, construct the pie chart

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳ ಮಾಹಿತಿಯು ಒಂದು ಕುಟುಂಬದ ಮಾಸಿಕ ವೆಚ್ಚವನ್ನು ತೋರಿಸುತ್ತದೆ ಇದಕ್ಕೆ ಪೈ ಚಿತ್ರವನ್ನು ರಚಿಸಿ.

Items (ಬಾಬುಗಳು)	Expenditure (ಖರ್ಚು ರೂಗಳಲ್ಲಿ)
Food (ಆಹಾರ)	1200
Clothing (ಬಟ್ಟೆ)	1000
Education (ವಿದ್ಯಾಭ್ಯಾಸ)	1200
Rent (ಬಾಡಿಗೆ)	2000
Miscellaneous (ಇತರೆ)	1400

### 10 Marks

1. Draw 'less than' and 'more than' Ogives for the following data and find median.

ಕಡಿಮೆ ಮೌಲ್ಯಗಳಿಂದ ಮತ್ತು ಹೆಚ್ಚು ಮೌಲ್ಯಗಳಿಂದ ಸಂಚಿತ ಆವೃತ್ತಿ ರೇಖೆಗಳನ್ನು ರಚಿಸಿ ಮತ್ತು ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students	15	25	60	20	10	8	2	10

2. Draw 'less than' and 'more than' Ogives for the following data and find median.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ಕಡಿಮೆ ಮೌಲ್ಯಗಳಿಂದ ಮತ್ತು ಹೆಚ್ಚು ಮೌಲ್ಯಗಳಿಂದ ಸಂಚಿತ ಆವೃತ್ತಿ ರೇಖೆಗಳನ್ನು ರಚಿಸಿ ಮತ್ತು ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Class Interval	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	7	10	20	13	17	10	14	9

## Chapter-4: Arithmetic Average

Definition of Central Tendency, Types of Central Tendency: Arithmetic Mean: Meaning and Properties of Arithmetic Mean – Computation of Arithmetic Mean

### 1 Marks

1. Define Central Tendency.

ಕೇಂದ್ರೀಯ ಪ್ರವೃತ್ತಿಯನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

2. What are the various measures of Central Tendency.

ಕೇಂದ್ರೀಯ ಪ್ರವೃತ್ತಿಯ ವಿವಿಧ ಮಾಪನಗಳು ಯಾವುವು?

3. What is Arithmetic Mean.

ಅಂಕಗಣಿತ ಸರಾಸರಿ ಎಂದರೇನು?

4. Find the mean for the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 20, 30, 45, 50, 55

5. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 20, 25, 35, 40, 50

6. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	170	80	150	200	100	125	75
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7. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	70	52	63	80	95
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8. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	8	12	15	17	23
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### 5 Marks

1. Find Mean for the following data.



ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಸರಾಸರಿ ಕಂಡುಹಿಡಿಯಿರಿ.

Marks (ಅಂಕಗಳು)	20	30	40	50	60	70
No. of students (ವಿದ್ಯಾರ್ಥಿಗಳ ಸಂಖ್ಯೆ)	8	12	20	10	6	4

2. Calculate the arithmetic mean for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	10	20	30	40	50	60
F	1	2	6	5	4	2

3. Compute the arithmetic mean for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Wage (Rs.)	90	70	50	30	20	10
F	2	4	5	6	2	1

4. Compute the arithmetic mean for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	75	50	47	43	25
F	03	01	01	03	02

## 10 Marks

1. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No of Students	7	8	15	10	6	4

2. Calculate the Mean for the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	10-20	20-30	30-40	40-50	50-60
F	3	4	10	5	2

## Chapter-5: Positional Averages-Median and Mode

Definition and importance of Median-Calculation of Median- Definition and importance of Mode - Calculation of Mode.

### 1 Marks

1. Define Median.

ಮಧ್ಯಕವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

2. Define Mode.

ಬಹುಳಕವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

3. Find out median.

ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 1100, 1150, 1080, 1120, 1200, 1160, 1400

4. Find out Median.

ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	70	40	35	30	25
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5. Find out Median.

ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	3	7	8	1	4	5	7	9
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6. Identify the mode from the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ಬಹುಳಕವನ್ನು ಗುರುತಿಸಿ.

X: 3, 5, 3, 7, 3, 8, 5

7. Identify the mode from the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ಬಹುಳಕವನ್ನು ಗುರುತಿಸಿ.

X: 10, 12, 13, 12, 11, 12, 15, 16, 15, 10, 12, 16

8. Identify the mode from the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ಬಹುಳಕವನ್ನು ಗುರುತಿಸಿ.

X	1	2	3	4	5
F	23	43	55	18	24

9. Identify the mode from the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ಬಹುಳಕವನ್ನು ಗುರುತಿಸಿ.

X	5	10	15	20	25	30	35
F	3	4	5	21	6	7	20

### 5 Marks

1. Find Median from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Marks	20	30	40	50	60	70
No. of students	8	12	20	10	6	4

2. Compute Median from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Daily Wage	100	150	200	250	300
No. of Workers	10	12	25	33	20

### 10 Marks

1. Find Median and Mode from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಮಧ್ಯಕ ಮತ್ತು ಬಹುಳಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ

Height	60	61	62	63	64	65	66
No. of Persons	27	146	435	398	210	128	98

2. Compute Median from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಮಧ್ಯಕ ಲೆಕ್ಕಾಚಾರ ಮಾಡಿ.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students	15	20	25	24	12	31	71	52

3. Find Median from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಮಧ್ಯಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ

Class	0-100	100- 200	200-300	300-400	400-500
Frequency	12	18	27	20	17

## Chapter-6: Dispersion

Meaning of Dispersion- Measures of Dispersion- Range Quartile deviation- mean deviation - Standard deviation - Coefficient of Variation and Their Computation

### 1 Marks

1. Mention any two uses of range

ವಿಸ್ತಾರದ ಯಾವುದಾದರೂ ಎರಡು ಉಪಯೋಗಗಳನ್ನು ತಿಳಿಸಿ.

2. Define standard deviation.

ನಿಯತ ವಿಚಲನೆಯನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

3. Find the range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ವಿಸ್ತಾರವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 25, 32, 39, 46, 45, 75

4. Find the range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ವಿಸ್ತಾರವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 80, 110, 40, 25, 83, 26, 56, 60

5. Find the range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ವಿಸ್ತಾರವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X:3, 5, 3, 7, 3, 8, 5

6. Give the formula of calculating Q1

Q1 ಕಂಡು ಹಿಡಿಯುವ ಸೂತ್ರ ವನ್ನು ತಿಳಿಸಿ.

7. Give the formula for calculating Q3

Q3 ಕಂಡು ಹಿಡಿಯುವ ಸೂತ್ರ ವನ್ನು ತಿಳಿಸಿ.

8. Given Q3=30 and Q1=20, find the quartile deviation.

Q3=30 ಮತ್ತು Q1=20 ಎಂದು ನೀಡಿದಾಗ, ಚತುರ್ಥಕ ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

9. Given  $Q_3=60$  and  $Q_1=40$ , find the quartile deviation.

$Q_3=60$  ಮತ್ತು  $Q_1=40$  ಎಂದು ನೀಡಿದಾಗ, ಚತುರ್ಥಕ ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

## 5 Marks

1. Find Range and its coefficient from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ವಿಸ್ತಾರ ಮತ್ತು ವಿಸ್ತಾರದ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Day	Mon	Tue	Wed	Thurs	Fri	Sat
Prices	200	210	208	160	220	250

2. Calculate the Range and its coefficient of Range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ವಿಸ್ತಾರ ಮತ್ತು ವಿಸ್ತಾರದ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 18, 22, 28, 30, 35

3. Calculate the Range and its coefficient of Range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ವಿಸ್ತಾರ ಮತ್ತು ವಿಸ್ತಾರದ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 25, 32, 39, 46, 55, 75

4. Calculate the Range and its coefficient of Range from the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ವಿಸ್ತಾರ ಮತ್ತು ವಿಸ್ತಾರದ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X: 20, 24, 40, 52, 60

5. In a frequency distribution the three quartiles are 128,147,157. Calculate the Q.D. and its Co efficient.

ಆವರ್ತನ ವಿತರಣೆಯಲ್ಲಿನ ಮೂರು ಚತುರ್ಥಕಗಳು 128,147,157. ಚತುರ್ಥಕ ವಿಚಲನೆ ಮತ್ತು ಅದರ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

6. In a distribution lower quartile is 30.5 and upper quartile is 70.4, Find out Q.D. and its coefficient.

ವಿತರಣೆಯಲ್ಲಿ ಕೆಳಭಾಗದ ಚತುರ್ಥಕ 30.5 ಮತ್ತು ಮೇಲ್ಭಾಗದ ಚತುರ್ಥಕ 70.4. ಚತುರ್ಥಕ ವಿಚಲನೆ ಮತ್ತು ಅದರ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

7. For the distribution of daily wage of workers, the quartiles are 49.50 and 72.50.

Find out Q.D. and its co-efficient.

ಕಾರ್ಮಿಕರ ದೈನಂದಿನ ವೇತನದ ವಿತರಣೆಯ ಚತುರ್ಥಕಗಳು 49.50 ಮತ್ತು 72.50.

ಚತುರ್ಥಕ ವಿಚಲನೆ ಮತ್ತು ಅದರ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

(Ans: Q.D.=11.5, Coeff. Q.D.=0.188)

8. Calculate quartile deviation for the given data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಚತುರ್ಥಕ ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	120	122	124	126	130	140	150	160
F	1	3	5	7	10	3	1	1

9. Calculate quartile deviation for the given data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಚತುರ್ಥಕ ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	20	25	30	35	40	45
F	3	1	2	4	5	4

10. Compute the standard deviation from the following data

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ನಿಯತ (ಮಾನಕ)ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	5	10	15	20	25	30	35
F	10	15	20	10	8	5	2

## 10 Marks

1. Find Q.D. and its coefficient from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಚತುರ್ಥಕ ವಿಚಲನೆ ಮತ್ತು ಚತುರ್ಥಕ ವಿಚಲನೆ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Class Interval	0-10	10-20	20-30	30-40
Frequency	5	7	30	10

2. Calculate M.D. from Median and their coefficient from the following data.

ಈ ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ಮಧ್ಯಕದ ನೆರವಿನಿಂದ ಸರಾಸರಿ ವಿಚಲನೆ ಮತ್ತು ಅದರ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Class Interval	18-22	22-26	26-30	30-34	34-38
Frequency	20	30	11	3	1

3. Calculate the M.D. from Mean and its Coefficient from the following data.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಗೆ ಅಂಕಗಣಿತ ಸರಾಸರಿ ಮೂಲಕ ಸರಾಸರಿ ವಿಚಲನೆ ಮತ್ತು ಸರಾಸರಿ ವಿಚಲನೆಯ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Class Interval	40-60	60-80	80-100	100-110	110-120	120-140
Frequency	12	47	31	8	2	3

4. Compute Standard Deviation, Variance and Coefficient of variation for the following data.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ನಿಯತ (ಮಾನಕ) ವಿಚಲನೆ, ವಿಚಲನೆ ಶೀಲತೆ ಮತ್ತು ಮಾನಕ ವಿಚಲನೆ ಗುಣಾಂಕ ಕಂಡುಹಿಡಿಯಿರಿ.

C -I	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
F	18	16	15	12	10	5	2	1

5. Find Standard Deviation from the following distribution.

ಕೆಳಗಿನ ವಿತರಣೆಯಿಂದ ಮಾನಕ ವಿಚಲನೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Age	20-25	25-30	30-35	35-40	40-45	45-50
No. of persons	170	110	80	45	40	35

## Chapter-7: Correlation

Meaning of Correlation - Types of correlation - Methods of measuring Correlation- Karl Pearson's correlation coefficients

### 1 Marks

1. What is Correlation?  
ಸಹಸಂಬಂಧ ಎಂದರೇನು?
2. Mention any two types of Correlation.  
ಸಹಸಂಬಂಧದ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಗಳನ್ನು ತಿಳಿಸಿ.

3. What is Positive correlation?  
ಧನಾತ್ಮಕ ಸಹಸಂಬಂಧ ಎಂದರೇನು?
4. What is Negative correlation?  
ಋಣಾತ್ಮಕ ಸಹಸಂಬಂಧ ಎಂದರೇನು?
5. Mention any two methods of measuring Correlation.  
ಸಹಸಂಬಂಧ ಮಾಪನದ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಾನಗಳನ್ನು ತಿಳಿಸಿ.
6. Correlation between price and demand is.....  
ಬೆಲೆ ಮತ್ತು ಬೇಡಿಕೆಯ ನಡುವಿನ ಸಹಸಂಬಂಧ .....
7. Correlation between price and supply is .....  
ಬೆಲೆ ಮತ್ತು ಪೂರೈಕೆಯ ನಡುವಿನ ಸಹಸಂಬಂಧ .....

## 10 Marks

1. Find out Pearson's coefficient of correlation for the following information regarding the advertisement cost(X) and sales(Y) of a company.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳ ಸಹಾಯದಿಂದ ಒಂದು ಕಂಪನಿಯ ಜಾಹೀರಾತು ವೆಚ್ಚ ಮತ್ತು ಮಾರಾಟಗಳನ್ನು ನೀಡಲಾಗಿದೆ, ಕಾರ್ಲ್ ಪಿಯರ್ಸನ್ ಸಹಸಂಬಂಧ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	39	65	62	90	82	75	25	98	36	75
Y	47	53	58	86	62	68	60	91	51	84

2. Find out Pearson's coefficient of correlation for the following information.

ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳ ಸಹಾಯದಿಂದ ಕಾರ್ಲ್ ಪಿಯರ್ಸನ್ ಸಹಸಂಬಂಧ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	9	8	7	6	5	4	3	2	1
Y	15	16	14	13	11	12	10	8	9

3. Find out Pearson's coefficient of correlation for the following information.

ಮುಂದಿನ ದತ್ತಾಂಶಗಳ ಸಹಾಯದಿಂದ ಕಾರ್ಲ್ ಪಿಯರ್ಸನ್ ಸಹಸಂಬಂಧ ಗುಣಾಂಕವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	64	65	66	67	68	69	70
Y	66	67	65	68	70	68	72



## Chapter-8: Regression

Meaning and Importance of Regression - Regression Equation - Estimation of regression equation - Applications of regression equation in Economics

### 1 Marks

1. **What is regression?**  
ಹಿಂಚಲನೆ ಎಂದರೇನು?
2. **What is simple regression?**  
ಸರಳ ಹಿಂಚಲನೆ ಎಂದರೇನು?
3. **What is Multiple regression?**  
ಬಹು ಹಿಂಚಲನೆ ಎಂದರೇನು?

### 5 Marks

1. If Mean of X=100, Mean of Y = 98, Correlation=0.4, S.D. of X= 12, S.D of Y=5  
Write down the two regression equations of X on Y and Y on X.

X ನ ಸರಾಸರಿ= 100, Y ನ ಸರಾಸರಿ= 98, ಸಹಸಂಬಂಧ=0.4, X ನ ನಿಯತ ವಿಚಲನೆ = 12, Y ನ ನಿಯತ ವಿಚಲನೆ=5 ಈ ದತ್ತಾಂಶಗಳಿಂದ, Y ಮೇಲಿನ X ಮತ್ತು X ಮೇಲಿನ Y ನ ಹಿಂಚಲನೆಯ ಸಮೀಕರಣವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Estimate the possible value of X when Y=116.

Y =116 ಆಗಿರುವಾಗ X ನ ಮೌಲ್ಯವನ್ನು ಅಂದಾಜು ಮಾಡಿ.

2. Given Mean of X=36, Mean of Y =85, Correlation=-0.66, S.D. of X=11, S.D of Y=8, find two regression equations of X on Y and Y on X.

X ನ ಸರಾಸರಿ=36, Y ನ ಸರಾಸರಿ= 85, ಸಹಸಂಬಂಧ= -0.66, X ನ ನಿಯತವಿಚಲನೆ= 11, Y ನ ನಿಯತ ವಿಚಲನೆ= 8 ದತ್ತಾಂಶಗಳಿಂದ, Y ಮೇಲಿನ X ಮತ್ತು X ಮೇಲಿನ Y ನ ಹಿಂಚಲನೆಯ ಸಮೀಕರಣವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

i) Estimate the value of X when Y =75.

i) Y =75 ಆಗಿರುವಾಗ X ನ ಮೌಲ್ಯವನ್ನು ಅಂದಾಜು ಮಾಡಿ.

3. Find out the regression equations of X on Y and Y on X for the following information:

ಕೆಳಗಿನ ಮಾಹಿತಿಯಿಂದ Y ಮೇಲಿನ X ಮತ್ತು X ಮೇಲಿನ Yನ

ಹಿಂಚಲನೆಯ ಸಮೀಕರಣವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Mean of X=50.5, Mean of Y = 48.3, Correlation=0.73, S.D. of X= 15,  
S.D of Y=12.4

X ನ ಸರಾಸರಿ= 50.5, Y ನ ಸರಾಸರಿ= 48.3, ಸಹಸಂಬಂಧ= 0.73,

X ನ ನಿಯತ ವಿಚಲನೆ =15, Y ನ ನಿಯತ ವಿಚಲನೆ= 12.4 .

### 10 Marks

4. Find the two Regression equations from the following data.

ಈ ಕೆಳಗಿನ ದತ್ತಾಂಶಗಳಿಂದ ಎರಡು ಹಿಂಚಲನೆ ಸಮೀಕರಣಗಳನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	5	15	25	40	50	60	70
Y	15	40	50	60	70	65	75

2. Obtain the regression of Y on X and X on Y from the following table and estimate the value of X when Y is 85.

ಕೆಳಗಿನ ಪಟ್ಟಿಯಿಂದ X ಮೇಲಿನ Y ಮತ್ತು Y ಮೇಲಿನ X ನ ಹಿಂಚಲನೆಯ ಸಮೀಕರಣವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

X	75	80	93	65	87	71	98	68	89	97
Y	82	78	86	72	91	80	95	72	89	74

## Chapter-9: Time Series Analysis

Definition of Time Series – Components of Time Series – Estimation and Forecasting of Trend

### 1 Marks

1. Define Time Series.

ಸಮಯ ಸರಣಿಯನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

2. Mention any two Components of Time Series?

ಸಮಯ ಸರಣಿಯ ಯಾವುದಾದರೂ ಎರಡು ಅಂಶಗಳನ್ನು ತಿಳಿಸಿ.

### 5 Marks

1. Draw the trend line using the Semi-Average method for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅರೆ ಸರಾಸರಿ ವಿಧಾನವನ್ನು ಬಳಸಿ ಪ್ರವೃತ್ತಿ ರೇಖೆಯನ್ನು ರಚಿಸಿ.

Year	2014	2015	2016	2017	2018	2019	2020	2021
Sales	102	105	114	110	108	112	114	116

2. Draw the trend line using the Semi-Average method for the following data.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಅರೆ ಸರಾಸರಿ ವಿಧಾನವನ್ನು ಬಳಸಿ ಪ್ರವೃತ್ತಿ ರೇಖೆಯನ್ನು ರಚಿಸಿ.

Year	2010	2011	2012	2013	2014	2015	2016
Sales	40	56	48	63	71	75	78

3. Calculate 3 yearly moving average for the following data and draw the trend line.

ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಮೂರು ವರ್ಷಗಳ ಚಲಿಸುತ್ತಿರುವ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿದು ಪ್ರವೃತ್ತಿ ರೇಖೆಯನ್ನು ರಚಿಸಿ.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sales	28	32	30	25	28	42	50	48	60

4. Compute the trend values by finding 3 yearly moving averages for the following time series.

ಕೆಳಗಿನ ಸಮಯ ಸರಣಿಯಿಂದ 3 ವರ್ಷಗಳ ಚಲಿಸುವ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Year	1988	1989	1990	1991	1992	1993	1994
Value	412	438	446	454	470	483	490

5. Compute the trend values by finding 3 yearly moving averages for the following time series.

ಕೆಳಗಿನ ಸಮಯ ಸರಣಿಯಿಂದ 3 ವರ್ಷಗಳ ಚಲಿಸುವ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production (in tonnes)	5	6	7	7	6	8	9	10	9

6. Compute the trend values by finding 5 yearly moving averages for the following time series.

ಕೆಳಗಿನ ಸಮಯ ಸರಣಿಯಿಂದ 5 ವರ್ಷಗಳ ಚಲಿಸುವ ಸರಾಸರಿಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Students	110	104	98	105	109	120	115	110	114	122	130

## 10 Marks

1. Estimate the trend values for the following data by using least square method and project the demand for the year 2023

ಕನಿಷ್ಠ ವರ್ಗ ವಿಧಾನದ ಮೂಲಕ ಕೆಳಗಿನ ಅಂಕಿಅಂಶಗಳಿಗೆ ಪ್ರವೃತ್ತಿ ಮೌಲ್ಯಗಳನ್ನು ಕಂಡುಹಿಡಿದು 2023 ನೇ ಯ ವರ್ಷಕ್ಕೆ ಬೇಡಿಕೆಯನ್ನು ಅಂದಾಜು ಮಾಡಿ.

Year	2015	2016	2017	2018	2019	2020	2021
Demand in units	235	250	210	320	235	410	450

2. From the following data, estimate the sales for the year 2018 by using least square method and project the trend values and draw a trend line.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಂದ ಕನಿಷ್ಠ ವರ್ಗ ವಿಧಾನದ ಮೂಲಕ 2018 ನೇ ವರ್ಷದ ಮಾರಾಟವನ್ನು ಅಂದಾಜು ಮಾಡಿ ಪ್ರವೃತ್ತಿ ರೇಖೆಯನ್ನು ಎಳೆಯಿರಿ.

Year	2012	2013	2014	2015	2016
Sales (in tons)	100	120	110	140	180

3. Using Least Square Method find the trend values for the following data. Estimate the demand for the year 2020.

ಈ ಕೆಳಗಿನ ಅಂಕಿ ಅಂಶಗಳಿಗೆ ಕನಿಷ್ಠ ವರ್ಗ ವಿಧಾನವನ್ನು ಬಳಸಿ ಪ್ರವೃತ್ತಿ ಮೌಲ್ಯಗಳನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ. 2020 ರ ವರ್ಷಕ್ಕೆ ಬೇಡಿಕೆಯನ್ನು ಅಂದಾಜಿಸಿ.

Year	2014	2015	2016	2017	2018
Sales (in tons)	28	19	31	35	40



**Government of Karnataka**

**Curriculum Framework for Undergraduate Programme in  
Colleges and Universities of Karnataka State**



**5<sup>th</sup> and 6<sup>th</sup> Semester Model Syllabus**

**for**

**BA. and BSc. in  
Economics**

**Submitted to  
Vice Chairman**

**Karnataka State Higher Education Council  
30, Prasanna Kumar Block, Bengaluru City University Campus,  
Bengaluru, Karnataka – 560009**

## Composition of Subject Expert Committee Members

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2	Dr. B. K. Tulasimala Vice-Chancellor, KSAW University, Vijayapura	Member
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10	Dr. Basavaraja S. Benni Professor, VSK University, Ballari	Member
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15	Dr. Timmaraddi Assoc. Professor, A. S. Women's College, Ballari	Member

SN	Name & Organization	Designation
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17	Dr. Joy Nerella Principal, Union Christian College, Sira Gate, Tumakuru	Member
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14	Dr. Manoj Dolli, Professor, Vijayanagara Sri Krishnadevaraya University.
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18	Dr. Suchitra S., Assoc. Professor, Davangere University.
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**Model Curriculum**  
**of**  
**BA in**  
**Economics**  
**5<sup>th</sup> & 6<sup>th</sup> Semester**

Karnataka State Higher Education Council

Karnataka State Higher Education Council

**Note:** If any Elective or Vocational course involves theory-cum-practical, then IA to Exam. Marks will be in the ratio of 50:50. The practical part is to be evaluated as part of IA. Semester end examination is only in theory component and questions from practical part, if any

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## Pedagogy

<b>Formative Assessment</b>	
<b>Assessment Occasion/ type</b>	<b>Weightage in Marks</b>
Internal Test	50%
Assignment	20%
Presentation/Project	30%
<b>Total</b>	<b>100</b>
<b><i>Formative Assessment as per University guidelines are compulsory</i></b>	

***Note: Strictly follow the Practicum***

Pedagogy; Evaluation process IA MARKS

<b>FORMATIVE ASSESSMENT</b>			
	<b>C1</b>	<b>C2</b>	<b>Total</b>
<b>Assessment Occasion/type</b>			
Internal Test	10	10	20
Assignment/seminar	5	-	05
Quiz/GD	5	-	05
Presentation/Project etc	-	10	10
<b>Total</b>	<b>20</b>	<b>20</b>	<b>40</b>
<b>Semester End Exam Theory</b>			<b>60</b>



Government of Karnataka

**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Public Economics</b>		
Course Code:	<b>ECO C9</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand introductory Public Finance concepts.
- CO2. Study the causes of market failure and corrective actions
- CO3. Understand the impact, incidence and shifting of tax
- CO4. Study the Economic Effects of tax on production, distribution and other effects
- CO5. Enable the students to know the Principles and Effects of Public Expenditure
- CO6. Understand the Economic and functional classification of the budget; Balanced and Unbalanced budget
- CO7. Understand the Burden of Public debt and know the Classical/ Ricardian views, Keynesian and post-Keynesian views
- CO8. To acquaint with the advantages and disadvantages of Deficit Financing,

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Public Economics</b>	<b>15</b>
	Public Economics: Meaning, definitions, Scope and Significance, Public Finance and Private Finance: Meaning, and Distinction; Public good and private good: Meaning, Characteristics, and Distinction, Principle of Maximum Social Advantage, Market Failures: Meaning, causes-role of externalities; Market failure and role of government; Corrective actions.	
<b>Practicum</b>	Group Discussions on Public Finance and private finance; public good and private good Assignment on Market failure and government intervention	
<b>Module II</b>	<b>Public Revenue and Public Expenditure</b>	<b>18</b>
	Meaning and sources of revenue; Taxation –Cannons of taxation, Characteristics of a sound tax system, Impact, Incidence- Division of Tax burden, Shifting of tax, Economic Effects of tax on production, distribution and other effects, Progressive and Regressive, Proportional Tax, Direct and Indirect Taxes –Merits and Demerits, Taxable Capacity: Meaning and determinants. Public Expenditure; Meaning, classification, principles, Types & Cannons, Reasons for the growth of public expenditure, Wagner’s	

	law of increasing state activities, Peacock-Wiseman hypotheses, Effects of public expenditure: Production, Distribution & Other effects	
<b>Practicum</b>	Mini-project/study to ascertain the impact of GST on retailers/wholesalers in your vicinity A case study on the taxable capacity of the different sections of society in the vicinity Assignment on Effects of public expenditure: Production, Distribution & Other Effects	
<b>Module III</b>	<b>Public Debt</b>	<b>12</b>
	Public Debt: Meaning, Purpose, Types & Effects; Sources of Public Borrowing; Burden of Public Debt -Classical/ Ricardian views, Keynesian and post-Keynesian views; Intergenerational equity of public debt; Causes of the Rise in Public Debt; Methods of debt redemption; Debt management.	
<b>Practicum</b>	Studying the burden of public debt through a project/ case study Assignment on Debt Management	
<b>Module IV</b>	<b>Public Budget, Fiscal Policy and Fiscal Deficit</b>	<b>15</b>
	Budget: Meaning, process & Types of budget, Economic and functional classification of the budget; Balanced and unbalanced budget, Types of Budget Deficits; Fiscal Policy: Meaning, objectives & Tools; Fiscal deficit: Meaning, Computation, Deficit Financing: Meaning, Advantages and Disadvantages	
<b>Practicum:</b>	Calculation of various types of budget deficit using the budget data Group discussion on the advantages and disadvantages of deficit financing	

<b>References</b>	
1	Lekhi R.K., Joginder Singh (2018) Public Finance, Kalyani publication, New Delhi
2	Tyagi B.P. (2014) Public Finance published by Jaya Prakash Nath and CO, Meerut
3	Hindriks J. and G. Myles (2006): Intermediate Public Economics, MIT Press.
4	Bhatia H L (2018): Public Finance. Vikas Publishing House.
5	Musgrave, R.A. (1989), The Theory of Public Finance, McGraw Hill
6	Musgrave R.A. and P.B. Musgrave (1989), Public Finance in Theory and Practice, McGraw Hill,



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Development Economics</b>		
Course Code:	<b>ECO C10</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the basic concepts and measurements of Development.
- CO2. Learn some classical and partial theories of Development economics and identify the difference.
- CO3. Identify the difference between Developed and Developing Countries.
- CO4. Analyse and tackle the Development issues effectively.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module 1</b>	<b>Introduction to Economic Development</b>	<b>14</b>
	Concept - Definitions - Distinction between Economic Growth and Development - Indicators of Growth and Development, Measures of Economic Development: Gross National Product (GNP) - Physical Quality of Life Index (PQLI), Human Development Index (HDI), Happiness Index, Inequality and Poverty: Meaning, causes, indicators – Gini Coefficient Index, Human Poverty Index (HPI).	
<b>Practicum:</b>	Assignment on various indicators of growth and development Group discussions about the characteristic features of different countries and their development levels	
<b>Module 2</b>	<b>General Theories of Economic Growth and Development</b>	<b>16</b>
	Adam Smith's Theory, David Ricardo's Theory, T.R. Malthus' Theory, Karl Marx's Theory, Schumpeter's Theory and Rostow's Growth Theory - Harrod-Domar Model.	
<b>Practicum:</b>	Assignment on different theories and their relevance to developing Countries, Debate on present stage of India's growth and estimated stage it may reach by 2047	
<b>Module 3</b>	<b>Partial Theories of Economic Development</b>	<b>16</b>
	Lewis Labour Surplus Model - Rodan's Big Push Theory - Lieberstein's Critical Minimum Effort Approach - Balanced Vs. Unbalanced Growth, Factors in the Development Process Capital Accumulation - Capital-Output Ratio - Technology and Economic Development.	

<b>Practicum:</b>	Group Discussion on Balanced and unbalanced growth strategies in Developed and developing countries Assignment on the Factors in the Development Process Capital Accumulation	
<b>Module 4</b>	<b>Sustainable Development</b>	<b>14</b>
	Inclusive Development - Millennium Development Goals - Sustainable Development Goals, Targets and Achievements with reference to India.	
<b>Practicum</b>	Seminar on MDGs and SDGs and the challenges	

<b>References</b>	
1	Higgins Benjamin & W.W. Norton Economic Development New York & Company. Inc.
2	Mishra S.K and Puri V.K, Economic Development and Planning, Himalaya Pub., House, Mumbai.
3	Taneja M.L. and Meier G. M, Economics of Development and Planning, S. Chand and Co, New Delhi.
4	Thirlwall A.P. Growth and Development: With Special Reference to Developing Economies, Palgrave Macmillan, New York.
5	Todoaro. M.P & Orient Longman Economic Development in the Third World, United Kingdom
6	Sustainable Development Reports



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Human Resource Management</b>		
Course Code:	<b>ECO C11</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the meaning, nature, scope and value of the contemporary approach to human resource management with reference to Economics.
- CO2. To describe an organisation of a human resource management functionary in an establishment, and to identify attributes of a successful personnel manager.
- CO3. To impart knowledge and techniques in human resource planning, Job-Analysis, and Job-Design.
- CO4. To explain various methods of recruitment, selection, induction and placement.
- CO5. To develop the importance and methods adopted for training and development of employees in two days environment in the workplace.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Human Resource Management</b>	<b>15 hrs</b>
	Human Resource Management: Concept, Nature, scope, objectives, importance, functions of Human Resource Management with reference to Economics; Organization of personnel department, Qualities of Personnel Manager, role of Personnel Manager, Status of Personnel Manager; Characteristics of a Human Resource Manager, HRD - Responsibility of managers.	
<b>Practicum</b>	Group Discussions on Human Resource Management as a Profession. Assignment on Qualities of Personnel Manager	
<b>Module II</b>	<b>Procurement of Human Resources</b>	<b>15 hrs</b>
	Human Resource Planning – Concept and objectives, importance, process, problems and guidelines; Job Design and Analysis: Concept, process, job description and job specification; Recruitment and Selection Meaning and process of recruitment, recruitment policy and organization, sources and techniques of recruitment, meaning and process of selection.	
<b>Practicum</b>	Assignment on recruitment and selection Group discussion on Techniques of Recruitment	
<b>Module III</b>	<b>Training and Job Evaluation</b>	<b>15 hrs</b>



	Training: Concept, objectives, importance; identifying training needs. Designing training programmes, methods of training, evaluating training effectiveness, retraining Concept, process and objectives of job evaluation, advantages and limitations, essentials of successful job evaluation, methods of job evaluation, Wage and Salary Administration. Objectives and principles, essentials of sound wage structure, factors affecting wages, methods of wage payment, and wage policy in India, executive compensation.	
<b>Practicum</b>	Project on training and job evaluation	
<b>Module IV</b>	<b>Performance Appraisal</b>	<b>15 hrs</b>
	Performance appraisal: Concept, objectives, uses, process, problems, essentials, methods and techniques, appraisal, interview, Transfers, promotions and separations. Purpose of job changes, concept and objectives of transfers. Types of transfer, transfer policy, concept and basis of promotion, promotion policy, demotion, types of separations.	
<b>Practicum</b>	Seminar on transfers and promotions Group discussion on Performance appraisal	

<b>References</b>	
1	Koontz, Weirich & Aryasri, (2004) <b>Principles of Management</b> , Tata McGraw-Hill, New Delhi,
2	Tripathi & Reddy, (2008) <b>Principles of Management</b> , Tata McGraw-Hill, New Delhi, Laurie
3	Meenakshi Gupta, (2009) <b>Principles of Management</b> , PHI Learning, New Delhi,
4	Gupta (2016), <b>Human resource Management</b> . S Chand Publisher. New Delhi
5	Aswathappa K. (2020) <b>Human resource Management</b> , Tata Mc Graw Hill Publishing Co. Ltd.
6	Prasad L. M, (2017) <b>Organisational Behaviour</b> , S. Chand Publishers, New Delhi.



Government of Karnataka

Model Curriculum

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Banking and Finance</b>		
Course Code:	<b>ECO C12</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian banking and the role of banks in monetary policy.
- CO2. Analyze the functioning of banks and different types of accounts and other services offered by banks.
- CO3. Evaluate recent developments in the Indian banking sector, including digital banking, payment banks, and non-performing assets.
- CO4. Describe the overview of the Indian financial system, including financial markets, financial instruments, and financial regulation.
- CO5. Analyze the challenges faced by Indian banks and the implications of banking reforms for the Indian economy.
- CO6. Develop critical thinking and analytical skills in evaluating various financial products and services banks and capital markets offer.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to banking: India</b>	<b>15</b>
	Indian Banks: Evolution, structure, functions, types and features- Public sector, private sector, foreign, Cooperative, RRB, Small finance banks, payment banks; Role and importance of banks in the Indian economy; Credit creation and financial intermediation; Central Bank and banking regulation; Regulatory and supervisory powers; Monetary policy and banking channel of credit control; Policy rates and banking; repo, reverse repo, MCLR, Bank rate, CRR, SLR, MSF; Issues in banking sector; NPA crisis; impact of global events on Indian banks.	
<b>Practicum</b>	Compare and contrast the different types of banks, highlighting their strengths and weaknesses- Presentation. Conduct a class discussion and compare and contrast the different scenarios on various loans, highlighting the risks involved and the measures taken by banks to manage these risks.	
<b>Module II</b>	<b>Banking services</b>	<b>15</b>

	Banking services: Bank deposits; Types and features of bank accounts; account opening and importance of KYC; Bank loans; types, features, documents required; eligibility, interest rates, maturity, loan default and consequences; Other services: Locker facility, payment and remittance services and channels; currency exchange; debit cards, credit cards, pre-paid cards; ATMs; internet and mobile banking; Modern banking products: Insurance on deposits and loans, Investment services in capital market- stocks, bonds and mutual funds; advisory services; retirement products.	
<b>Practicum</b>	Group discussion on bank accounts and loan products and making recommendation to different classes Comparison of banking services by visiting bank branches	
<b>Module III</b>	<b>Modern Banking</b>	<b>15</b>
	Modern banking facilities; Digital banking; Digital Wallets; Digital account opening; Biometrics; contact less payment system; instant payments; personal finance management tools; Use of artificial intelligence and machine learning in banks; Cyber security in banking; Credit scoring; Direct lending; Corporate banking; Investment Banking	
<b>Practicum:</b>	Survey bank customers to understand their usage and satisfaction levels with digital banking services. Analyze the adoption rates of digital banking services across different age groups and demographic segments	
<b>Module IV</b>	<b>Financial Market</b>	<b>15</b>
	Introduction to Indian financial markets; Equity markets and stock exchanges; Debt markets and bond markets; Currency markets and forex trading; Commodity markets and trading; Derivatives markets; Mutual funds; Insurance products Investing in capital market products- access, channels; risk in capital market investments; Role of SEBI, Fintech and innovation in capital markets;	
<b>Practicum</b>	Debate: Investing in capital market products. Assignment on Indian financial markets	

<b>References</b>	
1	Khan, M. Y. (2019). Indian Financial System (11th ed.). McGraw Hill Education (India) Private Limited.
2	RBI (2022) report on the trend and Progress of Banking in India
3	Pathak, B. V. (2018). Indian financial system. Pearson Education
4	Principles and Practices of Banking (2023), Indian Institute of Banking & Finance (IIBF), MacMillian
5	Shekhar, K. C. & Shekhar, L. (2013). Banking Theory and Practice, 21st Edition
6	Taxman's Digital Banking, Indian Institute of Banking & Finance (IIBF), Bharati Law House
7	Reserve Bank of India. (2017). Basic Financial Literacy Guide.

	<a href="https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx">https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx</a>
8	Securities and Exchange Board of India. (2021). Handbook of Statistics on Indian Securities Market. <a href="https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html">https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html</a>
9	Financial Education Handbook (2021) National Centre for Financial Education (NCFE) <a href="https://www.ncfe.org.in/resources/downloads">https://www.ncfe.org.in/resources/downloads</a>
10	Investor Education material by National Stock Exchange ( <a href="https://www.nseindia.com/invest/how-to-invest-in-capital-market">https://www.nseindia.com/invest/how-to-invest-in-capital-market</a> )



Government of Karnataka

**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of GST</b>		
Course Code:	<b>ECO E1A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the indirect tax structure in India and challenges
- CO2. Develop an informed view on the rationale of choosing Goods and Services Tax.
- CO3. Understand the GST laws, tax slabs, GST council and the framework of implementation
- CO4. Demonstrate ability to explain time of supply, place of supply and value of supply
- CO5. Analyze the concept of input tax credit and valuation of supply with examples
- CO6. Explain the GST registration process and GST filing procedure

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Indirect Taxes and GST</b>	<b>15</b>
	Indirect taxation before GST- Introduction to Indirect Taxes: Meaning and Features, Types of Indirect Taxes in India: Excise Duty, VAT, Service Tax, etc., VAT types and methods, Drawbacks of the existing Indirect Tax System; Introduction to Goods and Services Tax, Rationale and Key Features for GST, Experience from uniform tax structure in other countries, Advantages and disadvantages of GST framework	
<b>Practicum:</b>	Discussions on the limitation of tax structure before introduction of GST. Assignments on GST tax collection since introduction at state-level Explain the differences between the old tax system and GST, and how the GST system has impacted the economy of India.	
<b>Module II</b>	<b>Fundamentals of GST</b>	<b>15</b>
	Structure of GST in India- Central GST, State GST, UTGST; Integrated GST, Subsuming of Taxes, GST Rate Structure in India; Levy and Collection of GST, Discussion on definition of goods, service, supply: Supply under GST and types of supply: taxable, exempt, zero-rated, and non-taxable, Time of supply, place of supply and valuation of supply: transaction value, open market value, and other methods, Input tax credit with illustration.	
<b>Practicum:</b>	Identify the different types of supply and the valuation methods used under GST for a specific product. Assignment on computing the value of supply or input tax credit for a given scenario and explain how the time and place of supply affect the tax liabilities under GST	

<b>Module III</b>	<b>GST Compliance</b>	<b>15</b>
	GST framework- GST Registration: eligibility, procedure, and threshold limits, exemptions, GST Returns: types, due dates, and penalties, GST Payment; GST Audit; GST Refund: eligibility, procedure, and time limits, GST Council- Structure, objectives, functions, decisions, GST Network; GST & Indian Economy- Compensation to states- Trends of GST collection in India- national level and state level- Challenges and compliance, impact of GST on Economic growth.	
<b>Practicum</b>	Demonstrate GST registration process for different types of business or GST returns filing procedure Assignment of trends and progress in GST collection in India	

<b>References</b>	
1	Mehrotra, H.C. & Agarwal V. P, (2022), Goods and Services Tax, Shaitya Bhawan Publications
2	Balachandran, V. (2023), Textbook of GST & Customs Law, Sultan Chand & Sons
3	Datey V. (2023). Taxmann's GST Ready Reckoner (2020), Taxmann Publications Pvt. Ltd.
4	Singhania, V.K; Students Guide to GST & Customers Law, Taxmann Publication (P) Ltd
5	Agrawal, R. K. (2023). Bharat's Handbook on G.S.T. (Goods & Service Tax) for May 2023 Exam. Mumbai, India: Bharati Law House.
6	Ahuja, G., & Gupta, R. (2019). Systematic Approach to Income Tax. New Delhi, India: Wolters Kluwer India Pvt Ltd.
7	Central GST Act (2017), Central Board of indirect Taxes and Customs
8	Integrated GST Act (2017), Central Board of indirect taxes and Customs
9	Union Territory GST Act (2017), Central Board of indirect taxes and Customs
10	GST (Compensation to States Act), 2017



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Insurance</b>		
Course Code:	<b>ECO E1B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

<p><b>Course Outcomes (COs):</b> After the successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• CO1. Gain knowledge on economics of insurance</li> <li>• CO2 Understand the Insurance Planning</li> <li>• CO3. Understand the essential and fundamentals of Life and Health Insurance</li> </ul>		
<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hrs</b>
<b>Module I</b>	<b>Introduction to Economics of Insurance</b>	<b>15</b>
	Definition of insurance, Scope of economic of insurance, Importance of insurance, Brief history of insurance, Perils and risks in insurance, Classification of risks hazards; How insurance works, Classes of insurance and assumptions, Risk pooling and risk transfer in insurance, Social vs. private insurance, Life vs. non-life insurance	
<b>Practicum:</b>	Identify how insurance works and analyse risk pooling and risk transfer in insurance Assignment on importance of insurance and risks in insurance	
<b>Module II</b>	<b>Insurance Planning</b>	<b>15</b>
	Types of Insurance Planning- Wealth accumulation plan lifecycle planning, Planning for wealth accumulation, Tax advantage and tax non-advantage; Retirement Planning - Essential of individual retirement planning, Investing pension plan, basic principles of pension plans, Pension plans in India; General Insurance Structure - General Insurance, concept of General Insurance, Types of General Insurance, Marine Insurance, Motors Insurance, Agricultural Insurance, Fire Insurance, Personal Accident Insurance.	
<b>Practicum:</b>	Compare and contrast the different types of Insurance Planning, highlighting their strengths and weaknesses. Assignment on types of general Insurance	
<b>Module III</b>	<b>Personal insurance / Health Insurance</b>	<b>15</b>
	Essential of Life and Health Insurance- Fundamentals of Life and Health Insurance, functions of Life and Health Insurance, Health Insurance and Economic Development, Insurance and Farmer Security; Insurance Documentation - Health Insurance products, Health Insurance underwriting, Health Insurance claims ; Insurance Legislation - The insurance act, 1938- Registration- Accounts and	

	Returns, Investments, Limitation on expense of Management, Regulation of Insurance, Insurance regulation in India, role and need of regulation, history of insurance regulation in India, Insurance Reforms Development Authority (IRDA), performance of IRDA, Indian Insurance in global platform, future potential in Indian Insurance Business.	
<b>Practicum</b>	Conduct a survey to know the knowledge about life and health insurance in the neighborhood Assignment on performance of IRDA	

References	
1	Chambers, R. (1983): Rural Development: Putting the Last First, Longman, Harlow.
2	Dandekar, V.M. and N. Rath (1971): Poverty in India, GIPE, Pune
3	Dantwala, M. L. (1973): Poverty in India: Then and Now, 1870-1970, Macmillan, Bombay.
4	Gupta. K .R. (Ed) (2003): Rural Development in India, Atlantic Publishers and Distributors, New Delhi.
5	Jain, Gopal Lal (1997): Rural Development, Mangal Deep Publications, Jaipur,
6	Singh, Katar (1986): Rural Development: Principles, Polices and Management, Sage Publications, New Delhi, (Second Edition).
7	Karalay, G. N. (2005): Integrated Approach to Rural Development: Polices, Programmes and Strategies, Concept Publishing Company, New Delhi.
8	Maheshwari, S. R. (1985): Rural Development in India, Sage, Publications New Delhi
9	Satya Sundaram, I. (1997): Rural Development, Himalaya Publishing House, Delhi.
10	Mehta, Shiv R. (1984): Rural Development Policies and Programmes, Sage Publications, New Delhi.
11	Tyagi, B. P. (1998): Agricultural Economics and Rural Development, Jai Prakash Math and Co., Meerut





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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Rural Economics</b>		
Course Code:	<b>ECO E1C</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the meaning, concepts, objectives, nature, feature and scope of Rural Economics
- CO2. Know the various indicators and their Measurement of Rural development.
- CO3. Understand the policies and strategies of rural development.
- CO4. Understand the rural Natural Resources, Rural income and Rural poverty and indebtedness

<b>Modules</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Rural Economy</b>	<b>15</b>
	Rural Economics- Definition, Meaning, Objectives, Nature and Scope; Need, Causes and consequences of the Rural Economy; Pattern, Characteristics and Importance of Rural Economy	
<b>Practicum</b>	Assignment on Characteristics and importance of Rural Economy Survey to know the characteristics of rural economy in the neighborhood	
<b>Module II</b>	<b>Measurement, Policies and Strategies of Rural Development</b>	<b>15</b>
	Introduction to measurement of Rural Development – Objectives of measurement of rural development Indicators of Measurement of Rural development: Poverty, GNP per capita, distribution of Income, Per capita rural expenditure, PQLI, Income inequality; Importance and Need for Rural Development Policies - Freedom, Control and Public Policy - Goals of Rural Development Policy - Hierarchy of Policy Goals - Rural Development Policies. Strategies of Rural Development: Growth Welfare, Responsive Oriented and Integrated or Holistic Strategy - Liberalization and Rural Development	
<b>Practicum</b>	Undertake evaluation study on rural development programmes and prepare an assignment. Field visit to nearby village and study the employment opportunities and present situation	
<b>Module III</b>	<b>Rural Resources Rural Income, Poverty and Indebtedness</b>	<b>15</b>
	Natural Resources: Land, Water, Mineral and Forest Resources. Utilization and Potential: Capital and Human Resources - Levels of Technology; Rural Income: Sources of Household Income - Contributions of Agriculture and Allied Activities to National Income - Animal Husbandry - Income Differences between Rural and Urban Sectors - Problems of Rising Rural Incomes. Rural Poverty: Causes and Consequences - Rural Credit:	

	Magnitude of Rural Credit - Multi-Agency Approach to Rural Credit. Rural Indebtedness: Extent of Rural Indebtedness - Nature of Indebtedness - Causes of Rural Indebtedness - Effects of Indebtedness – Government Measures	
<b>Practicum</b>	Debate on Problems of Rising Rural Income Assignment on Causes and consequences of Rural Poverty	

<b>References</b>	
1	Agarwal A N and Singh S P, The Economics of Under Development, OUP, New Delhi.
2	Dalip S Thakur, Poverty, Inequality and Unemployment in Rural India, B R Pub., Corporation, New Delhi.
3	Ekans Richard S and K S Parikh, Planning and Growth: Multi-sectoral, Inter-temporal Models Applied to India, The MIT Press, Massachusetts.
4	Higgins Benjamin, Economic Development: Principles, Problems and Policies, Central Book Depot, Allahabad.
5	Jain Gopal Lal, Rural Development, Mangal Deep Publications, Jaipur
6	Katar Singh, Rural Development: Principles, Policies and Management, Sage Publications, New Delhi.
7	Parthasarathy G – Economic Reforms and Rural Development
8	Satya Sundaram I, Rural Development, Himalaya Publishing House, New Delhi.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Marketing</b>		
Course Code:	<b>ECO E1D</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. To understand the basics concepts of marketing and asses the marketing environment.
- CO2. Analyze the issues in rural markets.
- CO3. To study rural consumers behaviors.
- CO4. Outline the recent development in the field of marketing.

<b>Modules</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction of Marketing</b>	<b>15</b>
	Marketing: Definition, Meaning, Nature & Scope, Objectives, Importance, Marketing & Selling, Concept and Importance of Market Segmentation, Role of Marketing in Economic Development, Modern Marketing.	
<b>Practicum</b>	Seminar on the Role of Marketing in Economic Development Assignment on Modern Marketing	
<b>Module II</b>	<b>Consumer Behavior and Rural Marketing</b>	<b>15</b>
	Consumer Behavior: Nature, Importance, buying Decision, Factors influencing consumer buying behaviors. Rural Consumers Behavior: Nature, importance, Characteristics, Influencing Factors. Rural Marketing: Meaning, Definition, Nature & Scope, Features, Importance, Types. Problems and Remedies of Rural Market: Co-Operative Marketing Societies, Importance of Regulated Market	
<b>Practicum</b>	Survey consumers to Know the factors influencing their buying Behavior. Debate on best remedies to solve the problem of rural market.	
<b>Module III</b>	<b>E-Marketing and Service Marketing</b>	<b>15</b>
	E-Marketing: Meaning, Concept, Advantages & Disadvantages, Challenges. Types – Digital, Mobile Marketing, Online, social media - Meaning, Concept, Benefits, Importance, Challenges, Advantages & Disadvantages Service Marketing: Meaning, Concept, and Difference between the marketing of goods Vs Service Marketing, Importance, Problems.	
<b>Practicum</b>	Analyse the adoption of E-Marketing across different types of demographic segments. Debate on Advantages & Disadvantages of e -marketing	

<b>References</b>	
1	Philip Kotler (2015), Principles of Marketing. 13th edition. Pearson Education.
2	Saxena Rajan, (2017) Marketing Management, Tata McGraw-Hill Publishing Company Ltd., New Delhi. Fifth Edition.
3	Kumar Arun & Meenakshi N (2016), Marketing Management, Vikas Publishing House Pvt. Ltd., New Delhi. Third Edition
4	Panda Tapan (2008), Marketing Management, Excel books, New Delhi, Second Edition.
5	Chhabra, T.N., and S. K. Grover. Marketing Management. Fourth Edition.
6	Marketing Management- A South Asian Perspective-15e – Pearson, Philip Kotler, Kevin Keller,
7	Abraham Koshy, Mithileshwar Jha 7 Principles of Marketing-13e Pearson- Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasanul
8	Haque Marketing Management: Indian Context-Global Perspective, Ramaswamy and Namakumari, sixth edition, SAGE Publication
9	Valarie A Zeithmal & Mary Jo Bitner, Dwayne D. Gremler and Ajay Pandit, 7/e, McGH, (2018) Service Marketing, Integrating Customer Focus Across the Firm.
10	Valarie A Zeithmal & Mary Jo Bitner, 5/e, (2011) e-Marketing-TMH.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Entrepreneurial Economics</b>		
Course Code:	<b>ECO V1A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1: Acquire the operational procedures knowledge of entrepreneurship
- CO2. To know how to Start your own business as a young Entrepreneur
- CO3. Enabling the students to find various procedures of operations of the business.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module I</b>	<b>Entrepreneurship and Launching Business</b>	<b>15</b>
	<p>Entrepreneur and Entrepreneurship – Issues of considering for Entrepreneurship, identifying business opportunity and choosing right business, Plan a new entrepreneurship- create a business plan- contents of Business plan- marketing plan-operational plan- financial plan-risk analysis and risk management plan.</p> <p>Choose a business structure, Setting Business Entity &amp; incorporation of the company, Formulation of Memorandum of Association (MOA), Formulate Article of Association (AOA), approving stamp and sign of Business Entity. Registering for e-filing, Applying for Director Identification Number (DIN), Digital Signature Certificate (DSC), and Permanent Account Number (PAN).</p>	
<b>Practicum</b>	<p>Identify career opportunities in business and create a Business Plan</p> <p>Demonstration on Registering for e-filing</p> <p>Assignment on Formulation of Memorandum of Association (MOA)</p>	
<b>Module II</b>	<b>Procedure for Start-up Business</b>	<b>15</b>
	<p>Operational Procedures- Get Government of India, State Government (Karnataka) and Local Government tax IDs, -Apply for all concerned licenses and permits, - Open a business bank current account, - Apply for Business Insurance, - Appraisal of Technical Feasibilities, Economic and Financial viability - Bottom line.</p>	
<b>Practicum</b>	<p>Identify the and write a small report on procedure to open a business bank current account and applying for business Insurance.</p>	

<b>Experiential Learning/ Practicum</b>	<b>Visit a Startup/MSME and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>
<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the Startup/Micro Enterprise Visited</li> <li>2. Certificate from the MSME/Startup Stating the students visit and learning about the entrepreneurship and enterprise</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the MSME/Startup</li> <li>5. Lessons Learnt about Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc....,</li> </ol>	

<b>References</b>	
1	Donald F Kuratko (2014), “Entrepreneurship – Theory, Process and Practice”, 9th Edition, Cengage Learning.
2	Khanka. S.S ( 2013) “Entrepreneurial Development” S.Chand & Co. Ltd., RamNagar, New Delhi.
3	Kuratko and Rao, Entrepreneurship: A South Asian Perspective; Ferrell, Fraedrich, Farrell, Business Ethics, Cengage Learning
4	Singh, Nagendra P. Emerging Trends in Entrepreneurship Development. New Delhi: ASEED.
5	Marc J Dollinger, Entrepreneurship – Strategies and Resources, Pearson Education
6	Venkateshwara Rao and Udai Pareek, (Eds) Developing Entrepreneurship-A Handbook
7	Donald F Kuratko (2014), “Entrepreneurship – Theory, Process and Practice”, 9th Edition, Cengage Learning.
9	<a href="https://www.sba.gov/business-guide/launch-your-business/open-business-bank-account">https://www.sba.gov/business-guide/launch-your-business/open-business-bank-account</a>
10	<a href="https://www.businessnewsdaily.com/4686-how-to-start-a-business.html">https://www.businessnewsdaily.com/4686-how-to-start-a-business.html</a>
11	<a href="https://www.forbes.com/advisor/in/business/how-to-start-a-business/">https://www.forbes.com/advisor/in/business/how-to-start-a-business/</a>
12	<a href="https://services.gst.gov.in/services/">https://services.gst.gov.in/services/</a>
13	<a href="https://www.jotform.com/pdf-templates/proposal">https://www.jotform.com/pdf-templates/proposal</a>
14	<a href="https://www.visme.co/templates/proposals/">https://www.visme.co/templates/proposals/</a>



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Digital Economics</b>		
Course Code:	<b>ECO V1B</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course Objectives:** After the completion of the course, the students will be able to understand the structures of the digital economy, how the community and firms interact in digital markets and how digital markets should be designed and regulated.

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. To be able to apply the concepts of business models to digital economy and understand distinguishing features of the digital economy
- CO2. To link the specific distinguishing characteristics of digital economy to market structures and market outcomes
- CO3. To understand implications of business models and behaviors in the digital economy
- CO4. To analyze the structural incentives of digital economy.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module I</b>	<b>Features of the Digital Economy</b>	<b>15</b>
	Introduction to the Digital Economy – Digitization of the Economy, The Digital Economy Ecosystem; Multi-sided Platforms, Two-sided Markets, Network Effects and Positive Feedbacks, Lock-in and Switching Costs, Formation of Monopolies in Digital Economy, The “Long Tail”, Importance of Data – Prediction Vs. Causality, Privacy; Search and Matching – Low Search Costs and Prices, Search Engines, Recommendations and Matching, Ethical Challenges in the digital economy – Challenges for Society, Challenges for ethics; Recent Legal Developments towards digital economy.	
<b>Practicum</b>	Group Discussion on the Digital Economy Ecosystem Assignment on Importance of Data – Prediction Vs. Causality.	
<b>Module II</b>	<b>Digital Markets</b>	<b>15</b>

	Main Types of Digital Economy Market Players – Specific Features, Behaviour, Goals Stakeholders and relationships in digital markets, Competition, Cooperation and Coopetition; Digital Innovations, Main types of Digital Economy Business Models, The layered internet model, Strategic Positioning – Business Strategies of Different types of Digital Economy Market Players; Digital Economy and Traditional Companies – Digital Technologies as a risk factor for traditional Companies, Business Models of Traditional Companies in Digital Economy, Coexistence Models of Digital and Traditional Companies; Individual Markets: Media – Copyrights and Streaming, News and Social Media; Advertising, E-commerce – Customization, Auctions, Payment Systems; The sharing/gig economy – Ride-hailing, Labour Markets, Lodging.	
<b>Practicum</b>	Seminar on e-commerce sites Debate on the sharing/gig economy	
<b>Experiential Learning/ Practicum</b>	<b>Conduct a Survey using Interview Schedule on Perception of the consumers who are using digital payments</b>	<b>30</b>
<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Brief Profile on Digital Payments</li> <li>2. Different Modes of Digital Payments</li> <li>3. Collecting the data from the 50 respondents who use Digital Payments Using the pre designed interview schedule</li> <li>4. Analysis of the data using simple statistical tools</li> <li>5. Interview Schedule must consist of the following <ol style="list-style-type: none"> <li>i. Name, Occupation, income and Expenditure</li> <li>ii. Socio-Economic Background of the Consumers</li> <li>iii. From when they are using Digital Payments</li> <li>iv. Products/ Services for which they are using Digital Payments</li> <li>v. Benefits of Digital Payments</li> <li>vi. Difficulties faced by Digital Payments</li> <li>vii. Suggestions to improve</li> </ol> </li> </ol>	

<b>References</b>	
1	Overby Harald, Jan. A. Audestad (2018), <i>Digital Economics: How Information and Communication Technology is Shaping Markets, Businesses and Innovation</i> , Create Space Independent, Scotts Valley, CA USA
2	Overby Harald, Jan. A. Audestad (2021), <i>Introduction to Digital Economics – Foundations, Business Models and Case Studies</i> , Springer Nature, Switzerland
3	Peitz M & Waldfogel J. (2012), <i>The Oxford Handbook of the Digital Economy</i> , Oxford University Press
4	Kahin. B & Brynjolfsson. E (2000), <i>Understanding the Digital Economy: Data, Tools and Research</i> , Cambridge, Mass: The MIT Press





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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Dairy Farming</b>		
Course Code:	<b>ECO V1C</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Know the animal husbandry and significance, employment opportunities in dairy farming
- CO2. Acquire the knowledge about dairy farm management.
- CO 3. Understand the facilities of dairy farming.
- CO4. Start the self-dairy farm business.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module I</b>	<b>Introduction</b>	15
	Animal husbandry, livestock in India, scope and prosperity, dairy development in India, Dairy facilities-selection of site, housing system, classification of dairy plants, layouts and design equipment and utilization, cost aspects of dairy farming, records to be maintained in a dairy farm, finance to Dairy farming.	
<b>Practicum</b>	Visit dairy farm- Survey on Dairy facilities Survey on cost and revenue aspect of dairy farming.	
<b>Module II</b>	<b>Management of a Dairy Farm</b>	15
	Operation flood in India- Definition of Milk and Nutritive value of milk, Classification of dairy, animals-breeds and control, breeding management, Pest, disease and control, care of new born calf, major responsibilities of a dairy former, cooling, cleaning and sanitization of dairy farm, basic principles of feed, importance of Feed ingredients , feed formulation and feed mixing. Milk product and bio-products, procurement of marketing of milk, clean milk production and handling-processing and testing quality Control of milk, storage and distribution of processed milk. Government policies, scheme for dairy business.	
<b>Practicum</b>	Understand the animal breeds and management, diseases and its control, cleaning and sanitization Basic principles of feed and marketing.	

<b>Experiential Learning/ Practicum</b>	<b>Visit a milk federation/dairy co-operative society/ Milk Union</b>	<b>30</b>
<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the milk federation/dairy co-operative society/ Milk Union Visited</li> <li>2. Certificate from the milk federation/dairy co-operative society/ Milk Union Stating the students visit and learning about the Dairy Management</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the milk federation/dairy co-operative society/ Milk Union Visited</li> <li>5. Lessons Learnt about Managerial Functions, Operational Functions – Reception of the milk, Milk Trading, Testing of milk, dispatch of milk, Payments, Accounting, Cleanliness, Standardization of milk and other functions, dairy Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc....,</li> </ol>	

<b>References</b>	
1	Banerjee G. C. (2010) -Textbook of Animal Husbandry, Oxford Publication, IBH Publishing Co. Pvt Ltd, New Delhi
2	Muller CJC, The Dairy Farming Handbook, Directorate Animal Science Research and Technology Development Services.
3	Dairy India 2007, 6 <sup>th</sup> Edition
4	Principles and Practices of Dairy Farm – Jagadish Prasad.
5	Economics of Milk Production – Bharati Pratima Acharya Publishers.
6	Saras Applied Zoology- Fifth Edition 2015, SaraS Publication, Tamilnadu.
7	Dilip Dutt, Chairman, National Dairy Development Board- Good Dairy Husbandry Practices.
8	Fao Animal Production And Health- Guide To Good Dairy Farming Practice, Published by food and agriculture organization of the united nations and international dairy federation, Rome, 2011
9	Dairying- 2019, <a href="http://www.cstaricalcutta.gov.in">www.cstaricalcutta.gov.in</a>

# 6<sup>th</sup> Semester



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>International Economics</b>		
Course Code:	<b>ECO C13</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the international trade theories and their application in international trade
- CO2. Explain the concept of terms of trade and demonstrate the effect of trade barriers; and display the ability to analyse the stages of economic integration
- CO3. Understand the concept of BoP and assess the BoP position and examine the changes in forex rate
- CO4. Analyse the role of International trade and financial institutions
- CO5. Demonstrate good inter-personal and communication skills through class participation and contributing to critical discussion on trade issues

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>International Trade Theories</b>	<b>15</b>
	Meaning and Importance of International trade; Differences between Internal and International Trade; Trade Theories: Mercantilist view; Absolute cost and comparative cost advantage theories; Haberler's Opportunity cost theory; Hecksher-Ohlin theory; Leontief's paradox	
<b>Practicum</b>	Assignment on Ricardo's Comparative cost advantage and Leontief's paradox	
<b>Module II</b>	<b>Terms of Trade and Commercial Policy</b>	<b>17</b>
	Terms of trade- Concept and Types, Factors determining Terms of Trade; Commercial Policy: Free trade v/s Protection; Tariffs: Types and effects; Quotas; Anti-dumping; Economic Integration: Meaning and stages.	
<b>Practicum</b>	Debate: Free trade v/s Protection Mini project: Trace the evolution of India towards Economic Integration	
<b>Module III</b>	<b>Balance of Payment and Capital Flow</b>	<b>13</b>
	Balance of Payment: Concept, Components; Disequilibrium in Balance of Payment: Causes and Measures to correct disequilibrium; Foreign Exchange rate: Meaning and types; determination of Foreign exchange rate: Demand for and Supply of Forex; Purchasing Power Parity (PPP) theory; Capital Flow: Meaning and concept of Foreign Investment; Forms of FDI; Advantages and disadvantages of FDI.	
<b>Practicum</b>	Prepare India's Balance of Payment statement using recent Economic Survey Assignment on Forms of FDI	

<b>Module IV</b>	<b>International Finance and Trade Institutions</b>	<b>15</b>
	Bretton Woods Institutions: IMF and IBRD -IDA and IFC: Organization, Objectives, Functions and their role in developing countries; Evolution of WTO: GATT – principles and objectives; WTO: Organization, Objectives, Functions, Agreements and current issues; WTO and developing countries;	
<b>Practicum:</b>	Group Discussion: Effectiveness of IMF and IBRD in developing countries Seminar: Agreements of WTO or current issues of WTO	
<b>References</b>		
1	Sodersten. B. (1993): International Economics, MacMillan, 3 Edition, London,	
2	Salvatore, D. (2016): International Economics, 12 Edition, Wiley Publication	
3	Vaish, M. C. and Sudama Singh (1980): International Economics, 3 Edition, Oxford and IBH Publication, New Delhi.	
4	Carbaugh, R. J. (1999): International Economics, International Thompson Publishing, New York	
5	Dana, M. S. (2000): International Economics: Study Guide and work Book, 5. Edition, Routledge Publishers, London.	
6	Kenen, P. B. (1994). The International Economy, Cambridge University Press, London.	
7	Krugman, P.R. and M. Obstfeld (1994): International Economics: Theory and Policy Addison-Wesley Publications.	
8	Jackson, JD. (1998) The World Trading System, Cambridge University Press, Mass. Cherunilam, International Economics, TMH, New Delhi.	
9	D M Mithani, International Economics, Himalaya, Mumbai.	
10	Jhingan M.L.(2016): International Economics, Vrinda Publications Pvt Ltd-Delhi	
11	Dwivedi D.N. (2013): International Economics Theory & Policy, Vikas Publishing House Pv.t Ltd.	
12	K.C. Rana & K.N. Verma (2017): International Economics; Vishal Publishing Co.	
13	Krishnamurthy H.R (2013) : Antararashtreeya Arthashastra ; (Kannada version), Sapna, Bengaluru	



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Public Finance</b>		
Course Code:	<b>ECO C14</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian Public Finance
- CO2. Enable the students to know the Source and nature of public revenue and expenditure
- CO3. Understand the Budget and different concept of deficits
- CO4. Know the Public debt and its management
- CO5. Understand the fiscal and monetary policy and their tools and importance
- CO7. To enable the students to know the Indian federal financing system and Financial Commissions.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Public Revenue</b>	<b>18</b>
	<b>Direct Tax Revenue</b> - Sources of Revenue-Tax and Non-Tax Revenue; Trends and Patterns of Tax Revenue in India; Direct and Indirect Taxes in India; Personal Income Tax Rates and Slabs; Corporate Tax- Tax Rate and Slabs; <b>Indirect Tax Revenue</b> - Indirect Taxes – Earlier Taxes-VAT and MODVAT; Goods and Services Tax (GST)- Objectives and Classification of GST, Tax Rates of GST; Trends and Patterns of GST; Impact of GST on Indian Economy; Tax Reform Commissions.	
<b>Practicum</b>	Collection and analysis of data on Direct tax Collection and analysis of GST from businesses	
<b>Module II</b>	<b>Public Expenditure</b>	<b>15</b>
	<b>Revenue Expenditure</b> - Classification of Public Expenditure in India; Revenue Account Expenditure- Trends and Patterns; Capital Account Expenditure-Trends and Patterns; Fiscal Responsibility and Budget Management (FRBM) Act; Impact of Public Expenditure on Indian Economy; Expenditure Reforms Commission (ERC) in India; <b>Union Budget and Its Analysis</b> - Meaning and Classification of Budgets; Zero-Based Budget; Composition of Union Budget; Union Budget Analysis (current one); Different Concept of Deficits- Revenue, Fiscal, Primary Deficits	
<b>Practicum</b>	Analysis of Union Budget (Current one) Group Discussion on Budget Deficits	

<b>Module III</b>	<b>Public Debt and Its Management</b>	<b>14</b>
	<b>Public Borrowings and Debt</b> - Meaning and Nature of Public Debt; Sources of Public Borrowings; Classification of Public Debt; Trends and Patterns of Central Government Debt; Main Characteristics of Indian Public Debt; Crowding out of Private Investment; Causes of Public Debt in India; <b>Burden of Public Debt and Management in India</b> - Meaning of Burden of Public Debt; Importance of Public Management; Principles of Public Debt Management; Repayment of Public Debt in India; Impact of Public Debt on Indian Economy; Finance Commissions in India	
<b>Practicum</b>	Assignment to write on Indian Public Debt and sources of repayment Group Discussion on Burden of Public Debt	
<b>Module IV</b>	<b>Fiscal and Monetary Policies and Federal Finance in India</b>	<b>13</b>
	<b>Fiscal and Monetary Policy India</b> - Meaning and Objectives of Fiscal Policy; Importance of Fiscal Policy; Tools of Fiscal Policy; Meaning and Objectives of Monetary Policy; Importance of Monetary Policy; Tools of Monetary Policy; <b>Indian Federal Finance</b> - Meaning and Importance- Stages of Growth; Allocation of Resources- Division of Functions and Resources; Principles of Federal Finance; Shortcomings of Federal Financing; Finance Commission and Their Recommendations.	
<b>Practicum</b>	Group Discussion about the Role of Fiscal and Monetary Policies in controlling inflation Assignment to write the State List, Union List and Concurrent list	

<b>References</b>	
1	Bhatia H L (2021): Public Finance, S. Chand and Co., New Delhi.
2	Lekhi R.K (2020): <i>Public Finance</i> , Kalyani Publishers, New Delhi.
3	Musgrave R.A and Musgrave P.A (2017): <i>Public Finance in Theory and Practice</i> , Mcgraw- Hill Kogakusha, Tokyo.
4	Om Prakash (2021): <i>Public Economics: Theory a practice</i> , Vishal Publishing Co. Ludhiana.
5	S.K. Singh (2019): <i>Public Economics: Theory and Practice</i> S. Chand and Co., New Delhi.
6	Tyagi, B.P (2018): <i>Public Finance</i> , Jai Prakash Nath and Company, Meerut, India.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economic Thoughts of Dr.B.R Ambedkar</b>		
Course Code:	<b>ECO C15</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. derive inspiration from the life and works of B R Ambedkar
- CO2. Appreciate the socio-economic scenario during Ambedkar’ period and compare it with present day
- CO3. Comprehend the contributions of Ambedkar on various economic aspects
- CO4. Assess the economic views of Ambedkar in the light of present-day socio-economic problems
- CO5. develop the traits of critical thinking and critiquing

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module 1</b>	<b>Ambedkar’s views on Economy, Society and Equity</b>	<b>15 Hrs</b>
	Socio- Economic-Political Context of India during Ambedkar’s period; Brief outline of Ambedkar’s life and career; Ambedkar’s views on: a) economy and society; b) role of state c) Socialism and State Socialism; d) Women Empowerment , e) Objectives of economy: growth & equity; Socio-economic inequality: Economics of Caste, discrimination and deprivation; reforms suggested there in by Dr Ambedkar: Constitutional Provisions; Hindu code Bill	
<b>Practicum</b>	Assignment: Socio-economic inequality and status of affirmative actions in India	
<b>Module 2</b>	<b>Thoughts of Ambedkar on Agriculture</b>	<b>15Hrs</b>
	Ambedkar’s views on: Agrarian Economy; Consolidation of land holdings and land revenue; Comparison with Ricardian view; Collective farming; views on land-ownership and land lessness; Nationalization of land and ceiling on land holdings; Surplus labour utilisation in agriculture and capital formation;	
<b>Practicum</b>	Mini Project: Using the Agriculture census data ( <a href="https://agcensus.dacnet.nic.in/">https://agcensus.dacnet.nic.in/</a> ), chart the average size of operational holdings (by group) for different social classes in your tehsils and district (for 2001-2 and 2015-16); compare with the corresponding figures of state and nation.	
<b>Module 3</b>	<b>Ambedkar on Industrialisation and Planning</b>	<b>15 Hrs</b>
	Ideas on Industrialisation; views on types of industries Labour: views on labour exploitation and labour reforms; Social security Planning: Measures to develop Irrigation and Power sector: River linking;	
<b>Practicum</b>	Debate 1): Small & cottage industries of rural areas v/s large scale industries in	



	urban areas Debate 2) Industrialize or perish v/s Industrialize and perish	
<b>Module 4</b>	<b>Ambedkar's contribution to Fiscal and Monetary Economics</b>	<b>15 Hrs</b>
	Fiscal Economics: study of sources of revenue; canons of expenditure Monetary Economics: Price stability and exchange rate stability; Currency reform	
<b>Practicum</b>	Seminar: Ambedkar's views on 'The Problem of Rupee'	

#### References (In order of importance of usage)

1	Heggade O D (1998) - Economic Thoughts of B R Ambedkar
2	Heggade O D – ಅಂಬೇಡ್ಕರ್ ರ ಆರ್ಥಿಕ ವಿಚಾರಧಾರೆ, Arjun Pub. House, Mysuru
3	Speeches and writing of Dr. B R Ambedkar, W R Mujawar (4 Volumes)
4	ಡಾ.ಬಾಬಾಸಾಹೇಬ ಅಂಬೇಡ್ಕರ್ ರ ಬರಹಗಳು ಮತ್ತು ಭಾಷಣಗಳು – Vol 1, Vol.2 Part 1& 2, Vol 3, Vol 6 Part 1& 2, Vol 10 Part 1, 2, & 3, Vol 12 part 2, Pub by Govt of Karnataka
5	Nagar and Nagar ( 2010), Economic Thoughts and Policy of Dr. B. R. Ambedkar
6	Permaiah, P.K and Sateesh Reddy (1994) – Dr Ambedkar's Economic Philosophy, Delta Pub, New Delhi
7	Dongre M K – Economic Thought of Dr B R Ambedkar
8	Ramaiah Reddy (ed) (1987)- Dr B R Ambedkar's Economic Philosophy
9	Sukhadeo Thorat(1998), Ambedkar's Role in Economic Planning and Water Policy, Shipra Publications, New Delhi.
10	Ambedkar B. R. (1936) Annihilation of Caste, Government of Maharashtra, Writings and Speeches of Dr B R Ambedkar, Volume 1, Mumbai. Also see <a href="https://www.brambedkar.in/annihilation-of-caste/">https://www.brambedkar.in/annihilation-of-caste/</a>
11	Ambedkar B. R. (1923) THE PROBLEM OF THE RUPEE: ITS ORIGIN AND ITS SOLUTION (HISTORY OF INDIAN CURRENCY & BANKING) <a href="http://dramedkar.co.in/wp-content/uploads/books/category1/13the-problem-of-the-rupee.pdf">http://dramedkar.co.in/wp-content/uploads/books/category1/13the-problem-of-the-rupee.pdf</a>
12	Vasant Moon (Compiled) (1989) DR. BABASAHEB AMBEDKAR WRITINGS AND SPEECHES VOL. 1Part V of <a href="https://www.mea.gov.in/Images/attach/amb/Volume_01.pdf">https://www.mea.gov.in/Images/attach/amb/Volume_01.pdf</a>



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Environmental Economics</b>		
Course Code:	<b>ECO C16</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand how economic methods can be applied to environmental issues facing society
- CO2. Examine the linkages between Environmental Degradation and Economic Development
- CO3. Develop an informed view regarding the potential of economics to help societies achieve their environmental goals
- CO4. Demonstrate good inter-personal and communication skills through writing an essay and contributing to critical discussion
- CO5. Analyze environmental problems and to assess environmental policies.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Environment and Ecology</b>	<b>15</b>
	Meaning, Nature and Scope of Economics of Environment; Linkages between Environment and the Economy; Environmental Kuznets curve; Environmental Stress; Population and Environment; Poverty and Environment; Meaning and elements of ecology; Biotic and Abiotic components; Food, Hydrological and Carbon Cycles; Material Balanced Principle (Entropy law); Meaning and strategies to achieve Sustainable Development; Rio Summit; Green Accounting Introduction to SDGs.	
<b>Practicum:</b>	Making charts relating to SDGs or Assignments on environment-economy linkages at the local level.	
<b>Module II</b>	<b>Natural Resources Scarcity and Conservation</b>	<b>15</b>
	Meaning and Characteristics of Renewable and Non-renewable resources; Non-Renewable Resources and the problem of depletion and problem of overuse ; Resource Scarcity and Economic Growth (Limits to Growth Model); Energy and Economic Development; Energy resources and their Pricing; Alternative energy sources; Conservation of Natural Resources- 3Rs – Reduce, Reuse and Recycling Measures	
<b>Practicum:</b>	Identifying local resources; Project on resource conservation (esp. water) at the College level; Discussion on Limits to Growth	

<b>Module III</b>	<b>Environmental Pollution</b>	<b>15</b>
	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	visiting the Pollution Control Board office and observing its functions	
<b>Module IV</b>	<b>Environmental Pollution and Regulation</b>	<b>15</b>
	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	Assignments on types of pollution in local areas; Seminars on climate change and its consequences; visiting the Pollution Control Board office and observing its functions	

<b>References</b>	
1	Bhattacharya, R.N (Ed) (2001), <i>Environmental Economics: An Indian Perspective</i> , Oxford University Press.
2	Karpagam M. (1993), <i>Environmental Economics</i> , Sterling Publishers, New Delhi.
3	Shankar, U, (2001), <i>Environmental Economics</i> , Oxford University Press, New Delhi.
4	Singh, Katar and Anil Shisodia (2007): <i>Environmental Economics: Theory and Applications</i> , Sage Publications, New Delhi
5	Mahajan V.S (2003): <i>Environmental Protection – Challenges &amp; Issues</i> , Deep & Deep Publishers New Delhi
6	Sengupta, R.P. (Ed.) (2001), <i>Ecology and economics: An Approach to Sustainable Development</i> , Oxford University Press, New Delhi.
7	Nick Hanley, Jason F, Shogren and Ben White (2005): <i>Environmental Economics in Theory and Practice</i> , Macmillan India Ltd.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Industrial Economics</b>		
Course Code:	<b>ECO E2A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand Industrial Economics in the Indian context.
- CO2. Critically examine and summarize the theories of industrial location.
- CO3. Describe the working of different industrial finance institutions.
- CO4. Identify the major issues involved in Indian industry and Government policies.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module – I</b>	<b>Framework of Industrial Economics</b>	<b>15</b>
	<b>Industrial Economics:</b> Meaning, Nature & Scope, Importance - Concepts: Plant, Firm and Industry; Organization of a Firm; Classification of Firms on the basis of Ownership (Public, Private, Joint and Cooperative Sectors), - Industrial Combinations, causes, Mergers & Acquisitions and Amalgamations; <b>Industrial Location:</b> Meaning, Determinants, Weber’s theory, Florence’s theory, Industrial location policy in India, Industrial Location trend in India.	
<b>Practicum</b>	Visit to nearest firm/organization and prepare the report	
<b>Module – II</b>	<b>Industrial Growth and Finance in India</b>	<b>15</b>
	<b>Industrial growth in India:</b> Review of recent trends in Indian industrial growth and structural transformation, Changing role of Public enterprises, efficiency, productivity and performance constraints - Performance and role of Micro, Small, Medium Enterprises (MSME), Role of MNC’s in India, The IT sector in India viewed in world context; <b>Industrial Finance :</b> Internal & External and other components of Funds, Role, Nature, Volume and types of Industrial Finance - Role of Commercial Banks, IDBI, SIDBI, IFCI, SFCs etc.	
<b>Practicum</b>	Discussion on sources of Industrial Finance.	

<b>Module – III</b>	<b>Issues in Indian Industry and Government Policies</b>	<b>15</b>
	<b>Major Issues in Indian Industry:</b> Industrial Backwardness, Problems of Regional Imbalance, Industrial Sickness: Industrial Disputes: Causes and Measures, Industrial Proliferation and Environmental Protection; <b>Government Policies for Industries :</b> Global Competition emerging trend, Government's recent policies - Industrial policy 1991 and subsequent changes, Technology and Foreign Collaboration Policy,	
<b>Practicum</b>	Seminar on Industrial disputes.	

<b>References</b>	
1	Barthwal R.R. (2022), <i>Industrial Economics: An Introductory Textbook</i> , 3 <sup>rd</sup> Edn, New Age International Publishers.
2	Bhalerao N & Desai SSM (2010), <i>Industrial Economy of India</i> , 5 <sup>th</sup> Edition, Himalaya Publishing House, Bombay.
3	Cherunilam, F. (1994), <i>Industrial Economics: Indian Perspective</i> , Himalaya Publishing House, Mumbai.
4	Hay, D. and D.J. Morris (1979), <i>Industrial Economics: Theory and Evidence</i> , Oxford University Press, New Delhi.
5	Singh, Sai A. and A. N. Sadhu (1988), <i>Industrial Economics</i> , Himalaya Publishing House, Bombay.
6	Sivayya, K.V. and Das, V.B.M. (2004), <i>Indian Industrial Economy</i> , S. Chand & Co., New Delhi.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Labour Economics</b>		
Course Code:	<b>ECO E2B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After successfully completing the course, the student will be able to:

CO1. Understand the basic concepts of Labour Economics.

CO2. analyze and tackle the labour issues effectively

CO3. Understand the theories of wages as well as wage policy analysis

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hrs</b>
<b>Module - I</b>	<b>Introduction Labour Economics</b>	<b>15</b>
	Concept and Definition - Nature, Scope and Importance - Labour as a Unique Factor of Production - Labour Economics as a Branch of Economics - Interdisciplinary Character of Labour Economics; Labour Market Concept of Labour Market and its Features - Difference between Labour Market and Commodity Market - Labour Market Imperfections and Factors Contributing to Imperfections - Determinants of the Supply and the Demand for Labour - Organized and Unorganized Labour.	
<b>Practicum</b>	Group Discussion on Labour as a Unique Factor of Production. Assignment on Labour Economics as a branch of economics Visit to Organized and Unorganized Labour Market	
<b>Module II</b>	<b>Employment and Wage</b>	<b>15</b>
	Concept of Employment and Full Employment - Need for Full Employment - Theories of Employment - Classical, Neo-Classical and Modern Approaches to Employment - Unemployment, Causes and Consequences - Technology and Employment - Information Technology Revolution and Employment; Wages Wage Concept and Definitions – Wage and Development – Theories of Wages, Classical, Marginal Productivity and Collective Bargaining Theory of Wage – Wage Differentials – Wage Policy, Objectives and Importance.	
<b>Practicum</b>	Presentation on Theories of Employment Undertake evaluation study on wage policies and prepare an assignment.	
<b>Module III</b>	<b>Labour Productivity and Labour Welfare</b>	<b>15</b>
	Concept of Labour Productivity - Measurement and Importance of Labour Productivity - Determinants - Causes for Low Labour Productivity and Measures to Increased Labour Productivity - Technology and Labour Productivity. State and	

	Labour: Need for State Intervention in Labour Matters - Methods of Intervention - Labour Social Security and Labour Welfare Measures; Labour Policy, Objectives and Importance - Emerging Perception on State Intervention.	
<b>Practicum</b>	Survey on the conditions of Labour in different sectors Debate on need for State Intervention in Labour Matters	

References	
1	Bhagoliwal T.N. <i>Economics of Labour and Industrial Relations</i> , Sahitya Bhavan, Agra.
2	McConnell C.R. and S.L. Brue <i>Contemporary Labour Economics</i> , McGraw Hill, New York.
3	Mittal and Sanjay Prakash Sharma. <i>Labour Economics</i> , RSBA, Jaipur.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Factor Pricing and Welfare Economics</b>		
Course Code:	<b>ECO E2C</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the concepts of Welfare Economics
- CO2. The students can be able to analyze and theories of welfare economics effectively.
- CO3. To understand the importance of the theories and models that can be used to improve the economic and social welfare of people

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Theories and Pricing of Factors of Production</b>	<b>15</b>
	Meaning and Significance of factor pricing - Functional (factor) and Personal incomes - Demand and Supply of Factors of Production in Perfect and Imperfect Competitive Markets. <b>Rent:</b> Ricardian Theory, Modern Theory, and Quasi Rent Theory; <b>Wages:</b> Subsistence Theory, Wage-Fund Theory, Residual Claimant Theory, Marginal Productivity Theory, and Modern Theory; <b>Interest:</b> Classical Theory - Loanable Funds Theory, Liquidity Preference Theory, and Hicks -Hansen Theory (IS-LM); <b>Profit:</b> Dynamic Theory, Innovation Theory, Risk-bearing Theory and Uncertainty bearing Theory; Factor pricing in perfectly competitive markets - Marginal productivity theory of factor pricing; Factor pricing in imperfectly competitive markets - Monopsony power: Trade Unions and wage determination - Bilateral monopoly; Prices of Fixed Factors: Rents and Quasi Rents - Non-Homogeneous Factors and Wage Differentials	
<b>Practicum</b>	Collecting information on labour supply to understand the reasons for its backward bending seminars about the above theories	
<b>Module II</b>	<b>General Equilibrium Theory</b>	<b>15</b>
	Interdependence in the Economy (Circular Flow) - Partial and General Equilibrium Analyses; Two-Sector Model: Equilibrium of Production and Equilibrium of Consumption - Simultaneous Equilibrium (Edgeworth box diagrams) – Walrasian General Equilibrium Analysis – Pareto Optimality and Market Equilibrium; Market failure – Meaning of Market Efficiency – Reasons for Market Failure - Externalities, Public goods, Property rights, Coase Theorem, Asymmetric information - Meaning - adverse selection, moral hazards, agency problems; Theory of second best.	
<b>Practicum</b>	Collecting information on market failures and to ascertain the reasons for it Describing the graphs used	



<b>Module III</b>	<b>Welfare Economics</b>	<b>15</b>
	Individual welfare and social welfare – Pigouvian Welfare Economics - Social welfare function – Kaldor-Hicks Compensation criteria - Collective Choice, Social Choice and Social Welfare - Arrow’s impossibility theorem - Samuelson's Utility Possibility Curve - Value Judgments and Welfare Economics – Amartya Sen’s Contributions to Welfare Economics; Government Intervention – Need for Public Policy - Economics Justification for Welfare Schemes.	
<b>Practicum</b>	Conducting surveys to understand the notion of welfare Preparing a list of government programmes and giving justification for it from the point of view of Economics	

<b>References</b>	
1	Ahuja H.L, (2007) <i>Advanced Economic Theory</i> , S. Chand and Company, New Delhi.
2	Ferguson C.E and Maurice S. Charles, (1978) <i>Economic Analysis - Theory and Applications</i> , Richard D. Irwin Inc. USA.
3	Sen A.K, (2017) <i>Collective Choice and Social Welfare</i> , Holden-Day, San Francisco.
4	Jhingan, M.L. (2016): <i>Microeconomics</i> , Vrinda Publications, New Delhi
5	Mankiw, N. Gregory (2020). <i>Principles of Economics</i> (Ninth ed.). Boston, MA.
6	Koutsoyianis, A (1979): <i>Modern Microeconomics</i> , London, Macmillan
7	Samuelson, Paul (2004): <i>Economics</i> , McGraw-Hill, New Delhi
8	Salvatore, Dominick (2008) <i>Microeconomics Theory and Applications</i> , Oxford University Press, New York



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economics of Non-Farm Sector</b>		
Course Code:	<b>ECO E2D</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the Meaning, Concepts, objectives, Nature and scope of Economics of Non-Farm Sector.
- CO2. To know the sustainable development of non-farm sector
- CO3. To understand the importance of non-farm sector in the Indian economy
- CO4. To study the Government programmes and policies for non-farm sector.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Non-Farm Sector</b>	<b>15</b>
	Meaning and Definition of Non-Farm Sector, Nature of Non-Farm Sector Economics, Importance of non-farm sector, Role of non-farm sector in the rural Economy, the demand for and supply of non-farm labour in the rural Economy. Need of sustainable development of non-farm sector in India,	
<b>Practicum</b>	Collecting the information on demand for and supply of nonfarm jobs Collecting information on how to develop and sustain non-farm sector Seminars and discussion	
<b>Module II</b>	<b>Non-Farm Sector and Employment</b>	<b>15</b>
	Types of unemployment in rural India, <b>Nature</b> of nonfarm Employment- Construction, Mining and quarrying, small businesses. Women and women employment in non-farm sector, Agro based Industries, and agro processing industries, Rural Markets, Rural MSMEs, women employment in households and cottage industry, Textile and handlooms, Rural Trade and Transportation. Rural Tourism-Swadesh Darshan.	
<b>Practicum</b>	Collecting the information on mining and quarrying workers condition Collecting information on rural trade and transportation Seminars and discussion	
<b>Module III</b>	<b>Government Schemes and Policies for Non-Farm Sector</b>	<b>15</b>
	Role of NGOs in non-farm sector, Government Schemes, MGNREGA, Skill India, Pradhan Mantri Kaushal Vikas Yojna, National Apprenticeship Promotion Scheme,	

	Aajeevika, Deen Dayal Upadhyay Gramin Kaushal Yojana, Pradhan Mantri MUDRA Yojana (PMMY), National Institute of Rural Development and Panchayati Raj (NIRDPR), Establishing cooperative societies.	
<b>Practicum</b>	Collecting the information on National Apprenticeship Scheme Collecting information on MUDRA Yojana Seminars and discussion	

<b>References</b>	
1	<b>Nayyar Rohini and Sharma N Alakh, (2005)</b> , Rural Transformation in India : The Role of Non-Farm Sector: Institute for Human Development
2	<b>Rao M Koteswars (2000)</b> . Rural Employment: The Non-Farm Sector. Deep and Deep publication New Delhi
3	<b>Chattopadhyay Apurba Kumar and Chakrabarti Saumya (2013)</b> Economics of Rural Non-Farm Sector: Certain Characteristics and Determinants Serial Publication New Delhi
4	<b>Fisher Thomas (1997)</b> ,Forgotten Sector: Non-farm employment and enterprises in rural India: Practical Action Publication
5	Jami.B.Kilangla and M Giribabu. (Eds) : 2020 <b>AGRICULTURE AND RURAL TRANSFORMATION: Issues and Challenges (With Special Reference to North-East India)</b> .Rawat Publication .Jaipur
6	<b>Government of India.2020-21</b> . Annual Report: Department of Agriculture, Cooperation and Farmers Welfare
7	<b>Antony Piyush, V. R.P Gayathri,. Mamgain; (2001)</b> “Social and Economic Security in India” (ed.), Institute for Human Development, New Delhi



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Micro Entrepreneurs Development</b>		
Course Code:	<b>ECO V2A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1. To know how to start own Micro Entrepreneur Unit.
- CO2. To enable the students to find out various procedure of operations of Micro Entrepreneurship.
- CO3. To enable the students to gain knowledge and skills needed to run micro enterprises successfully.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Micro Enterprises : Technical Feasibility</b>	<b>15</b>
	Management Evaluation – Micro Enterprises Promotion - Types of Enterprises and Management – Sole Proprietorship, Partnership, Limited Liability Partnership, Private Limited - Profile of the Management - Idea of Product – Product Line – Product Demand Estimation – Promotion and Competition Management. Technical Feasibility – Manufacturing Process – Digital Technology – AI in Manufacturing – Plant Location, Plant and Machinery Technical Feasibility, Raw-material Utilities and Human Resources, Contracts and Annual Maintenance Agreements (AMCs) – Project Monitoring and Implementation – Plant Optimization.	
<b>Practicum</b>	Assignment on Micro Entrepreneurs Development Survey to analyse Technical Feasibility in Micro Enterprises	
<b>Module II</b>	<b>Micro Enterprises: Financial and Economic Viability</b>	<b>15</b>
	Appraisal of Financial Feasibilities – Cost of the Project – Land and Building, Plant and Machinery, Furniture’s and Fixtures, Pre-Operative Expenses, Fixed and Working Capital – Means of Strategic Finance – Own Contribution and Venture Capital, Term Loans, Subsidy and Government Schemes, Other Sources, Economic Viability – Profit and Losses, Break Even and Bottom Line.	
<b>Practicum</b>	Identify the factors of economics viability in micro enterprises and write an assignment	
<b>Experiential Learning/ Practicum</b>	<b>Visit a Micro Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>
<b>Format of the</b>	1. Name and Address of the Micro Enterprise Visited	

<b>Report</b>	<ol style="list-style-type: none"> <li>2. Certificate from the Micro Enterprise Stating the students visit and learning about the Micro Enterprises : Technical Feasibility</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Micro Enterprise</li> <li>5. Lessons Learnt about Micro Enterprises: Technical Feasibility, Financial and Economic Viability, Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc....,</li> </ol>	
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<b>References</b>	
1	Bessant J and Tidd J (2011): Innovation and Entrepreneurship, 2nd Edition, John Wiley & Sons.
2	Desai, V (2021): Small Scale Industries and Entrepreneurship, Himalaya Publishing House, Mumbai.
3	Desai, V (2011) : Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, Mumbai.
4	Donald F K (2014): Entrepreneurship – Theory, Process and Practice, 9th Edition, Cengage learning.
5	Hirsch, R.D., Peter, M and Shepherd D (2006): Entrepreneurship, 6 <sup>th</sup> Edition, Tata McGraw-Hill, Mumbai.
6	Kanaka S S (2013): Entrepreneurial Development, S. Chand & Co. New Delhi.
7	Nagendra and Manjunath, V.S. (2010): Entrepreneurship and Management, Pearson.
8	Roy R (2011): Entrepreneurship, 2 <sup>nd</sup> Edition, Oxford University Press.
9	Stokes, D and Wilson, N. (2010): Small Business Management and Entrepreneurship, 6 <sup>th</sup> Edition, Cengage Learning.
10	Sundar, K (2011) : Entrepreneurial Development, Vijay Nicole Imprints Pvt. Ltd.



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**Model Curriculum**

Program Name	<b>BA in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Project Planning and Management</b>		
Course Code:	<b>ECO V2B</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1-formulate and present a practicable project idea
- CO2-prepare a realistic economic plan
- CO3-describe models and methods to lead, carry out, document and evaluate project
- CO4-describe an intended project in a complete project plan
- CO5-review and evaluate own and others' project plans critically.
- CO6-Understand the content for preparing a Project Report for new projects and differentiate between financial, technical analysis and business feasibility.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Project Planning and Management</b>	<b>15</b>
	Meaning, Definition, Nature & Scope, Types - Schedule planning, Resource planning, Budget planning, Procurement management, Quality planning, Communications planning. Key elements of a successful project planning, and Process of Project planning.	
<b>Practicum</b>	Assignments on project planning and management activities. Group discussion on project planning.	
<b>Module II</b>	<b>Project Management Implementation and Stakeholder Management and Project Controlling</b>	<b>15</b>
	<b>Project Management:</b> Meaning, definition, Objectives, Nature and Importance, Project Management Skills - Qualities of the best project manager, Project Management life Cycle; <b>Project Implementation:</b> Definition, Implementation Tools, and Process, Performance and quality control measurements. <b>Stakeholder Management:</b> Definition, Features, Importance, Risk Management; Definition, importance, techniques; Project Controlling System: Meaning, Pre-requisites, Process, Essentials, Methods, Project completion.	
<b>Practicum</b>	Discussion on the Skills of project management, Decision Making, Problem-Solving, and risk-management skills In small groups, try to identify the LARGEST project each of you has been involved with.	
<b>Experiential Learning/ Practicum</b>	<b>Visit an Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>
<b>Format of the Report</b>	1. Name and Address of the Enterprise Visited 2. Certificate from the Enterprise Stating the students visit and learning about the Project Planning and Management	

	3. Certificate from the concerned HOD & Concerned teacher 4. Brief Profile of the Enterprise 5. Lessons Learnt about Project Planning and Management Implementation, Stakeholder Management and Project Controlling Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc.....,	
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<b>References</b>	
1	Adrienne Watt (2014) Project Management – 2nd Edition, publisher, BC CAMPUS open access books liabrary.
2	<u>Davies A. Igberaese</u> (2023) .Introduction to Project Management ,Routledge Taylor &Francis Group
3	Harold Kerzner (2013), Project Management; A Systems Approach to Planning, Scheduling, and Controlling, WILEY INDIA
4	Joseph Heagney (2019) Fundamentals of Project Management, 5th Edition, Amacom Publication
5	Kalpesh Ashar (2022), Project Management Essentials; You Always Wanted To Know, Vibrant Publication
6	Project Management from Simple to Complex, open text book Publisher: University of Minnesota Libraries Publishing
7	Albert lester (2021) Project management, planning and control
8	Rory Burke (2009), Project Management Planning And Control Techniques, 4Th Edition, WILEY INDIA.



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## Model Curriculum

Program Name	<b>BA in Economics Internship</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Internship</b>		
Course Code:	<b>Skill Enhancement Course</b>	No. of Credits	<b>2</b>
Contact hours		Duration of SEA/Exam	<b>Practical</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>NA</b>

### INTRODUCTION:

Internship [Organizational work] is an integral part of the curriculum. Its objective is to equip students with job skills and communication abilities, enabling them to bridge the gap between theoretical knowledge and practical application. The internship program incorporates various interventions that offer students exposure to real-life job experiences and expectations, empowering them with insights into the workings of different industries.

The internship is strategically positioned during the 6<sup>th</sup> semester of the Bachelors of Arts in Economics program. This timing provides students with a strong foundation in economics, enabling them to apply their knowledge in real-world settings. Additionally, the program caters to the critical need for teaching skills in economics and administration, enhancing the academic qualifications of students. Overall, the internship program aims to prepare students for the job market, thereby bridging the gap between academia and the professional world.

### OBJECTIVES:

The objectives of conducting program are:

1. To boost students' employability by imparting soft skills that are essential in everyday life.
2. To enable students discover their professional strengths and weaknesses and align them with the changing economic environment.
3. To provide an opportunity for students to apply theoretical concepts and knowledge in real life situations at the work place.
4. To prepare students to understand organization culture and familiarize them with the organization needs.



5. To enable students to manage resources, meet deadlines, identify and undertake specific goal-oriented tasks.
6. To sharpen domain knowledge and provide core competency skills.

### **Internship Requirements & General Guidelines:**

#### **A. Nature of internship project work:**

1. Every Student is required to work in an organization (a firm, self- help groups/cooperatives/farms or any rural economy components) for at least two months as part of Internship.
2. The student shall identify an internship work place.
3. Maximum five students of the same department from a College/University shall work for Internship in the same organization.
4. Internship work may be to carry out Professional work.
5. The internship shall be paid or unpaid.
6. While, working from the organizational premises is encouraged, in certain cases, virtual internship shall be considered.

#### **B. Duration of Internship:**

1. The Internship works shall be for a period of TWO months [Sixty Days].
2. The internship commence from the first day of the sixth semester.
3. Student is expected to carry out his/her Internship works during the first FIVE days of the week, and shall report to the department on a weekly basis.
4. The duration of the work shall be specified by the organization at the beginning of the program and the number of hours spent shall be in line with the prevailing rules.

#### **C. Guide and Mentor:**

1. An internal mentor shall be assigned by the University/College for the smooth conduct and supervision of the internship program.
2. The internal mentor shall provide guidance students in securing internship and to monitor the progress.

#### **D. Protocol of the Internship work:**

1. The head of the institution shall issue an internship work authorization letter during the 5<sup>th</sup> semester to the College or Organization where student is expected to join the internship work.
2. Student is expected to take up the preliminary work such as identifying the organization and engaging in securing in an offer from an organization
3. During the 5<sup>th</sup> semester, students who secured an offer must get consent offer signed by the principal/head to carry out internship.
4. Student must submit the joining report with the date of joining for internship to the department head through internal mentor.
5. In case of professional work, the student is expected to be regular in performing his/her duties/tasks assigned to him/her by the Organization.

#### **E. Evaluation:**

1. All the students should obtain a certificate of internship from the workplace. This certificate shall mention the name of the candidate, the organizations name and duration of work. A letter describing the work of the candidate is desirable. The certificate shall be submitted to the department head.
2. The performance of a candidate shall be assessed for maximum of 100 marks.
3. The assessment methods shall be decided by the Universities based on the existing conventions.
4. The assessment method shall consist of an internship report submitted by the students based on the work experience and a viva-voce/presentation.
5. **Viva-voce/Presentation:** There shall be a viva-voce examination will be conducted for by the department where each student is expected to give a presentation and submit necessary documents.

#### **F. Marks allocation for Internship Work:**

<b>Statement of Marks Secured</b>		
<b>Item</b>	<b>Maximum Marks</b>	<b>Marks Obtained</b>
Candidate Attendance for teaching/work		
Candidate Punctuality for teaching/work		
Course Work Preparation/ Work Commitment		
Students Feedback/Employer Feedback		
Behavioural Attitudes		

Overall Observation		
<b>Total</b>		
Total Marks Secured by student in Words:		

<b>Viva-voce by Chairman and an Expert Drawn from Other University for 30 Marks</b>			
Sl. No	Aspects	Maximum Marks	Marks Obtained
1	Presentation Skills		
2	Communication Skills		
3	Subject Knowledge		
Total			

Note: Assessment needs to be done as per the regulation.

**Model Curriculum**  
**of**  
**BSc in**  
**Economics**  
**5<sup>th</sup> & 6<sup>th</sup> Semester**

Karnataka State Higher Education Council

Karnataka State Higher Education Council



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Introduction to R Software</b>		
Course Code:	<b>ECO C9</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

<b>Course Outcome:</b> After the successful completion of the course, the student will be able to:		
<ul style="list-style-type: none"> <li>• CO1. Enables to do programming in R</li> <li>• CO2. Students can able to gain skill in analysing the data.</li> <li>• CO3. To acquaint with the recent advances in R</li> </ul>		
<b>Modules</b>	<b>Description</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to R</b>	<b>10</b>
	Installation Procedure - Help - Demo Examples - Packages and Libraries - Command Line - Data Editor - R Studio.	
<b>Practicum</b>	Develop an R script and execute it	
<b>Module II</b>	<b>Basics in Calculations</b>	<b>16</b>
	Basics and R as a Calculator - Multiplication and Division - Addition and Subtraction Built in Functions and Assignments - Matrix Operations - Creation of a Matrix - Properties - Transpose - Multiplication - Addition and Subtraction - Submatrices - Inverse.	
<b>Practicum</b>	Solve a problem on Submatrices - Inverse	
<b>Module III</b>	<b>Missing Data and Logical Operations</b>	<b>16</b>
	Missing Data - Logical Operations and Comparisons - Control Statements - Loops - Conditional Execution - Sequences - Repeats, Sorting and Ordering - Lists - Vector Indexing - Data Management with Strings - Display and Formatting.	
<b>Practicum</b>	Group Discussion on Missing Data and Logical Operations	
<b>Module IV</b>	<b>Descriptive Statistics and Functions in R</b>	<b>18</b>
	Frequencies - Absolute and Relative, Partition Values - Quartile - Decile - Percentile, Graphics - Bar Plots - Pie Chart - Histogram - Scatter Plot, Descriptive Statistics - Mean - Median - Mode - Variability - Variance - Range - Standard Deviation, Statistical Distribution - Skewness - Kurtosis, Statistical Functions - Correlation - Regression - Regression Line - Goodness of Fit.	
<b>Practicum</b>	Presentation on Descriptive Statistics and Functions in R	

## References

1	Alain F. Zuur, Elena N. Ieno, Erik H.W.G. Meesters (2009), A Beginner's Guide to R (Use R), Springer Cham Publications.
2	Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani, (2013), Introduction to Statistical Learning with Applications in R, Springer Cham Publications.
3	Christian Heumann, Michael Schomaker, Shalabh (2017), Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R, Springer Cham Publications.
4	McKinney, W. (2012). Python for data analysis: Data wrangling with Pandas, NumPy, and IPython, O'Reilly Media, Inc.



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Public Economics</b>		
Course Code:	<b>ECO C10</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

CO1. Understand introductory Public Finance concepts.

CO2. Study the causes of market failure and corrective actions

CO3. Understand the impact, incidence and shifting of tax

CO4. Study the Economic Effects of tax on production, distribution and other effects

CO5. Enable the students to know the Principles and Effects of Public Expenditure

CO6. Understand the Economic and functional classification of the budget; Balanced and Unbalanced budget

CO7. Understand the Burden of Public debt and know the Classical/ Ricardian views, Keynesian and post-Keynesian views

CO8. To acquaint with the advantages and disadvantages of Deficit Financing,

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Public Economics</b>	<b>15</b>
	Public Economics: Meaning, definitions, Scope and Significance, Public Finance and Private Finance: Meaning, and Distinction; Public good and private good: Meaning, Characteristics, and Distinction, Principle of Maximum Social Advantage, Market Failures: Meaning, causes-role of externalities; Market failure and role of government; Corrective actions.	
<b>Practicum</b>	Group Discussions on Public Finance and private finance; public good and private good Assignment on Market failure and government intervention	
<b>Module II</b>	<b>Public Revenue and Public Expenditure</b>	<b>17</b>
	Meaning and sources of revenue; Taxation –Cannons of taxation, Characteristics of a sound tax system, Impact, Incidence- Division of Tax burden, Shifting of tax, Economic Effects of tax on production, distribution and other effects, Progressive and Regressive, Proportional Tax, Direct and Indirect Taxes –Merits and Demerits, Taxable Capacity: Meaning and determinants.Public Expenditure; Meaning, classification, principles, Types & Cannons, Reasons for the growth of public	

	expenditure, Wagner's law of increasing state activities, Peacock-Wiseman hypotheses, Effects of public expenditure: Production, Distribution & Other effects	
<b>Practicum</b>	Mini-project/study to ascertain the impact of GST on retailers/wholesalers in your vicinity A case study on the taxable capacity of the different sections of society in the vicinity Assignment on Effects of public expenditure: Production, Distribution & Other Effects	
<b>Module III</b>	<b>Public Debt</b>	<b>13</b>
	Public Debt: Meaning, Purpose, Types & Effects; Sources of Public Borrowing; Burden of Public Debt -Classical/ Ricardian views, Keynesian and post-Keynesian views; Intergenerational equity of public debt; Causes of the Rise in Public Debt; Methods of debt redemption; Debt management.	
<b>Practicum</b>	Studying the burden of public debt through a project/ case study Assignment on Debt Management	
<b>Module IV</b>	<b>Public Budget, Fiscal Policy and Fiscal Deficit</b>	<b>15</b>
	Budget: Meaning, process & Types of budget, Economic and functional classification of the budget; Balanced and unbalanced budget, Types of Budget Deficits; Fiscal Policy: Meaning, objectives & Tools; Fiscal deficit: Meaning, Computation, Deficit Financing: Meaning, Advantages and Disadvantages	
<b>Practicum:</b>	Calculation of various types of budget deficit using the budget data Group discussion on the advantages and disadvantages of deficit financing	

<b>References</b>	
1	Lekhi R.K., Joginder Singh (2018) Public Finance, Kalyani publication, New Delhi
2	Tyagi B.P. (2014) Public Finance published by Jaya Prakash Nath and CO, Meerut
3	Hindriks J. and G. Myles (2006): Intermediate Public Economics, MIT Press.
4	Bhatia H L (2018): Public Finance. Vikas Publishing House.
5	Musgrave, R.A. (1989), The Theory of Public Finance, McGraw Hill
6	Musgrave, R.A. and P.B. Musgrave (1989), Public Finance in Theory and Practice, McGrawHill,





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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Development Economics</b>		
Course Code:	<b>ECO C11</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the basic concepts and measurements of Development.
- CO2. Learn some classical and partial theories of Development economics and identify the difference.
- CO3. Identify the difference between Developed and Developing Countries.
- CO4. Analyse and tackle the Development issues effectively.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module 1</b>	<b>Introduction to Economic Development</b>	<b>14</b>
	Concept - Definitions - Distinction between Economic Growth and Development - Indicators of Growth and Development, Measures of Economic Development: Gross National Product (GNP) - Physical Quality of Life Index (PQLI), Human Development Index (HDI), Happiness Index, Inequality and Poverty: Meaning, causes, indicators – Gini Coefficient Index, Human Poverty Index (HPI).	
<b>Practicum:</b>	Assignment on various indicators of growth and development Group discussions about the characteristic features of different countries and their development levels	
<b>Module 2</b>	<b>General Theories of Economic Growth and Development</b>	<b>16</b>
	Adam Smith's Theory, David Ricardo's Theory, T.R. Malthus' Theory, Karl Marx's Theory, Schumpeter's Theory and Rostow's Growth Theory - Harrod-Domar Model.	
<b>Practicum:</b>	Assignment on different theories and their relevance to developing Countries, Debate on present stage of India's growth and estimated stage it may reach by 2047	
<b>Module 3</b>	<b>Partial Theories of Economic Development</b>	<b>16</b>
	Lewis Labour Surplus Model - Rodan's Big Push Theory - Lieberstein's Critical Minimum Effort Approach - Balanced Vs. Unbalanced Growth, Factors in the Development Process Capital Accumulation - Capital-Output Ratio - Technology and Economic Development.	

<b>Practicum:</b>	Group Discussion on Balanced and unbalanced growth strategies in Developed and developing countries Assignment on the Factors in the Development Process Capital Accumulation	
<b>Module 4</b>	<b>Sustainable Development</b>	<b>14</b>
	Inclusive Development - Millennium Development Goals - Sustainable Development Goals, Targets and Achievements with reference to India.	
<b>Practicum</b>	Seminar on MDGs and SDGs and the challenges	

<b>References</b>	
1	Higgins Benjamin & W.W. Norton Economic Development New York & Company. Inc.
2	Mishra S.K and Puri V.K, Economic Development and Planning, Himalaya Pub., House, Mumbai.
3	Taneja M.L. and Meier G. M, Economics of Development and Planning, S. Chand and Co, Delhi.
4	Thirlwall A.P. Growth and Development: With Special Reference to Developing Economies, Palgrave Macmillan, New York.
5	Todoaro. M.P & Orient Longman Economic Development in the Third World, United Kingdom
6	Sustainable Development Reports



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Banking and Finance</b>		
Course Code:	<b>ECO C12</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian banking and the role of banks in monetary policy.
- CO2. Analyze the functioning of banks and different types of accounts and other services offered by banks.
- CO3. Evaluate recent developments in the Indian banking sector, including digital banking, payment banks, and non-performing assets.
- CO4. Describe the overview of the Indian financial system, including financial markets, financial instruments, and financial regulation.
- CO5. Analyze the challenges faced by Indian banks and the implications of banking reforms for the Indian economy.
- CO6. Develop critical thinking and analytical skills in evaluating various financial products and services banks and capital markets offer.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to banking: India</b>	<b>15</b>
	Indian Banks: Evolution, structure, functions, types and features- Public sector, private sector, foreign, Cooperative, RRB, Small finance banks, payment banks; Role and importance of banks in the Indian economy; Credit creation and financial intermediation; Central Bank and banking regulation; Regulatory and supervisory powers; Monetary policy and banking channel of credit control; Policy rates and banking; repo, reverse repo, MCLR, Bank rate, CRR, SLR, MSF; Issues in banking sector; NPA crisis; impact of global events on Indian banks.	
<b>Practicum</b>	Compare and contrast the different types of banks, highlighting their strengths and weaknesses- Presentation. Conduct a class discussion and compare and contrast the different scenarios on various loans, highlighting the risks involved and the measures taken by banks to manage these risks.	

<b>Module II</b>	<b>Banking services</b>	<b>15</b>
	Banking services: Bank deposits; Types and features of bank accounts; account opening and importance of KYC; Bank loans; types, features, documents required; eligibility, interest rates, maturity, loan default and consequences; Other services: Locker facility, payment and remittance services and channels; currency exchange; debit cards, credit cards, pre-paid cards; ATMs; internet and mobile banking; Modern banking products: Insurance on deposits and loans, Investment services in capital market- stocks, bonds and mutual funds; advisory services; retirement products.	
<b>Practicum</b>	Group discussion on bank accounts and loan products and making recommendation to different classes Comparison of banking services by visiting bank branches	
<b>Module III</b>	<b>Modern Banking</b>	<b>15</b>
	Modern banking facilities; Digital banking; Digital Wallets; Digital account opening; Biometrics; contact less payment system; instant payments; personal finance management tools; Use of artificial intelligence and machine learning in banks; Cyber security in banking; Credit scoring; Direct lending; Corporate banking; Investment Banking	
<b>Practicum:</b>	Survey bank customers to understand their usage and satisfaction levels with digital banking services. Analyze the adoption rates of digital banking services across different age groups and demographic segments	
<b>Module IV</b>	<b>Financial Market</b>	<b>15</b>
	Introduction to Indian financial markets; Equity markets and stock exchanges; Debt markets and bond markets; Currency markets and forex trading; Commodity markets and trading; Derivatives markets; Mutual funds; Insurance products Investing in capital market products- access, channels; risk in capital market investments; Role of SEBI, Fintech and innovation in capital markets;	
<b>Practicum</b>	Debate: Investing in capital market products. Assignment on Indian financial markets	

<b>References</b>	
1	Khan, M. Y. (2019). Indian Financial System (11th ed.). McGraw Hill Education (India) Private Limited.
2	RBI (2022) report on the trend and Progress of Banking in India
3	Pathak, B. V. (2018). Indian financial system. Pearson Education
4	Principles and Practices of Banking (2023), Indian Institute of Banking & Finance (IIBF), MacMillian
5	Shekhar, K. C. & Shekhar, L. (2013). Banking Theory and Practice, 21st Edition
6	Taxman's Digital Banking, Indian Institute of Banking & Finance (IIBF), Bharati Law House

7	Reserve Bank of India. (2017). Basic Financial Literacy Guide. <a href="https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx">https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx</a>
8	Securities and Exchange Board of India. (2021). Handbook of Statistics on Indian Securities Market. <a href="https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html">https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html</a>
9	Financial Education Handbook (2021) National Centre for Financial Education (NCFE) <a href="https://www.ncfe.org.in/resources/downloads">https://www.ncfe.org.in/resources/downloads</a>
10	Investor Education material by National Stock Exchange ( <a href="https://www.nseindia.com/invest/how-to-invest-in-capital-market">https://www.nseindia.com/invest/how-to-invest-in-capital-market</a> )



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>EXPERIMENTAL ECONOMICS</b>		
Course Code:	<b>ECO E1A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. name several experiments performed in each fields of economics and describe how the results affirm (or differ from) economic theory and/or field data.
- CO2. Understand how to design and run an experiment.
- CO3. Develop the ability to read recent journal articles in experimental economics and evaluate the quality of the papers. Students are expected to read assigned journal articles and book chapters during class and present one article and/or chapter in class.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Experimental Economics</b>	<b>15</b>
	Experimental Economics and Behavioral Game Theory-Risk and Time Preferences - Basic Principles of Experimental Design	
<b>Practicum</b>	Group Discussion on Basic Principles of Experimental Design	
<b>Module II</b>	<b>Behavioral Game Theory</b>	<b>15</b>
	Social Preferences: Ultimatum, Dictator and Trust Games- Mixed-Strategy Equilibrium-Bargaining - Dominant Solvable Games - Level-k Model	
<b>Practicum</b>	Conduct an Experimental session on Behavioral Game Theory	
<b>Module III</b>	<b>Markets and Strategic Behavior</b>	<b>15</b>
	Learning - Coordination and Equilibrium Selection-Signaling, Reputation and Cheap Talk - Neuroeconomics: fMRI and Eye tracking - Field Experiments-Prediction Markets and Asset Bubbles -Market Design	
<b>Practicum</b>	Demonstrate the difference between economic theoretical predictions and actual behavior.	

<b>References</b>	
1	C. A. Holt, Pearson Addison Wesley (2007) Markets, Games & Strategic Behavior,
2	J. H. Kagel and A. E. Roth, Princeton University Press (1997), The Handbook of Experimental Economics.



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Artificial Intelligence</b>		
Course Code:	<b>ECO E1B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1 Acquaint with Artificial Intelligence?
- CO2. Understand the importance of Artificial Intelligence in the growth and development of the economy.
- CO3. Understand the impact and implications of Artificial Intelligence on the various aspects of the economy
- CO4. The Implications of Artificial Intelligence for Public Policy

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Artificial Intelligence</b>	<b>15</b>
	What is Intelligence? - agents and their goals, substrates; Evolution of biological intelligence – history, benefits and costs, emotions, empathy and cooperation, language and human culture; Evolution of artificial intelligence: history of AI - second machine age, the third digital revolution, the fourth industrial revolution; Machine Learning – Its impact on Economics, Ubiquitous computing, Clouds, Big data, Block chains, Software agents, robots and Digital Innovations; Artificial Intelligence - Theory of Decision Making, General Purpose Technology; Economic Potential of Artificial Intelligence – Innovations; AI and Privacy	
<b>Practicum</b>	Presentation on Machine Learning – Its impact on Economics	
<b>Module II</b>	<b>Artificial Intelligence and the Economy</b>	<b>17</b>
	Intelligent Economy – Platform economy, Gig economy, Sharing economy, Block chain economy, Crypto currency economy; Artificial Intelligence and Economic Growth – Productivity Gains, Knowledge Production Function; Implications of automation and AI on the demand for labor, wages, and employment; Artificial Intelligence – Research and Development, Structural Transformation, Income redistribution and Employment, Role of Demand; AI and Industrial Organization – Need for firm level data; Impact of AI and Machine Learning on Market Design; Macroeconomic Impact of AI.	
<b>Practicum</b>	Identify the role of Crypto currency in economic development and write a report	
<b>Module III</b>	<b>Policy Implications of Artificial Intelligence</b>	<b>13</b>
	Public Policy in an AI Economy - redistribution vs predistribution, concerns about inequality, steering technological progress; What shall be taxed? - labour vs capital; robots vs scarce factors? AI and International Trade -	

	policy implications with respect to investments in research, and behind-the-border regulations such as privacy, data localization, standards, and competition; Economics of Tort Liability – Punishing Robots; AI and Behavioural Economics; Ethical Challenges in the Intelligent economy – Challenges for Society, Challenges for ethics; Social attitudes: deriving meaning & dignity from work	
<b>Practicum</b>	Debate on Policy implications of Artificial Intelligence	

<b>References</b>	
1	Agrawal Ajay, Gans Joshua & Goldfarb Avi (2019). <i>The Economics of Artificial Intelligence – An Agenda</i> , NBER and University of Chicago Press
2	Brynjolfsson, Erik and Andrew McAfee (2015), <i>The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies</i> , W.W. Norton.
3	Kahin. B & Brynjolfsson. E (2000), <i>Understanding the Digital Economy: Data, Tools and Research</i> , Cambridge, Mass: The MIT Press
<b>Academic Articles</b>	
1	Berg, Andrew, Edward F. Buffie, and Luis-Felipe Zanna (2017), “Robots, Growth, and Inequality: Should We Fear the Robot Revolution? (The Correct Answer is Yes),” forthcoming, <i>IMF Working Paper</i> .
2	European Political Strategy Centre, <i>The age of artificial intelligence</i> , EPSC Strategic Notes, March 2018.
3	Frey, Carl Benedikt, and Michael A. Osborne (2013), “The Future of Employment: How Susceptible Are Jobs to Computerisation?” Oxford University paper.
4	Gries T. and Naudé W., <i>Artificial Intelligence, Jobs, Inequality and Productivity: Does Aggregate Demand Matter?</i> , Institute of Labor Economics, Discussion paper No 12005, November 2018.
5	Korinek, Anton and Joseph Stiglitz (2019), “Artificial Intelligence and Its Implications for Income Distribution and Unemployment,” in Agrawal et al.: <i>The Economics of Artificial Intelligence</i> , NBER and University of Chicago Press, May 2019.
6	McKinsey Global Institute, <i>Notes from the AI frontier – Modeling the impact of AI on the world economy</i> , discussion paper, September 2018.
7	OECD, <i>Digital economy outlook 2017</i> , October 2017.
8	PricewaterhouseCoopers, <i>The macroeconomic impacts of artificial intelligence</i> , February 2018.





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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Tourism Development</b>		
Course Code:	<b>ECO V1A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1. Interpret and evaluate tourism as a phenomenon and as a business system.
- CO2.Understand economic benefits such as tax revenues, job creation, or diversification of Local economies
- CO3.Contextualize tourism within broader cultural, environmental and economic Dimensions
- CO4.Develop and evaluate tourism policy and planning initiatives.
- CO5.Propose and conduct a research project to inform tourism practice
- CO6.Critique tourism practices for their implications locally and globally

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Tourism</b>	<b>15</b>
	<b>Tourism:</b> Concepts, definition, objectives, Nature and scope, significance, History, Tourist, Traveler, Excursionist .Types and forms: Inter-regional and intra-regional tourism, Inbound, outbound, Domestic and International. . Forms of Tourism: religious, Medical Tourism, historical, social, adventure, health, business, conferences, conventions, incentives, sports and adventure tourism. Tourism system: Nature, characteristics and components of Tourism Industry. Tourism Demand and supply: Measures, patterns, Characteristics and factors influencing tourism Demand and Supply.	
<b>Practicum</b>	Assignments on Types and forms of Tourism, Group discussions on factors influencing Demand and supply of Tourism.	
<b>Module II</b>	<b>Growth, Development &amp; Impact of Tourism on Economic development</b>	<b>15</b>
	Growth and Development of Tourism: post - second world war phenomenon, causes of rapid growth and modern tourism. Role and functions of Important Tourism Organizations: ITDC, State Tourism Development Corporations, Ministry of Railways & Civil Aviation, WTO, IATA, (International Air Transport Association), TAAI, (Travel Agents Association of India) WTTC (World Travel and Tourism Council) FHRAI. (The federation of Hotel and Restaurant Association of India), Important Tourism Destinations of India and Karnataka. Policy initiatives of Tourism Development Economic Impact: contribution to GDP/SDP, Economic benefits, the multiplier effect, development of infrastructure, Regional development, effects on	

	employment, tourism & economic value of cultural resources. Social, Cultural and Environmental Impacts.	
<b>Practicum</b>	Presentation on economic, social, cultural and Environmental impacts	
<b>Experiential Learning/ Practicum</b>	<b>Education trip to important tourist destinations for the students and submit report consisting 15-20 pages</b>	<b>30</b>
<b>Format of the report</b>	Name of the place – location - means of traveling to the destination - employability of tourism- climate - best season to visit - picturesque landscape - lodging and food - recreational facilities - places of interest in the area - local language/dress - handicrafts/products - overall experience	

<b>References</b>	
1	Bhatia A.K (2003) International Tourism, Sterling Publishers Pvt Ltd, New Delhi
2	Bhatia A.K (2003) International Tourism, Sterling Publishers Pvt Ltd, New Delhi
3	Bhatia AK (2002), Tourism Development: Principles and Practices, Revised edition Sterling Publishers Private Limited, New Delhi.
4	Dennis L & Foseter – Glencoe (2003), an Introduction to Travel & Tourism, McGraw Hill International
5	Revathy Girish (2007), Indian Tourist Panorama, Dominant Publishers and Distributors, New Delhi.
6	Introduction to Tourism-A K Bhatia
7	Tourism System-Mill R C and Morrison
8	Tourism Development- R Garther
9	Sati V.P (2001), Tourism Development in India, Pointer Publications, Jaipur.
10	Singh Anand (2005), Tourism in Ancient India, Serials Publications, New Delhi.
11	Sinha R.K (2003), Growth and Development of Modern Tourism, Dominant Publishers, New Delhi.

# 6<sup>th</sup> Semester



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Actuarial Economics</b>		
Course Code:	<b>ECO C13</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Objective:**

- To understand the basic actuarial techniques
- To understand the concepts of finance and its application in actuarial economics

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Enables understanding on Actuarial Economics and Insurance sector.
- CO 2. To acquaint with advances in financial models

<b>Modules</b>	<b>Description</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Actuarial Economics</b>	<b>10</b>
	Principles of Actuarial Economics - Importance of Finance and Mathematics in Actuarial Economics - The concept of Insurance - Classification of Insurance - Types of Life Insurance - History of Insurance in India - Insurance regulatory and development Act.	
<b>Practicum</b>	Assignment on Principles and Importance of Finance and Mathematics in Actuarial Economics.	
<b>Module II</b>	<b>Theory of Interest</b>	<b>18</b>
<b>Chapter 4</b>	Time value of money - Simple interest, compound interest, depreciation, investing over a period. Cash flow models - Zero coupon bonds, fixed interest securities, index linked securities, equity, annuity, an interest on loan, repayment loan. Interest rates - Nominal rate, effective rate and force of interest.	
<b>Practicum</b>	Calculate Simple interest, compound interest, depreciation	
<b>Module III</b>	<b>Theory of Uncertainty and Risk Models</b>	<b>18</b>
	Axioms of choice under uncertainty; utility functions; expected utility theorem; measures of risk-absolute and relative risk aversions; measures of investment risk-variance of return, semi-variance of return Decision Theory: Zero-sum two-player games – Domination - The Minimax criterion - Saddle points.	
<b>Practicum</b>	Presentation on Theory of Uncertainty and Risk Models	

<b>Module IV</b>	<b>Portfolio Theory</b>	<b>14</b>
	Portfolio Theory - Benefits of Diversification, Models of Asset Returns: - Multifactor Models - The Single Index Model, Asset Pricing Models: - The Capital Asset Pricing Models (CAPM) – Limitations of CAPM.	
<b>Practicum</b>	Group discussion on Portfolio Theory and Benefits of Diversification	

<b>References</b>	
1	Stephen G. Kellison, The theory of interest. Irwin Mc Graw Hill, 2008.
2	John Hull, Futures, Options and financial derivatives, Prentice hall publication
3	Panjer, Harry, H. (1998), Financial economics with applications to investments, Insurance and pensions. The Actuarial foundation.



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Public Finance</b>		
Course Code:	<b>ECO C14</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian Public Finance
- CO2. Enable the students to know the Source and nature of public revenue and expenditure
- CO3. Understand the Budget and different concept of deficits
- CO4. Know the Public debt and its management
- CO5. Understand the fiscal and monetary policy and their tools and importance
- CO7. To enable the students to know the Indian federal financing system and Financial Commissions

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Public Revenue</b>	<b>18</b>
	<b>Direct Tax Revenue</b> - Sources of Revenue-Tax and Non-Tax Revenue; Trends and Patterns of Tax Revenue in India; Direct and Indirect Taxes in India; Personal Income Tax Rates and Slabs; Corporate Tax- Tax Rate and Slabs; <b>Indirect Tax Revenue</b> - Indirect Taxes – Earlier Taxes-VAT and MODVAT; Goods and Services Tax (GST)- Objectives and Classification of GST, Tax Rates of GST; Trends and Patterns of GST; Impact of GST on Indian Economy; Tax Reform Commissions.	
<b>Practicum</b>	Collection and analysis of data on Direct tax Collection and analysis of GST from businesses.	
<b>Module II</b>	<b>Public Expenditure</b>	<b>15</b>
	<b>Revenue Expenditure</b> - Classification of Public Expenditure in India; Revenue Account Expenditure- Trends and Patterns; Capital Account Expenditure-Trends and Patterns; Fiscal Responsibility and Budget Management (FRBM) Act; Impact of Public Expenditure on Indian Economy; Expenditure Reforms Commission (ERC) in India; <b>Union Budget and Its Analysis</b> - Meaning and Classification of Budgets; Zero-Based Budget; Composition of Union Budget; Union Budget Analysis (current one); Different Concept of Deficits- Revenue, Fiscal, Primary Deficits.	
<b>Practicum</b>	Analysis of Union Budget (Current one) Group Discussion on Budget Deficits	

<b>Module III</b>	<b>Public Debt and Its Management</b>	<b>14</b>
	<b>Public Borrowings and Debt</b> - Meaning and Nature of Public Debt; Sources of Public Borrowings; Classification of Public Debt; Trends and Patterns of Central Government Debt; Main Characteristics of Indian Public Debt; Crowding out of Private Investment; Causes of Public Debt in India; <b>Burden of Public Debt and Management in India</b> - Meaning of Burden of Public Debt; Importance of Public Management; Principles of Public Debt Management; Repayment of Public Debt in India; Impact of Public Debt on Indian Economy; Finance Commissions in India	
<b>Practicum</b>	Assignment to write on Indian Public Debt and sources of repayment Group Discussion on Burden of Public Debt	
<b>Module IV</b>	<b>Fiscal and Monetary Policies and Federal Finance in India</b>	<b>13</b>
	<b>Fiscal and Monetary Policy India</b> - Meaning and Objectives of Fiscal Policy; Importance of Fiscal Policy; Tools of Fiscal Policy; Meaning and Objectives of Monetary Policy; Importance of Monetary Policy; Tools of Monetary Policy; <b>Indian Federal Finance</b> - Meaning and Importance- Stages of Growth; Allocation of Resources- Division of Functions and Resources; Principles of Federal Finance; Shortcomings of Federal Financing; Finance Commission and Their Recommendations.	
<b>Practicum</b>	Group Discussion about the Role of Fiscal and Monetary Policies in controlling inflation Assignment to write the State List, Union List and Concurrent list	

<b>References</b>	
1	Bhatia H L (2021): Public Finance, S. Chand and Co., New Delhi.
2	Lekhi R.K (2020): <i>Public Finance</i> , Kalyani Publishers, New Delhi.
3	Musgrave R.A and Musgrave P.A (2017): <i>Public Finance in Theory and Practice</i> , Mcgraw- Hill Kogakusha, Tokyo.
4	Om Prakash (2021): <i>Public Economics: Theory a practice</i> , Vishal Publishing Co. Ludhiana.
5	S.K. Singh (2019): <i>Public Economics: Theory and Practice</i> S. Chand and Co., New Delhi.
6	Tyagi, B.P (2018): <i>Public Finance</i> , Jai Prakash Nath and Company, Meerut, India.



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>International Economics</b>		
Course Code:	<b>ECO C15</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the international trade theories and their application in international trade
- CO2. Explain the concept of terms of trade and demonstrate the effect of trade barriers; and display the ability to analyse the stages of economic integration
- CO3. Understand the concept of BoP and assess the BoP position and examine the changes in forex rate
- CO4. Analyse the role of International trade and financial institutions
- CO5. Demonstrate good inter-personal and communication skills through class participation and contributing to critical discussion on trade issues

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>International Trade Theories</b>	<b>15</b>
	Meaning and Importance of International trade; Differences between Internal and International Trade; Trade Theories: Mercantilist view; Absolute cost and comparative cost advantage theories; Haberler's Opportunity cost theory; Heckscher-Ohlin theory; Leontief's paradox	
<b>Practicum</b>	Assignment on Ricardo's Comparative cost advantage and Leontief's paradox	
<b>Module II</b>	<b>Terms of Trade and Commercial Policy</b>	<b>18</b>
	Terms of trade- Concept and Types, Factors determining Terms of Trade; Commercial Policy: Free trade v/s Protection; Tariffs: Types and effects; Quotas; Anti-dumping; Economic Integration: Meaning and stages.	
<b>Practicum</b>	Debate: Free trade v/s Protection Mini project: Trace the evolution of India towards Economic Integration	
<b>Module III</b>	<b>Balance of Payment and Capital Flow</b>	<b>12</b>
	Balance of Payment: Concept, Components; Disequilibrium in Balance of Payment: Causes and Measures to correct disequilibrium; Foreign Exchange rate: Meaning and types; determination of Foreign exchange rate: Demand for and Supply of Forex; Purchasing Power Parity (PPP) theory; Capital Flow: Meaning and concept of Foreign Investment; Forms of FDI; Advantages and disadvantages of FDI.	
<b>Practicum</b>	Prepare India's Balance of Payment statement using recent Economic Survey Assignment on Forms of FDI	



<b>Module IV</b>	<b>International Finance and Trade Institutions</b>	<b>15</b>
	Bretton Woods Institutions: IMF and IBRD -IDA and IFC: Organization, Objectives, Functions and their role in developing countries; Evolution of WTO: GATT – principles and objectives; WTO: Organization, Objectives, Functions, Agreements and current issues; WTO and developing countries;	
<b>Practicum:</b>	Group Discussion: Effectiveness of IMF and IBRD in developing countries Seminar: Agreements of WTO or current issues of WTO	
<b>References</b>		
1	Sodersten. B. (1993): International Economics, MacMillan, 3 Edition, London,	
2	Salvatore, D. (2016): International Economics, 12 Edition, Wiley Publication	
3	Vaish, M. C. and Sudama Singh (1980): International Economics, 3 Edition, Oxford and IBH Publication, New Delhi.	
4	Carbaugh, R. J. (1999): International Economics, International Thompson Publishing, New York	
5	Dana, M. S. (2000): International Economics: Study Guide and work Book, 5. Edition, Routledge Publishers, London.	
6	Kenen, P. B. (1994). The International Economy, Cambridge University Press, London.	
7	Krugman, P.R. and M. Obstfeld (1994): International Economics: Theory and Policy Addison-Wesley Publications.	
8	Jackson, JD. (1998) The World Trading System, Cambridge University Press, Mass. Cherunilam, International Economics, TMH, New Delhi.	
9	D M Mithani, International Economics, Himalaya, Mumbai.	
10	Jhingan M.L.(2016): International Economics, Vrinda Publications Pvt Ltd-Delhi	
11	Dwivedi D.N. (2013): International Economics Theory & Policy, Vikas Publishing House Pv.t Ltd.	
12	K.C. Rana & K.N. Verma (2017): International Economics; Vishal Publishing Co.	
13	Krishnamurthy H.R (2013) : Antarakashreeya Arthashastra ; (Kannada version), Sapna, Bengaluru	



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**Model Curriculum**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Environmental Economics</b>		
Course Code:	<b>ECO C16</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand how economic methods can be applied to environmental issues facing society
- CO2. Examine the linkages between Environmental Degradation and Economic Development
- CO3. Develop an informed view regarding the potential of economics to help societies achieve their environmental goals
- CO4. Demonstrate good inter-personal and communication skills through writing an essay and contributing to critical discussion
- CO5. Analyze environmental problems and to assess environmental policies.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Environment and Ecology</b>	<b>15</b>
	Meaning, Nature and Scope of Economics of Environment; Linkages between Environment and the Economy; Environmental Kuznets curve; Environmental Stress; Population and Environment; Poverty and Environment; Meaning and elements of ecology; Biotic and Abiotic components; Food, Hydrological and Carbon Cycles; Material Balanced Principle (Entropy law); Meaning and strategies to achieve Sustainable Development; Rio Summit; Green Accounting Introduction to SDGs.	
<b>Practicum:</b>	Making charts relating to SDGs or Assignments on environment-economy linkages at the local level.	
<b>Module II</b>	<b>Natural Resources Scarcity and Conservation</b>	<b>15</b>
	Meaning and Characteristics of Renewable and Non-renewable resources; Non-Renewable Resources and the problem of depletion and problem of overuse ; Resource Scarcity and Economic Growth (Limits to Growth Model); Energy and Economic Development; Energy resources and their Pricing; Alternative energy sources; Conservation of Natural Resources- 3Rs – Reduce, Reuse and Recycling Measures.	
<b>Practicum:</b>	Identifying local resources; Project on resource conservation (esp. water) at the College level; Discussion on Limits to Growth	

<b>Module III</b>	<b>Environmental Pollution</b>	<b>15</b>
	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	visiting the Pollution Control Board office and observing its functions	
<b>Module IV</b>	<b>Environmental Pollution and Regulation</b>	<b>15</b>
	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	Assignments on types of pollution in local areas; Seminars on climate change and its consequences; visiting the Pollution Control Board office and observing its functions	

<b>References</b>	
1	Bhattacharya, R.N (Ed) (2001), <i>Environmental Economics: An Indian Perspective</i> , Oxford University Press.
2	Karpagam M. (1993), <i>Environmental Economics</i> , Sterling Publishers, New Delhi.
3	Shankar, U, (2001), <i>Environmental Economics</i> , Oxford University Press, New Delhi.
4	Singh, Katar and Anil Shisodia (2007): <i>Environmental Economics: Theory and Applications</i> , Sage Publications, New Delhi
5	Mahajan V.S (2003): <i>Environmental Protection – Challenges &amp; Issues</i> , Deep & Deep Publishers New Delhi
6	Sengupta, R.P. (Ed.) (2001), <i>Ecology and economics: An Approach to Sustainable Development</i> , Oxford University Press, New Delhi.
7	Nick Hanley, Jason F, Shogren and Ben White (2005): <i>Environmental Economics in Theory and Practice</i> , Macmillan India Ltd.



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economics of Information</b>		
Course Code:	<b>ECO E2A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Students shall be able to understand the role of information in contemporary economics.
- CO2. Students are expected to understand the strategies for pricing information.
- CO3. Students are expected to understand relevance of information policy in contemporary digital economy.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Role of Information in Economy</b>	<b>15</b>
	Foundations of the Information economy-Introduction to Information economy-Definition of information good-The cost of producing information-Managing intellectual property-Economic and public good-The economics of attention-Technology Systems competition Lock-in and switching costs-Positive feedback, network externalities, and standards Policy	
<b>Practicum</b>	Assignment on Role of Information in Economy	
<b>Module II</b>	<b>Strategies for Pricing Information</b>	<b>15</b>
	Pricing Information Goods-Cost of producing information-Costs and competition-Product Personalization-Product pricing-Personalized pricing-Versioning-Group pricing- Price sensitivity, Network effects, Lock-in, Sharing Versioning Information-Types of versioning-Value-subtracted versions-Avoiding pitfalls in versioning-On-line and off-line versions-Goldilocks pricing-Customizing the browser-Bundling-Promotional pricing	
<b>Practicum</b>	Survey on Strategies for Pricing Information and write a report on it	
<b>Module III</b>	<b>3 Strategies for Information Industries and Information Policy in New Economy</b>	<b>15</b>
	Cooperation and Compatibility-How standards change the game-Winners and Loser from standards-Tactics in formal standard-setting-Managing open standards-Case Study- Linux Adoption in the Public Sector: An Economic Analysis-Waging a Standards War-Classification of standards wars-Information-age standards wars-Key assets in network markets-Two basic tactics in standards wars-Capstone case: Microsoft Netscape Information Policy overview-Price differentiation-Competition policy-Telecommunications regulation and policy in brief (Indian context)	

	The components of Digital Economics-Twelve theme of the new economy-The ten technology shift-The Internet Economy and its Indicators-E-commerce and Digital Economy	
<b>Practicum</b>	Presentation on 3 Strategies for Information Industries and Information Policy in New Economy	

<b>References</b> [Please refer to the Latest Editions]	
1	Don Tapscott. The digital economy: Promise and peril in the age of networked intelligence. McGraw-Hill. (ISBN : 0-07-063342-8)
2	Amrit Tiwana. The knowledge Management Toolkit: Practical techniques for building a knowledge Management System. Pearson Education. (ISBN 981-405-873-4)



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## Model Curriculum

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>METHODS OF DATA ANALYSIS</b>		
Course Code:	<b>ECO E2B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. What are Theoretical Distributions?
- CO2. Hypothesis Testing
- CO3. Techniques of Data Analysis – t test, ANOVA, Factor Analysis, Regression and correlation

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Hypothesis Testing</b>	<b>15</b>
	Types of Analysis: Univariate, Bivariate and Multivariate Data Analysis - Descriptive vs. Inferential Analysis – Theoretical Distributions – Normal, Chi-square, t, F, Binomial and Poisson Distributions – Concept of Estimator - Sampling Distribution of Estimator - Point and Interval Estimation - Properties of Good Estimator for Small and Large Samples Hypothesis Testing: Steps in Testing of Hypothesis - Approaches to Hypothesis Testing - Confidence Interval Approach -Test of Significance Approach and P-Value Approach- Formulation of Hypothesis - Null and Alternative - Level of Significance - One Sided and Two Sided Hypothesis - Type-I and Type-II Error - Test Statistic- Critical Value	
<b>Practicum</b>	Conduct independent research and analysis and formulate and test the hypothesis	
<b>Module II</b>	<b>Techniques of Data Analysis</b>	<b>15</b>
	Estimation of Mean and Variance - Test of Single Sample Mean - Two Independent Means Test - Testing for Means of Paired Data - Test of Single Sample Variance - Two Sample Variance Test – Test of Proportions - Non-Parametric Tests - Testing of Hypotheses: Concepts,. Non-Parametric Tests: Advantages & Disadvantages - Chi-square Tests - Tests for Randomness. Analysis of Variance - Assumptions for Analysis of Variance - Testing for the Equality of K Proportion Means - Between Treatments Estimate of Population Variance - Within Treatments Estimate of Population Variance - Comparing the Variance of Estimates - The F Test - Multiple Comparison Procedures.	
<b>Practicum</b>	Presentation on Techniques of Data Analysis	
<b>Module III</b>	<b>Advanced Data Analysis</b>	<b>15</b>
	<b>Factor Analysis:</b> Meaning of Factor Analysis - Objectives of Factor Analysis - Designing a Factor Analysis - Assumptions in Factor Analysis -	

	<p>Deriving Factors and Assessing Overall Fit - Interpreting the Factors - Validation of Factor Analysis.</p> <p><b>Regression Analysis:</b> Simple Regression, Partial Regression and Multiple Regression Analysis - Assumptions - Estimation of Regression Model.</p> <p><b>Correlation Analysis:</b> Correlation Analysis - Types of Correlation: Cross Tabulation, Charles Spearman's Coefficient of Correlation, Karl Pearson's Coefficient of Correlation, Coefficient Multiple and Partial Correlation.</p>	
<b>Practicum</b>	Debate on Applications of advanced data analysis	

<b>References</b>	
1	Anderson, Sweeney and Willams, (2012) <i>Statistics for Business and Economics</i> , Thomson South Western, US.
2	Hair, Anderson, Tatham and Black (2009) <i>Multivariate Data Analysis</i> , Pearson Education, Singapore



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Game Theory</b>		
Course Code:	<b>ECO E2C</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Describe the basic elements of a game, including players, strategies, and preferences and explain the basic assumptions for the analysis.
- CO2. Analyze games with simultaneous moves and apply best response analysis to determine the equilibrium of a game.
- CO3. Analyze games with sequential moves and apply backwards induction to determine the equilibrium of a game.
- CO4. Describe and analyze a number of strategic situations frequently observed in economic, political, and social environments and explain the nature of the equilibrium.
- CO5. Describe and analyze a number of strategic situations frequently observed in the business world, including imperfect competition and incentives in organizations.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Game Theory</b>	<b>15</b>
	Basic Ideas and Examples – The GPA RAT Race – Why Professors So Mean? - How to Think about Strategic Games – Decisions versus Games - Classifying games : Sequential or Simultaneous - Conflict or Commonality – Single or Repeated with same or changing opponents - Equal or Asymmetric Information – Games with Fixed rules or Manipulable – Cooperative or Non-cooperative – some Terminology: Strategies – Payoffs – Rationality – Common Knowledge of Rules – Equilibrium – Observation and experiment – Uses of game Theory.	
<b>Practicum</b>	Group Discussion on the notion of a strategic game and equilibria and identify the characteristics of main applications of these concepts and write an assignment	
<b>Module II</b>	<b>Games with Sequential Moves</b>	<b>10</b>
	Game Trees: Nodes – Branches – Paths of Play – Uncertainty and Nature’s Moves – Outcomes and Payoff – Strategies – Tree Construction — Adding More Players – Adding More Moves	
<b>Practicum</b>	Solve Games using Trees – Solve Games Adding More Players and Moves	
<b>Module III</b>	<b>Simultaneous Move Games – Discrete and Continuous Strategies</b>	<b>20</b>
	Depicting Simultaneous Move Games with Discrete Strategies – Nash Equilibrium – Nash Equilibrium as a System of Beliefs and Choices –	



	Dominance; Both Players have Dominant Strategies - One Players has a Dominant Strategy – Successive Elimination of Dominant Strategies – Best-Response Analysis - Simultaneous Move Games with Continuous Strategies; Pure Strategies that are Continuous variables - Price Competition – Some Economics of Oligopoly – Political campaign Advertisement – General Method of Finding Nash Equilibria	
<b>Practicum</b>	Real World Evidence of Nash Equilibrium Computer Software to Solve Game Problems	

<b>References</b>	
1	Avinash K. Dixit and Barry J. Nalebuff: The Art of Strategy, W.W. Norton, 2008.
2	Martin Osborne, An Introduction to Game Theory, Oxford University Press, 2003



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## Model Curriculum

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Operational Research in Economics</b>		
Course Code:	<b>ECO E2D</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Explain the concepts of operational research and history of it.
- CO2. Explain the different approaches to decision analysis
- CO3. To optimize the objective function with given constraints.
- CO4. Solve different types of problems involving linear programming
- CO5. Discuss the concept of system analysis and identify the various categories of systems
- CO6. Describe model and analyze the different types of models
- CO7. Able to draw decision tree
- CO8. Defined simulation and highlight the various types of simulation models
- CO9. Able to perform Monte Carlo simulation.

MODULES	DESCRIPTION	45 Hours
<b>Module I</b>	<b>Fundamentals of Operation Research</b>	<b>15</b>
	Operations Research (OP) – Objectives, History and Development, Definition, Characteristics of Operation Research; Scientific Methods in Operations Research- The Judgment Phase, The Research Phase, The Action Phase ; Necessity of Operations Research in Industry ; Scope and Applications of Operations Research; Scope of Operations Research in Financial Management <b>Tools of OP: Linear Programming (LP)-</b> Formulation of LP Problems, Constrained maximization and minimization, Graphical and algebra solution for LP problems.	
<b>Practicum</b>	Designing LP Problem Empirically optimizing objective function Verification of graphical solutions with algebra method. Solving the LP problem in Excel Sheet.	
<b>Module II</b>	<b>Modeling in Operational Research</b>	<b>15</b>
	<b>Introduction</b> , Objectives, Definition, and Classification of Modeling; Characteristics of Good Models , Advantages of Models, Limitations of Models, Constructing a Model ; Types of Mathematical Models ; <b>Introduction to Decision Tree:</b> Definition, Benefits and Disadvantages of Using Decision Tree, Components of the Decision Tree, Structure of a , Decision Tree , Analysis of Decision Tree.	

<b>Practicum</b>	Construction of different operation research models Drawing decision tree	
<b>Module III</b>	<b>Simulation and System Analysis</b>	<b>15</b>
	<p><b>Introduction to Simulation:</b> Objectives, Definition, Advantages of Simulation Technique, Application of Simulation, Limitations of Simulation Technique, Monte Carlo Simulation</p> <p><b>Introduction to System Analysis:</b> Objectives, Definition, The Systems Theory, Elements of a System, Types of Systems; Forms of Systems - Conceptual System, Mechanical System, Social System, Deterministic System, Probabilistic System; The Concept of Entropy in a System.</p>	
<b>Practicum</b>	Simulation experiments Monte Carlo Simulation using software Analysis of probability systems.	

References	
1	Dixon – Ogbechi, B.N. (2001). <i>Decision Theory in Business</i> . Lagos: Philglad Nig. Ltd.
2	Gupta, P.K. & Hira, D.S. (2012). <i>Operations Research</i> , New Delhi: S. Chand & Company.
3	Rama Murthy P (2007). <i>Operations Research</i> , New Delhi: New Age International (P) Limited, Publishers
4	Taylor III, B.W. (2007). <i>Introduction to Management Science</i> , (9th ed.). New Jersey: Pearson Education Inc.



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economics of Stock Market</b>		
Course Code:	<b>ECO V2A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 Hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the functioning, structure, and regulation of the stock market in India.
- CO2. Analyze different types of stocks, their characteristics, and their impact on risk and returns tradeoffs.
- CO3. Demonstrate the process of investing in the stock market, including opening a demat account, understanding trading windows, and buying and selling stocks.
- CO4. Utilize technical analysis tools such as chart analysis, trend analysis, and major indicators to develop effective trading strategies.
- CO5. Conduct fundamental analysis by interpreting financial statements, calculating financial ratios, and applying valuation methods.
- CO6. Apply risk management techniques and investment biases in real-time stock trading scenarios.

<b>Modules</b>	<b>Description</b>	<b>60 Hrs</b>
<b>Module I</b>	<b>Fundamentals of stock market</b>	<b>15</b>
	Overview of capital market, Stock market in India: Function, structure and regulation, features and participants; Types of stocks and their characteristics; Stock market indices; Equity Issue methods; primary and secondary markets; Risk and returns tradeoff; Diversification, The process to invest: Opening demat account; Trading window; Day trade vs. long term investment; Buying and selling stocks; types of orders in stock trading; payments and trade settling cycle; stop-loss	
<b>Practicum</b>	Conducting mock stock trading sessions using real-time data Analyze the risk associated with stock market investments	
<b>Module II</b>	<b>Technical and Fundamental analysis</b>	<b>15</b>
	Technical analysis: Meaning, advantages and role, Chart analysis- types of charts and interpretation; candle charts and pattern study. Trend analysis, moving averages, support and resistance levels, sentimental indicators, volume and open interest; Major Indicators & Oscillators; Trading Strategies; Dow Theory And Elliot Wave Theory; Trading Psychology And Risk Management; Fundamental analysis: Introduction, relevance and steps; Time value of money; discount factors; risk free rate; equity risk premium; CAPM Beta; Sharpe ratio;	

	Financial Statements: Balance Sheet, Income statement, cash flow statement; Financial ratios; Valuation methods: Discounted cash flow method; Dividend discount method; Free cash flows;	
<b>Practicum:</b>	Complete National Stock Exchange Academy's certification in technical analysis. Using charts, demonstrate a trading strategy Assignment on various investor biases in trading	
<b>Experiential Learning/ Practicum</b>	<b>Visit an Retail Brokerage Firm and write an report to know about opening a demat trading account, Online Trading and research to wide area Financial Products</b>	<b>30</b>
<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the Retail Brokerage Firm Visited</li> <li>2. Certificate from the Retail Brokerage Firm Stating the students visit and learning about the Fundamentals of stock market</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Retail Brokerage Firm</li> <li>5. Lessons Learnt about Fundamentals of stock market, Technical and Fundamental analysis, Sources of finances, Challenges faced, Strategies to Overcome it, etc....,</li> </ol>	

<b>References</b>	
1	Graham, B. (2006). The Intelligent Investor. Collins Business Essentials.
2	NCFM, Technical Analysis module. National Stock Exchange Academy
3	NCFM, Fundamenta Analysis module. National Stock Exchange Academy
4	Patel, R. (2010). Guide to Technical Analysis & Candlesticks. Mumbai: Vision Books.
5	Sadekar, B. M. (2011). How to Make Money Trading with Candlestick Charts.
6	Palat, R. (2019). Fundamental analysis for investors (4th ed.). McGraw-Hill Education.
7	Gala, K., & Gala, A. (2019). Fundamental Analysis Shares: Become An Intelligent Investor.
8	Khan, M. Y. (2019). Indian Financial System (11th ed.). McGraw Hill Education
9	Lynch, P., & Rothchild, J. (2000). One Up on Wall Street: How to Use What You Already Know to Make Money in the Market. Penguin.
10	Paul, P. (2015). How to Avoid Loss and Earn Consistently in the Stock Market: An Easy-to-understand and Practical Guide for Every Investor. Vision Books.



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**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Micro Entrepreneurs Development</b>		
Course Code:	<b>ECO V2B</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1. To know how to start own Micro Entrepreneur Unit.
- CO2. To enable the students to find out various procedure of operations of Micro Entrepreneurship.
- CO3. To enable the students to gain knowledge and skills needed to run micro enterprises successfully.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Micro Enterprises : Technical Feasibility</b>	<b>15</b>
	Management Evaluation – Micro Enterprises Promotion - Types of Enterprises and Management – Sole Proprietorship, Partnership, Limited Liability Partnership, Private Limited - Profile of the Management - Idea of Product – Product Line – Product Demand Estimation – Promotion and Competition Management. Technical Feasibility – Manufacturing Process – Digital Technology – AI in Manufacturing – Plant Location, Plant and Machinery Technical Feasibility, Raw-material Utilities and Human Resources, Contracts and Annual Maintenance Agreements (AMCs) – Project Monitoring and Implementation – Plant Optimization.	
<b>Practicum</b>	Assignment on Micro Entrepreneurs Development Survey to analyse Technical Feasibility in Micro Enterprises	
<b>Module II</b>	<b>Micro Enterprises: Financial and Economic Viability</b>	<b>15</b>
	Appraisal of Financial Feasibilities – Cost of the Project – Land and Building, Plant and Machinery, Furniture’s and Fixtures, Pre-Operative Expenses, Fixed and Working Capital – Means of Strategic Finance – Own Contribution and Venture Capital, Term Loans, Subsidy and Government Schemes, Other Sources, Economic Viability – Profit and Losses, Break Even and Bottom Line.	
<b>Practicum</b>	Identify the factors of economics viability in micro enterprises and write an assignment	
<b>Experiential Learning/ Practicum</b>	<b>Visit a Micro Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>

<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the Micro Enterprise Visited</li> <li>2. Certificate from the Micro Enterprise Stating the students visit and learning about the Micro Enterprises : Technical Feasibility</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Micro Enterprise</li> <li>5. Lessons Learnt about Micro Enterprises: Technical Feasibility, Financial and Economic Viability, Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc....,</li> </ol>	
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<b>References</b>	
1	Bessant J and Tidd J (2011): Innovation and Entrepreneurship, 2nd Edition, John Wiley & Sons.
2	Desai, V (2021): Small Scale Industries and Entrepreneurship, Himalaya Publishing House, Mumbai.
3	Desai, V (2011) : Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, Mumbai.
4	Donald F K (2014): Entrepreneurship – Theory, Process and Practice, 9th Edition, Cengage learning.
5	Hirsch, R.D., Peter, M and Shepherd D (2006): Entrepreneurship, 6 <sup>th</sup> Edition, Tata McGraw-Hill, Mumbai.
6	Kanaka S S (2013): Entrepreneurial Development, S.Chand & Co. New Delhi.
7	Nagendra and Manjunath, V.S. (2010): Entrepreneurship and Management, Pearson.
8	Roy R (2011): Entrepreneurship, 2 <sup>nd</sup> Edition, Oxford University Press.
9	Stokes, D and Wilson, N. (2010): Small Business Management and Entrepreneurship, 6 <sup>th</sup> Edition, Cengage Learning.
10	Sundar, K (2011) : Entrepreneurial Development, Vijay Nicole Imprints Pvt. Ltd.



Government of Karnataka

**Model Curriculum**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Project Planning and Management</b>		
Course Code:	<b>ECO V2C</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2 hours</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1-formulate and present a practicable project idea
- CO2-prepare a realistic economic plan
- CO3-describe models and methods to lead, carry out, document and evaluate project
- CO4-describe an intended project in a complete project plan
- CO5-review and evaluate own and others' project plans critically.
- CO6-Understand the content for preparing a Project Report for new projects and differentiate between financial, technical analysis and business feasibility.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Project Planning and Management</b>	<b>15</b>
	Meaning, Definition, Nature & Scope, Types - Schedule planning, Resource planning, Budget planning, Procurement management, Quality planning, Communications planning. Key elements of a successful project planning, and Process of Project planning.	
<b>Practicum</b>	Assignments on project planning and management activities. Group discussion on project planning.	
<b>Module II</b>	<b>Project Management Implementation and Stakeholder Management and Project Controlling</b>	<b>15</b>
	<b>Project Management:</b> Meaning, definition, Objectives, Nature and Importance, Project Management Skills - Qualities of the best project manager, Project Management life Cycle; <b>Project Implementation:</b> Definition, Implementation Tools, and Process, Performance and quality control measurements. <b>Stakeholder Management:</b> Definition, Features, Importance, Risk Management; Definition, importance, techniques; Project Controlling System: Meaning, Pre-requisites, Process, Essentials, Methods, Project completion.	
<b>Practicum</b>	Discussion on the Skills of project management, Decision Making, Problem-Solving, and risk-management skills In small groups, try to identify the LARGEST project each of you has been involved with.	
<b>Experiential Learning/ Practicum</b>	<b>Visit an Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>
<b>Format of the</b>	1. Name and Address of the Enterprise Visited	



<b>Report</b>	<ol style="list-style-type: none"> <li>2. Certificate from the Enterprise Stating the students visit and learning about the Project Planning and Management</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Enterprise</li> <li>5. Lessons Learnt about Project Planning and Management Implementation, Stakeholder Management and Project Controlling Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc.....,</li> </ol>	
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<b>References</b>	
1	Adrienne Watt (2014) Project Management – 2nd Edition, publisher, BC CAMPUS open access books liabrary.
2	<u>Davies A. Igberaese</u> (2023) .Introduction to Project Management ,Routledge Taylor &Francis Group
3	Harold Kerzner (2013), Project Management; A Systems Approach to Planning, Scheduling, and Controlling, WILEY INDIA
4	Joseph Heagney (2019) Fundamentals of Project Management, 5th Edition, Amacom Publication
5	Kalpesh Ashar (2022), Project Management Essentials; You Always Wanted To Know, Vibrant Publication
6	Project Management from Simple to Complex, open text book Publisher: University of Minnesota Libraries Publishing
7	Albert lester (2021) Project management, planning and control
8	Rory Burke (2009), Project Management Planning and Control Techniques, 4Th Edition, WILEY INDIA.

**Question Paper Pattern for UG Semester**  
**DSC, DSEC & OEC**

Paper Code:		Paper Title:	
Duration of Exam	<b>2 Hours</b>	Max Marks	<b>60 Marks</b>
Instruction:	<b>Answer all the sections</b>		

**Section-A**

1. Answer <b>ALL</b> the following sub-questions, each sub-question carries <b>ONE</b> mark	(10X1=10)
A. B. C. D. . J.	
<i>Note for Section-A: Three sub-questions from each unit and remaining one sub-question (J) from unit I to III.</i>	

**Section-B**

Answer any <b>FOUR</b> of the following questions, each question carries <b>FIVE</b> marks	(4X5=20)
2. 3. 4. 5. 6. 7.	
<i>Note for Section-B: Minimum Two question from each unit (Q No 2 to 6)</i>	

**Section-C**

Answer any <b>THREE</b> of the following questions, each question carries <b>TEN</b> marks	(3X10=30)
8. 9. 10. 11. 12.	
<i>Note for Section-C: Minimum Two question from each unit (Q No 8 to 12) Sub-questions such as 'a' and 'b' may be given for a question in section-C only.</i>	