2019

B.Sc.

## 4th Semester Examination

## **ECONOMICS** (Honours)

Paper - SEC 2T

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## (Financial Economics)

### Group - A

1. Answer any five questions shortly: 5

5×2=10

- (a) Define Physical Capital and Financial Capital.
- (b) Suppose an investor faces the combination of return (in Rs.) and probability as follows:

Return: 200 300 400 500 Probability:  $\frac{1}{2}$   $\frac{1}{5}$   $\frac{1}{7}$   $\frac{11}{70}$ 

[ Turn Over ]

Find out the expected return the investor can earn.

- (c) What will be the shape of the indifference curve of an individual who loves risk against returns?
- (d) An individual invests Rs. 10,000 upon a government bond as interest rate of 5% per annum. What will be the compounded earning after five years?
- (e) Explain the relation between bond price and rate of interest?
- (f) Distinguish between Nominal Rate of Interest and Real Rate of Interest.
- (g) Define Loanable Fund. Which group of economists has proposed the Loanable Fund Theory of Interest?

#### Group - B

Answer any *four* questions briefly:  $4 \times 5 = 20$ 

2. Suppose a student after passing out the Plus II exam opts for doing graduation in either Mathematics or Economics. He faces three states of scoring marks good, medium and bad. The probabilities of occurrence of each of the states and the corresponding marks secured are given below:

Subject	States of Nature	Probability	Results (% of Marks)	
1	Good	0.3	92	
Mathematics	Medium	0.4	65	
1	Bad	0.3	40	
	Good	0.3	85	
Economics	Medium	0.4	62	
	Bad	0.3	45	

Determine which subject is beneficial to be choosen by the student in terms of scoring marks?

- Suppose you have a sum of Rs. 10,000 and you want to invest it for four (4) years. Calculate the Present Discounted Value (PDV) for the series of return for the said period with four (4%) percent rate of interest.
- 4. Explain Keynesian Liquidity Preference theory used in determining rate of interest. 5
- 5. Distinguish between Bond and Perpetuities. Derive PDV, for both the financial assets. 2+3=5
  - 6. Write down the equation of an indifference curve in 'mean' and 'standard deviation' of return. Draw the indifference curves in the same plane when the individual is (i) risk neutral and (ii) risk quarter.

7. Explain intuitively how an individual makes optimum demand for an asset under uncertainly conditions.

## Group - C

Answer any *one* question briefly:  $1 \times 10 = 10$ 

- 8. Discuss the present value criteria to calculate expected gain from capital investment in a finite period. What is internal rate of return? 8+2=10
- What is Capital Asset Pricing Model (CAPM)?
  Explain how expected return from a security can be determined with the help of CAPM.

# (Research Methodology)

## Group - A

- 1. Answer any *five* questions shortly:  $5 \times 2 = 10$ 
  - (a) What do you understand by quantitative research and qualitative research?
  - (b) Distinguish between Parameter and Statistic.
  - (c) What do you mean by random sampling?
  - (d) What are the different sources of secondary data?

- (e) Distinguish between sample survey and complete enumeration.
- (f) What do you mean by multivariate analysis?
- (g) Distinguish between Type I error and Type II error.
- (h) What are the different types of report?

## Group - B

Answer any four questions:

2.	Explain	the	meaning	and	significance	of a	research
i	design.						2+3

- 3. Distinguish between research methods and research methodology. 5
- 4. Explain the merits of observation method in collecting data. What are its limitations? 3+2
- 5. What are the techniques involved in defining a research problem?
- 6. Describe briefly the important statistical tools often used to analyse the research data.
- 7. Write a short note on survey of literature and its importance in context of research report. 5

 $4 \times 5 = 20$ 

### Group - C

Answer any one question:

 $1 \times 10 = 10$ 

- What are the guiding considerations in the construction of questionnaire? Clearly explain the difference between collection of data through questionnaires and schedules.
- Briefly describe the layout of a research report, covering all relevant points specially methodology and gap in the existing literature.