



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

B.Sc. Honours Examination 2021

(CBCS)

4th Semester

ECONOMICS

PAPER—SEC2T

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

THEORY : SEC2T (FINANCIAL ECONOMICS)

Group - A

Answer any *two* questions.

2×15

1. Differentiate between Risk and Uncertainty. Define Mean and Variance of the returns from an asset. What are the possible ways of minimizing the magnitudes of uncertainties? Discuss how an individual determines optimum amount of an asset under the conditions of uncertainty.

2+4+4+5

2. Distinguish between : 3×5
- (a) Spot rates and forward rates
- (b) One-fund theorem and two-fund theorem
- (c) Beta of an asset and portfolios of assets.
3. Distinguish between Bond and Annuities. Calculate the PDV in both the cases and show that in case of the Annuities, the PDV will be just the fixed return divided by the rate of discount. 5+10
4. Consider 3 assets with return r_1 , r_2 and r_3 respectively. The covariance matrix and expected rates of return are

$$\Sigma = \begin{vmatrix} 2 & 1 & 0 \\ 1 & 2 & 1 \\ 0 & 1 & 2 \end{vmatrix} \quad \text{and} \quad m = \begin{vmatrix} .4 \\ .4 \\ .8 \end{vmatrix}$$

- (a) Find the minimum variance portfolio.
- (b) Find a second efficient portfolio.
- (c) If the risk-free rate is $r_f = 0.2$, find an efficient portfolio of risky assets. 5+5+5

Group - B

- Answer any *one* question. 1×10
5. Which portfolio is more efficient? How is the Markowitz model useful in portfolio selection? 3+7
6. What is Capital Asset Pricing Model (CAPM)? Explain how the expected return from a security can be determined by using this model. 3+7

THEORY : SEC2T (RESEARCH METHODOLOGY)**Group - A**

Answer any *two* questions. 2×15

1. What is research strategy? Give a brief idea about research ethics. Discuss the importance of review of literature. 3+6+6
2. Describe different steps of writing a project. Briefly explain 'summary statistics' in empirical research. 10+5
3. Distinguish between probability sampling and non-probability sampling. How can you select a random sample? 7+8
4. What do you mean by questionnaire? Describe the process of questionnaire designing. 4+11

Group - B

Answer any *one* question. 1×10

5. Write a brief note on different types of analysis of data, pointing out the significance of each. 10
6. (a) Distinguish between attributes and variates.
 (b) What do you mean by tabulation of statistical data? Write important principles of tabulation of statistical data. 3+(3+4)

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