III Semester M.Com. Examination, March/April 2021
(CBCS Scheme)
COMMERCE
Paper – 3.5 FB : Portfolio Management

Time : 3 Hours   Max. Marks : 70

SECTION – A

Answer **any seven** questions. **Each** question carries **two** marks. **(7×2=14)**

1. a) What is portfolio management ?
   b) State forms of efficient market theories.
   c) What do you mean by bond portfolio ?
   d) What do you mean by derivatives ?
   e) Give the meaning of efficient frontier.
   f) What do you mean by credit default swap ?
   g) Define mutual funds.
   h) State the difference between active revision and passive revision strategy.
   i) What do you mean by residual analysis ?
   j) What is a Japanese candlestick chart ?

SECTION – B

Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

2. "There is a trade-off between risk and return." – Explain this statement.
3. What are the assumptions under CAPM and arbitrage theories ?
4. Explain the random walk theory.
5. Explain different bond portfolio management strategies.

6. The following table provides information regarding portfolio risk and return.

Portfolio	Expected Return	Standard Deviation
1	10	4
2	12	7
3	13	5
4	16	12
5	20	14

a) The treasury bill rate is 5%. Which portfolio is the best ?

b) Would it be possible to earn 12% return with standard deviation of 4% ?

c) If standard deviation is 12%, what would be the expected return ?

7. If the following assets are assumed to be correctly priced on the SML, what is the return of the market portfolio ? What is the risk-free rate of return ?

R_1 – 9.40% Beta 1 – 0.80

R_2 – 13.40% Beta 2 – 1.30

SECTION – C

Answer **any three** questions. **Each** question carries **twelve** marks. **(12×3=36)**

8. Explain the different process of Portfolio Management.

9. "CAPM can be used to evaluate the pricing of securities." – Discuss.

10. In the light of the global recession and the threat of war in the Middle East, the market analyst predicts that the chance of having a booming stock market is 25%. The strong fundamentals in the economy offer hopes of normal market performance for 50% of the time. But there is always a 25% possibility of a downtrend. Mr. Anand has bought Hightech and Rapid Info Stocks in the IT sector. He has also bought the stocks of Comfo life which operates in the consumer goods sector. The rate of return in the worst case scenario of a recession is 9% for Comfo Life, 10% for Hightech and 14% for Rapid Info. In the case of normal performance, the anticipated return will be CL-13%, HT-14% and RI-12%. If boom condition prevails in the market CL will earn 18%, HT- 16% and RI- 10%. Apply mean variance criterion to the individual stocks. If Mr. Anand invests one-third of his resources in each stock that will be his portfolio return and risk be.

11. A financial analyst is analyzing two investment alternatives, Stock A and Stock B. The estimated rates of return and their chances of occurrence for the year are given below :

Probability of occurrence	Rates of return	
	A	B
0.20	22	5
0.60	14	15
0.20	–4	25

a) Determine expected rates of return, variance and standard deviation of A and B.

b) Is 'A' comparatively riskless ?

c) If the financial analyst wishes to invest half in B and half in A, would it reduce the risk ? Explain.

12. The following three portfolios provide the particulars given below :

Portfolio	Average Annual Return	Standard deviation	Correlation and Co-efficient market and Portfolio
A	18	27	0.8
B	14	18	0.6
C	15	8	0.9
Market	13	12	–

Risk-free rate of interest is 9.

a) Rank these portfolios using Sharpe's and Treynor's methods.

b) Compare both the indices.