LOYOLA COLLEGE (AUTONOMOUS) CHENNAI - 600 034



$\textbf{B.Com.} \ \ \mathsf{DEGREE} \ \ \mathsf{EXAMINATION} - \textbf{COMPUTER} \ \ \textbf{APPLICATIONS}$



FIFTH SEMESTER - NOVEMBER 2024

UCC 5602 - PORTFOLIO MANAGEMENT

Date	:: 18-11-2024 Dept. No.		Max. : 100 Mar			
ime	e: 09:00 am-12:00 pm					
	SECTION A	A - K1 (CO1)				
	Answer ALL the Questions (10 x 1 = 10)					
1.	Define the following.					
a)	Portfolio					
o)	Required rate of return					
c)	Unsystematic risk					
d)	Beta					
e)	Derivatives					
2.	MCQ					
a)		al Asset Pricing Model (CAPM) helps to determine:				
	a) The historical performance of a portfolio					
	b) The expected return of an asset based on its systematic risk					
c) The total risk of a portfolio d) The intrinsic value of a stock						
b)	The present value of a cash flow stream can be calcu	•	•			
	$a)PV=FV\times (1+r)^n \qquad b)PV=FV/(1+r)^n$	c)PV=FV×(1-r) n	d) $PV = FV / (1 - r)^n$			
c)	Which of the following is a derivative instrument?					
	a) Stock b) Bond	c) Option	d) Mutual Fund			
d)	The relationship between risk and return in a portfolio is typically:					
	a) Inversely proportional b) Directly proportional		d) Unrelated			
e)	Which of the following is a measure of a portfolio's					
	a) Sharpe Ratio b) Alpha	c) Beta	d) Standard Deviation			
	SECTION A - K2 (CO1)					
	Answer ALL the Questions		(10 x 1 = 10)			
3.	Fill in the blanks					
a)	The Theory focuses on maximizing returns for a given level of risk by constructing					
	an efficient frontier of optimal portfolios.					
b)	The formula for the future value of a single sum is					
c)	A option gives the holder the right, but not the obligation, to buy an asset at a specific					
	price before or at expiration.					
d)	Diversification helps to reduce risk but not risk.					
e)	In options trading, the is the price at which the holder can buy or sell the underlying asset.					
4.	True or False					
a)	In portfolio planning, the goal is to maximize risk w					
b)	Time value of money signifies that the value of a unit of money remains unchanged dur					
	different time periods.					
Asset allocation involves selecting individual securities for the portfolio.						

- d) A higher Beta indicates a higher level of risk compared to the market.
- e) In a swap contract, parties exchange cash flows based on different financial instruments or rates.

SECTION B - K3 (CO2)

Answer any TWO of the following in 100 words each.

 $(2 \times 10 = 20)$

5. The expected cash inflows are as follows:

Year	1	2	3	4	5
Cash inflow					
(Rs.)	10,000	12,000	14,000	16,000	20,000

Discount rate is 10%. Ascertain the present value of cash inflows.

- 6. Explain the steps in Portfolio Development
- 7. Highlight the Importance of the role of Portfolio managers
- 8. Detail the different kinds of bonds

SECTION C – K4 (CO3)

Answer any TWO of the following in 100 words each.

 $(2 \times 10 = 20)$

- 9. A person required to pay five equal annual payments of Rs. 10,000 each in his deposit account that pays 10% interest per year. Find out the future value of annuity at the end of 5 years.
- 10. Explain in detail the "Modern Portfolio Theory"
- 11. The returns on the share of BHELand the Market return for the past five years are given below:

Market Return (%)	BHEL (%)
-12.5	-5.1
1.7	6.7
7.2	7.1
11.5	18.9
6.3	11.9

Calculate the average return on BHEL shares and market return. What is BHEL's beta?

12. Contrast between Futures and Forwards

SECTION D – K5 (CO4)

Answer any ONE of the following in 250 words

 $(1 \times 20 = 20)$

- 13. Kumar invested Rs. 3,00,000 at 12% p.a for 6 years. What will be the value of investment after two years if interest is compounded (a) annually; (b) semi-annually; (c) quarterly and (d) monthly? Which is more beneficial to Kumar?
- 14. Summarise the different types of Derivatives with examples in detail.

SECTION E – K6 (CO5)

Answer any ONE of the following in 250 words

 $(1 \times 20 = 20)$

- 15. Design an optimal education funding plan for a family aiming to send their child to college in 18 years. Using advanced time value of money calculations; determine the precise amount needed for education expenses at the time of enrolment. Develop a tailored investment strategy, justify the asset allocation, and construct a savings plan that balances risk and return to effectively achieve the financial goal.
- 16. Elucidate the SEBI regulations regarding the portfolio operations.
