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68189

Maximum Marks: 75

Duration: 2.5 hours

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Use of simple calculator is allowed.

Q.1)A) Select the correct alternative and rewrite the statements(Any 8) (8 Marks)

1. PAN application form for the foreigners is _____.
a. **49AA** b. 50AA c. 49A
2. Mr. Vishnu has invested Rs. 5,00,000 in fixed deposit at 7% p.a. for a period of 3 years. Calculate the amount he would receive Rs. _____.
a. 35,000 b. 1,00,000 c. **1,05,000**
3. Minimum investment period for book FDs is _____.
a. **7 days** b. 15days c. 30 days
4. _____ is a contract between two parties which derives its Value/ Price from an underlying asset.
a. Hedge b. **Derivative** c. Arbitrage
5. _____ is comparable to keeping your money in bank account.
a. Materialisation b. **Dematerialisation** c. Rematerialisation
6. _____ refers to that portion of total risk in return caused by factors affecting prices of all securities.
a. Unsystematic risk b. Concentration risk c. **Systematic Risk**
7. Risk and returns share a _____ relationship.
a. Indirect b. **Direct** c. None of these
8. Discounted cash flow is based on application of concept of _____.
a. Money value b. **Time value** c. None of these

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9. Risk a client is willing to take depending on the financial circumstances and the investment goals is referred to as _____.

- a. Risk required b. Risk tolerance c. **Risk capacity**

10. In financial planning, most high option price will lead to _____.

- a. **Longer option period** b. Smaller option period c. Lesser period

Q.1)B) State whether the following statements are true or false. (Any 7) (7 Marks)

1. OTC markets are essentially informal markets where trades are negotiated. **True**
2. The main goal of conservative portfolio is to protect its value. **True**
3. Rematerialisation is the process of converting the securities held in electronic form into physical certificates: **True**
4. Attorney is the person to whom the power is granted. **True**
5. Open ended scheme of mutual funds are those which provide easy liquidity. **True**
6. Investment advisors which are body corporate shall have a net worth of not less than five lakh rupees. **False**
7. The concept of compound interest is that interest is not added back to the principal sum. **False**
8. Real estate provides scope for part selling. **False**
9. SEBI has authorized NISM to provide wealth management certification from time to time. **True**
10. A bonds terms and conditions are contained in a legal contract between the buyer and the seller, known as the indenture. **True**

Q.2) Answer the following

A. Explain the process of wealth management. (8 Marks)

1. Data Gathering to identify the current situation **(01)**
2. Define the terms of engagement **(01)**
3. Goal Setting **(01)**
4. Identification of Needs **(01)**
5. Analysing the opportunities and challenges **(01)**
6. Report **(01)**
7. Implementation **(01)**
8. Review and revision **(01)**

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B. Briefly explain the code of ethics to be followed in providing financial advice. (7 Marks)

1. Client First (01)
2. Integrity (01)
3. Objectivity (01)
4. Fairness (01)
5. Professionalism (01)
6. Competence (01)
7. Confidentiality (01)
8. Diligence, etc (01)

C. Elaborate various options for investing. (8 Marks)

1. Bank Fixed Deposit (01)
2. Shares (01)
3. Bonds and Debentures (01)
4. Gold (01)
5. Public Provident Funds (01)
6. Post office Savings Scheme (01)
7. Mutual Funds (01)
8. Life Insurance Policies, etc (01)

D. What are the obligations and responsibilities of the wealth manager? (7 Marks)

1. Duty of Loyalty (01)
2. Principal Trades (01)
3. Usurpation of Opportunity (01)
4. Secret Profits and Other Material Benefits (01)
5. Duty of Care (01)
6. Executing Orders (01)
7. Discretionary Portfolio Management, etc (01)

Q.3) Answer the following

A. Calculate Beta of security A from the following information: (8 Marks)

Periods	Return on Security A (%)	Return on Market Portfolio(%)
1	20	18
2	24	16
3	25	15
4	27	20
5	14	11

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Solution:

Periods	R_A	R_m	$(R_A - \bar{R}_A)$	$(R_m - \bar{R}_m)$	$(R_A - \bar{R}_A)(R_m - \bar{R}_m)$	$(R_m - \bar{R}_m)^2$
1	20	18	-2	2	-4	81
2	24	16	2	0	0	4
3	25	15	3	-1	-3	4
4	27	20	5	4	20	36
5	14	11	-8	-5	40	4
	110	80			53	46

$$\bar{R}_A = \frac{\sum R_A}{n} = \frac{110}{5} = 22 \text{ (1.5)}$$

$$\bar{R}_M = \frac{\sum R_m}{n} = \frac{80}{5} = 16 \text{ (1.5)}$$

$$\text{CoV}_{AM} = \frac{\sum (R_A - \bar{R}_A)(R_m - \bar{R}_m)}{n} = \frac{53}{5} = 10.60 \text{ (02)}$$

$$\delta m^2 = \frac{\sum (R_m - \bar{R}_m)^2}{n}$$

$$= \frac{46}{5} = 9.20 \text{ (02)}$$

$$\beta = \frac{\text{CoV}_{AM}}{\delta m^2} = \frac{10.60}{9.20} = 1.15 \text{ (01)}$$

B. Compute the correlation coefficient between the corresponding values of Variable X and Variable Y. (7 Marks)

Variable X	80	40	60	30	80	70	70	50
Variable Y	160	120	110	80	70	110	160	70

Solution:

Variable X	Variable Y	$(X - \bar{X})$ 1	$(Y - \bar{Y})$ 2	$(1)^2$ 3	$(2)^2$ 4	(1×2)
80	160	20	50	400	2500	1000
40	120	-20	10	400	100	-200
60	110	00	00	00	00	00
30	80	-30	-30	900	900	900

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80	70	20	-40	400	1600	-800
70	110	10	00	100	00	00
70	160	10	50	100	2500	500
50	70	-10	-40	100	1600	400
480	880			2400	9200	1800

$$\bar{X} = \frac{\sum X}{n}$$

$$= \frac{480}{8} = 60 \text{ (1.5)}$$

$$\bar{Y} = \frac{\sum Y}{n}$$

$$= \frac{880}{8} = 110 \text{ (1.5)}$$

$$\begin{aligned} \text{Coefficient of correlation} &= \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2 \sum(Y-\bar{Y})^2}} \\ &= \frac{1800}{\sqrt{2400 \times 9200}} \\ &= \frac{1800}{\sqrt{22080000}} \\ &= \frac{1800}{4692.94} = 0.38 \text{ (04)} \end{aligned}$$

C. Calculate the value of shares if the dividend received at the end of the 1st, 2nd, 3rd, 4th and 5th year is Rs. 300, 400, 500, 550 and 600 respectively. The discounting rate is 10%. Calculate intrinsic value of the shares using capitalization of income model. (8 Marks)

Solution:

Year	Dividend flow in Rs
1	300
2	400
3	500
4	550
5	600

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$$V = \sum_{n=1}^{\infty} \frac{C}{(1+K)^n}$$

$$V = \frac{300}{(1+0.10)^1} + \frac{400}{(1+0.10)^2} + \frac{500}{(1+0.10)^3} + \frac{550}{(1+0.10)^4} + \frac{600}{(1+0.10)^5}$$

$$V = \frac{300}{1.10} + \frac{400}{1.21} + \frac{500}{1.331} + \frac{550}{1.464} + \frac{600}{1.611}$$

$$V = 272.73 + 330.58 + 375.66 + 341.53 + 372.44$$

$$V = \text{Rs. } 1692.94$$

D. Miss. Divya had invested Rs. 2,00,000 in a fixed deposit at 8% per annum for a period 3 years. Calculate the simple interest and compound interest that she would have received at the end of the 3rd year. (8 Marks)

$$\text{Simple Interest} = \frac{P \times N \times R}{100}$$

$$= \frac{2,00,000 \times 3 \times 8}{100} = \text{Rs. } 48,000 \text{ (03)}$$

100

$$\text{Amount} = P (1 + r)^n$$

$$= 2,00,000 (1 + 0.08)^3$$

$$= 2,00,000 (1.2597)$$

$$= \text{Rs. } 2,51,940 \text{ (03)}$$

$$\text{Compound Interest} = \text{Amount} - \text{Principal}$$

$$= 2,51,940 - 2,00,000 = \text{Rs. } 51,940 \text{ (02)}$$

Q.4) Answer the following

A. Describe the benefits and risk involved in selecting mutual fund as an investment option.

(8 Marks)

Benefits

1. Diversification (01)
2. Professional Management (01)
3. Liquidity (01)

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4. Low Cost (01)
5. Transparency (01)
6. Tax Benefits, etc (01)

Risks

1. No Guarantee (01)
2. Fees and Commission (01)
3. Management Risk (01)
4. Excessive Diversification of portfolio (01)
5. Not more than Average return, etc (01)

B. What is risk profiling? Explain the factors that affect the risk profile of the clients. (7 Marks)

Meaning of risk profiling (01)

Factors

1. Knowledge (01)
2. Comfort (01)
3. Investment choice (01)
4. Propensity (01)
5. Attitude (01)
6. Capacity, etc (01)

C. The following are the different state of economy, the probability of the occurrence of the state and the expected rate of returns from the security X and Y in these different states are mentioned in the table below:

State	Probability	Rate of Return	
		Security X	Security Y
Recession	0.20	0.30	0.80
Normal	0.50	0.40	0.60
Boom	0.30	1.20	0.80

Solution:

Statement showing risk and return of security X

State	Probability	R_x	$P \times R_x$	$R_x - \bar{R}_x$	$(R_x - \bar{R}_x)^2$	$P(R_x - \bar{R}_x)^2$
Recession	0.20	30	06	-92	8164	1692.80

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Normal	0.50	40	20	-22	484	242
Boom	0.30	120	36	58	3364	1009.20
Total			62			2944

$$R_x = \sum_{n=1}^i P \times R_x$$

$$= 62\% (02)$$

$$\sigma_x = \sqrt{\sum P(R_x - R_x)^2}$$

$$= \sqrt{2944}$$

$$= \pm 54.26(02)$$

Statement showing risk and return of security Y

State	Probability	R _y	P x R _y	R _y - \bar{R}_y	(R _y - \bar{R}_y) ²	P(R _y - \bar{R}_y) ²
Recession	0.20	40	08	-22	484	96.80
Normal	0.50	60	30	-02	04	02
Boom	0.30	80	24	18	324	97.20
Total			62			196

$$R_y = \sum_{n=1}^i P \times R_x$$

$$= 62\% (02)$$

$$\sigma_y = \sqrt{\sum P(R_y - R_y)^2}$$

$$= \sqrt{196}$$

$$= \pm 14 (02)$$

D. Write a brief note stating the essentials of a comprehensive wealth plan. (7 Marks)

The various essential aspects of the client to be involved in the comprehensive wealth plan are:

1. Income (01)
2. Savings (01)

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3. Investments (01)
4. Property (01)
5. Levels of protection (01)
6. Retirement Plans (01)
7. Succession Planning, etc (01)

Q.5) Answer the following

A. Discuss the process of permanent account number. (8 Marks)

1. Gather all the documents (01)
2. Selection of appropriate portal (01)
3. Select the appropriate form(01)
4. Fill up the form (01)
5. Paying the charges (01)
6. Preparing the physical documents (01)
7. Submitting the documents (01)
8. Tracking the status and receiving the PAN card (01)

B. State the benefits of dematerialization over holding securities in physical forms. (7 Marks)

1. Liquidity (01)
2. No stamp duty (01)
3. Safe and convenient (01)
4. Less Transaction cost (01)
5. Saves time and money (01)
6. Nomination Facility (01)
7. Environment friendly, etc (01)

Write Short Notes (Any 3) (15 Marks)

a. Power of attorney

- A Power of Attorney is a legal document by which one person gives the right to perform or powers of transacting in matters relating to property, banking, legal and judicial proceedings, tax payments, etc., to another person due to certain reasons like being out of country, or getting old, or not able to look after one's duties in those matters etc.
- Types of Power of Attorney like General Power of Attorney, Special Power of Attorney, Durable and Non-Durable Power of Attorney.
- Any other points highlighting the importance of Power of Attorney.



b. Secondary Market

- Secondary market refers to a market where securities are traded after being initially offered to public in the primary market and/or listed on the stock exchange.
- It has a variety of assets that can vary from loans to stocks, from fragmented to centralized and from illiquid to liquid.
- The features of secondary markets such as : liquidity, less time lag, low transaction cost, helps in discovery, boost to savings and investments, etc.

c. Bond valuation

- Bond valuation is a technique determining the fair value of a particular bond.
- It includes calculating the present value of the bond's future interest payments, also known as its cash flow, and the bond's value upon maturity, also known as its face value or par value.
- Methods of valuation of bond like intrinsic value and Yield to maturity.

d. Know Your Customer

- KYC is an acronym for "Know Your Customer", a term used for customer identification process.
- It involves making reasonable efforts to determine true identity and beneficial ownership of accounts, source of funds, the nature of customer's business, reasonableness of operations in the account in relation to the customer's business, etc which in turns helps the banks to manage their risks prudently.
- KYC Process followed by the bank or regulatory and legal requirement or the documentation requirement for KYC.

e. Markowitz's Modern Portfolio Theory

- Markowitz showed that diversification of a portfolio does not depend on the number of securities but on the types of securities which are combined.
- The key to efficient diversification involves combining securities with negative or low co-variance or correlation among them to reduce risk without sacrificing returns.
- The theory assumption is to be stated.