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**Enrolment No:** 



#### UNIVERSITY OF PETROLEUM & ENERGY STUDIES

### **End Semester Examination – December, 2021**

Program: B.Com (Hons) Semester: 5

Subject/Course: Investment Analysis and Portfolio Management Max. Marks: 100

Course Code: FINC 3014 Duration: 3 Hours

### **Part A: Answer ALL questions**

## **Question 1.** Identify the statements below as True/False $(2 \times 5 = 10)$ [CO1]

- a) Adverse selection is a problem created by asymmetric information after the transaction occurs.
- b) A speculator focuses more on returns than safety and seeks very large returns from the market quickly.
- c) Government of India Dated Securities are regular coupon paying debt instruments.
- d) A private placement is an issue of shares by a company privately to its existing shareholders as on a record date.
- e) A primary trend in the stock market represents the bull and bear phases in the market.

# **Question 2**. Answer the following given below $(2 \times 5 = 10 \text{ Marks})$ [CO2]

- a) The price of a dated Government of India bond maturing in 10 years increases. The corresponding yield to maturity should (*choose the right answer*):
  - i. Increase
  - ii. Decrease
  - iii. Remain same
  - iv. Data insufficient
- b) A 91-Days RBI T-Bill with 40 days remaining to maturity has a yield of 7.75%. If par value of T-bill is 100, the current price is ....... (*Compute the answer and fill in the blank*)

- c) The price appreciation/depreciation of an asset divided by the beginning price represents ...... return while the periodic income in relation to the beginning price represents ...... returns. (*choose the right answer*)
  - i. Capital, Current
  - ii. Current, Capital
  - iii. Current, Current
  - iv. Capital, Capital
- d) In an order book, the market order to sell is matched with ..... prices and market order to buy is matched with ..... prices. (*choose the right answer*)
  - i. Bid, Ask
  - ii. Ask. Ask
  - iii. Bid, Bid
  - iv. Ask, Bid
- e) If RSI of a share is above 70, then the share is ..... (choose the right answer)
  - i. Overbought
  - ii. Oversold
  - iii. Either i or ii
  - iv. Neither i nor ii

#### **Part B: Answer ALL questions**

Question 3. You are evaluating two securities for investment. Security X provides a return of 5%, -1%, 3%, -2%, and -4% in the last five years. Whereas, Security Y has provided a return of -5%, 6%, 4%, -1%, and 3%. Determine the best security for investment by comparing the Geometric Mean (GM) of returns of the two securities. (5 Marks) [CO 2]

**Question 4**. Appraise in your own words, the idea behind "Private Placement" of shares. (5 Marks) [CO 3]

**Question 5**. Appraise the role of "Secondary Market" such as stock exchanges for investors. (5 Marks) [CO 3]

Question 6. The prevailing Yield to Maturity (YTM) in the bond market is 6%. Co. ABX corporate bonds with 5 years left to maturity pays 7.8% coupon annually. The face value of the bond is ₹100. Determine the price of the bond. (5 Marks) [CO 2]

#### Part C: Answer ALL questions (Question 9 has internal choice)

Question 7. The Government intends to raise ₹5,000 crores from an issue of 91-days T-Bill to meet its short-term obligations. Bids are invited for the issue of the T-Bill in a competitive bidding process. The following bids are received: (10 Marks) [CO 3]

A	99.52	970
В	98.99	578
C	97.92	937
D	97.46	864
E	97.98	1026
F	99.19	1077
G	98.56	970
Н	97.42	996
I	97.78	721
J	99.81	1405

You are required to determine the cut-off bid price and the amount received through:

- a) Uniform price bid
- b) Multiple price bid

**Question 8**. As a technical analyst, how can you analytically explain your client the following: [CO 4]

- a) Dow theory (4 Marks)
- b) Breadth of the market (3 Marks)
- c) Market Trend (3 Marks)

**Question 9**. Answer any one of the following:

**Question 9-A**. You are considering two stocks in similar industries for investment. The following fundamental information is given to you: (10 Marks) [CO 4]

	Stock A	Stock B	Industry Average
Price	2346.73	1115.67	-
52-Weeks High	2389.64	1988.23	-
52-Weeks Low	1054.33	935.54	-
ROE	10.45%	10.13%	8.45%
P/E	76.55	21.25	44.3
P/B	8.24	4.35	6.68
EPS Growth	7.00%	6.33%	5.50%
Sales Revenue Growth	7.90%	7.12%	5.90%
PAT Growth	11.00%	9.97%	6.75%

Analyze stocks A and B based on the fundamentals in the table. Recommend the best stock as per your analysis and give reasons.

<u>Or,</u>

**Question 9-B**. Analyze and Explain the outlined patterns (in red) in the following technical charts (Chart A and Chart B): (10 Marks) [CO 4]



**50** 

May

Apr

Oct 08

Nov

Dec

Jan 09

Feb

# Part D: Answer ALL questions (Question 11 has internal choice)

<u>Question 10</u>. Your client Miss. P has asked you to evaluate her investment portfolio. The following information is furnished by Miss P: [CO 4]

Assets	Purchase Price	No. of Units	Held for (Period)	Current Price	Portfolio Weight
Large Cap Fund	₹ 135.70	120	6 Months	₹ 147.50	12%
Mid Cap Fund	₹ 250.00	150	1 year	₹ 435.80	44%
Small Cap Fund	₹ 112.00	80	8 Months	₹ 108.60	6%
Gold ETF	₹ 76.50	180	3 Month	₹ 88.25	11%
Debt Funds	₹ 255.25	135	1 Year	₹ 305.50	28%

- a) What is the annualized rate of return on each of Miss. P's investments? (8 Marks)
- b) Which investment has is the best investment for Miss. P? (2 Marks)
- c) What is the overall portfolio return of Miss. P in percentage per annum? (5 Marks)

### **Question 11**. Answer any one of the following:

Question 11-A. As a financial analyst you are required to determine the yield to maturity (YTM) of a corporate bond that you are evaluating. The bond is currently available at ₹107.5 in the market and pays a coupon of 9.10% annually. The bond will mature in 6-years and has a face value of ₹100. You are considering two reference rates, 7% and 8% for your calculations. (15 Marks) [CO 4]

# <u>Or,</u>

*Question 11-B*. You are evaluating two shares, P and Q for your investment client. The return on P and Q are 11% and 17.5% respectively. The standard deviation of returns of P and Q are 8% and 13.75% respectively. The return of P and Q have a correlation of -0.28. You have decided to invest 40% of the client's money in P and 60% in O. [CO 4]

- a) Determine the return and standard deviation of the portfolio given the information. (7 Marks)
- b) Determine the optimal weights for the portfolio that will minimize the portfolio standard deviation and calculate the portfolio return for the optimal weight. (8 Marks)