

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination, December 2023
B. Tech. (CSE), Semester VII/BCA V Semester

Roll No.....

FA1127: FUNDAMENTALS OF INVESTING

Time: 2 ½ hours

Max. Marks: 30

Instructions to students:

1. Answer any 3 questions from the given below, each question of 10 marks.
2. Students are permitted to use non-scientific calculator only.
3. Do not write anything other than your roll number on question paper.
4. Mention all the assumptions for your answers clearly.

1. Vineet mutual Fund sponsored open ended equity-oriented scheme "Vineet Opportunity Fund". There were three plans "A" Dividend Re-investment plan, "B" Bonus Plan and "C" Growth plan. At the time of initial public offer on 1-4-2013, Ms. Ritisha, Ms. Hardika and Ms. Ayushi invested Rs. 1,00,000 each and Chosen, A, B, C plan respectively. (LO:3)

Date	Dividend %	Bonus Ratio	Net Asset Value per unit (F.V. Rs. 10)		
			Plan A	Plan B	Plan C
28-07-2017	30		30.70	31.40	33.42
31-03-2018	60	5:3	58.42	31.05	70.05
31-10-2021	50		42.18	25.02	56.15
15-03-2022	35		46.45	29.10	64.28
31-03-2022		1:3	42.18	20.05	60.12
24-03-2023	20	1:4	48.10	19.95	72.40
31-07-2023			53.75	22.98	82.07

On 31st July all the three investors redeemed all the balance units. Calculate annual rate of return to each of the investors.

Consider:

1. LTCG is exempted from tax.
 2. STCG is subject to 10% of Income tax.
 3. STT Tax is 0.2% only on sale or redemption of units.
2. On January 12, 2021, a trader buys one Nifty Index Futures contract at 1500. The initial margin requirement for the contract is Rs. 12000 while the maintenance margin is 65% of initial margin. Lot size is 100. Its settlement prices for the next 8 trading days are as follows. (LO:4)

Date	Settlement price
Jan 12	1565
Jan 14	1558
15	1553
16	1447
17	1549
20	1555
21	1572
22	1579

On Jan, 23 the investor closes his position when futures prices were 1583.

Required-

- a. Prepare the margin account showing all the cash flows (assume no amount is withdrawn from the margin account)
 - b. Calculate Profit/Loss.
3. Mr. Ayush Ranwa Earns Salary of Rs. 3,00,000 per month. He pays life premium of Rs. 65,000 per annum, deposits in PPF Rs. 1,50,000 per annum, Repays the housing loan principal repayment of Rs. 1,00,000 and interest for the year Rs. 60,000, Invested in NPS of Rs. 50,000 and deposited Tax saving FD of Rs. 1,00,000 for the year ended 2023-2024.
Calculate his total tax payable under new and old tax slab for the financial year 2023-2024. **(LO:2)**
4. Ram, who has been trading in the futures that resulted in huge losses, is now convinced that trading in options is a better alternative to trading in the futures when the direction of price movement is uncertain. However, he would like to know what gains he can make if he enters into options contracts. He has collected the following details on options on Tata Steel stock. **(LO:4)**
On April 1, Tata Steel shares are selling at INR 1,150. Call options and put options are available on Tata Steel with an exercise price of INR 1,200 and an exercise date of April 30. A call is priced at INR 7.30, and a put is priced at INR 54.60. The contract size is 850. The analysts have estimated that the share price of Tata Steel could be anywhere in the range of INR 1,140 to INR 1,260. Ram wants answers to the following questions:
1. If he purchases a call option, what will be the initial outlay for him?
 2. If he writes a call, what will be the initial receipt for him?
 3. What will be his initial premium margin (i) if he buys a call and (ii) if he writes a call?
 4. If he purchases a put option, what will be the initial outlay for him?
 5. If he writes a put, what will be the initial receipt for him?
 6. What will be the initial premium margin (i) if he buys a put and (ii) if he writes a put?
 7. Show diagrammatically what will be Ram's gains for the price range of INR 1,140 to INR 1,260 on the exercise date if:
 - (i) He buys a call
 - (ii) He buys a put
 - (iii) He writes a call
 - (iv) He writes a put
5. Explain the product, importance, advantages, process, eligibility norms and other guidelines of any two of investment options from the below – each of 5 marks. **(LO:1 & LO:5)**
- a. Sukanya Samriddhi Yojana
 - b. National Pension Scheme
 - c. Mutual Fund

all the best!