| Name: <br> Enrolment No: | UNIVERSITY WITH A PURPOSE |
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## UNIVERSITY OF PETROLEUM \& ENERGY STUDIES <br> End Semester Examination (Online) - December, 2020

## Program: BCom (Hons) <br> Subject/Course: Investment Analysis and Portfolio Management Course Code: FINC3014

Semester: V
Max. Marks: 100
Duration: 3 Hours

## Section A

1. Each question carries 5 marks.
2. Instructions- Select the correct answers.

| S <br> No | Question | CO |
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| Q1 | Which of the following is not among the asset classification <br> A) Physical assets <br> B) Real assets <br> C) Financial assets <br> D) Intangible assets | CO1 |
| Q2 | Which of the following is not the assumption of CAPM <br> A) Risk averse investors <br> B) Utility maximization <br> C) No taxes <br> D) Investors can't borrow at risk free rate. | CO1 |
| Q3 | Downside measure of portfolio risk focus only on the no profit no loss <br> positions. <br> A) True <br> B) False | CO1 |
| Q4 | FAMA French model focuses only on the size and book to market value <br> ratio. <br> A) False <br> B) True | CO1 |
| Q5 | With APT, it is possible for few stocks to be mispriced- not lie on SML <br> A) False <br> B) True | CO2 |
| Q6 | Which of the following is not studied under market movements. <br> A. Trend identification <br> B. Support level <br> C. <br> D. CAPM | CO2 level |

## Section B

1. Each question carries $\mathbf{1 0}$ marks.
2. Instructions: Write short answers.

| Q7 | What is CAPM? Write the assumptions of CAPM. | CO2 |
| :--- | :--- | :--- |
| Q8 | Write the steps followed in the Monte Carlo simulations and mention the <br> significance of Monte Carlo simulation for a portfolio manager. | $\mathbf{C O 2}$ |
| Q9 | Write the formulas to calculate the expected return and risk of a portfolio of <br> two securities i.e. A and B. | $\mathbf{C O 3}$ |
| Q10 | Write the pay-offs from a call option and put option for both the buyer and <br> seller of the options. | CO3 |
| Q11 | Draw a candlesticks, triple bottom, head \& shoulder, and up-trend charts. | CO4 |

## Section C

1. Each question carries 20 marks.
2. Show all the steps in calculating the required values until three decimal places.

| Q12 | Doon Ltd. sold $\$ 600$ million of 100 -year bonds with a yield to maturity of | CO4 |
| :--- | :--- | :--- | :--- |

5.5\%. Assuming the bonds were sold at par and pay an annual coupon, by what percentage will the price of the bond change if its yield to maturity decreases by $2 \%$ ? Increases by $4 \%$ ? Increases by 5\%?

## OR

Part 1. Consider the following semi-annual bond:
$\$ 100$ par value
7 years until maturity
9\% coupon rate
Price is $\$ 1,08.50$
What is the bond's yield to maturity?
Part 2.
Face value - ₹ 1000, Coupon - 10\% paid annually, time to maturity - 6 years, Discount rate $-11 \%$. Calculate the price of bond. (Show timeline and all calculations, please do not use the PV function in excel).

