SUBJECT CODE: 11EC/ME/FN63

## B. A. DEGREE EXAMINATION, APRIL 2017 <br> BRANCH IV - ECONOMICS SIXTH SEMESTER

## COURSE : MAJOR - ELECTIVE <br> PAPER : FINANCIAL ECONOMICS <br> TIME : 3 HOURS.

MAX. MARKS: 100

## SECTION - A <br> ANSWER ALL QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS:

(10x3=30)

1. What is meant by Coupon rate?
2. State the importance of Financial Market.
3. Write a brief note on IRR.
4. Define portfolio return.
5. Write a brief note on common stock.
6. Differentiate between money market and capital market.
7. Write a brief note on security market line.
8. A non-dividend paying stock has a current price of Rs.16. what will be the futures price if the risk free rate is $9 \%$ and the maturity of the future contract is 1 month?
9. State the types of financial derivatives.
10. The fixed deposit scheme of Andhra Bank offers the following interest rates

| Period of deposit | Rate per @ |
| :--- | :--- |
| 46 days to 179 days | $10.0 \%$ |
| 180 days to< 1 year | $10.5 \%$ |
| 1 year and above | $11.0 \%$ |

Find an amount of Rs. 10,000 invested today will grow in 3 years to.

## SECTION -B

ANSWER ANY FIVE QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 300
WORDS.
11. a) Creditors Rs 20,000, Working Capital Rs $3,60,000$ other current liabilities Rs 1,00,000. Calculate Current Ratio.
b) Current assets Rs 2,00,000, inventory Rs 40,000 , Working capital Rs 1,20,000 Calculate Quick Ratio.
12. The free rate of return is $5 \%$ and the market rate is $15 \%$ Betas for four shares $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z are respectively $0.60,1.00,1.20$ and -0.20 . What are the required rates of return on these four shares?
13. Explain the features of preferential shares.
14. Briefly explain the functions of secondary stock market.
15. A one year call option with an exercise price of Rs 60 is available at a premium of Rs 6.you can also buy a one year put worth an exercise price of Rs 55 at a premium of Rs 3 if you set up a portfolio of a put and a call, what will be your pay-off if the share price after one year is a)Rs 58 b) Rs 45 or (c) Rs 75.
16. Explain in detail optimal portfolio.
17. a) The bond of zeta industries Ltd with a par value of Rs 500 is currently traded at 435. The coupon rate is $12 \%$ and it has a maturity period of 7 years. What is the yield to maturity?
b) A Rs 100 par value bond bears a coupon rate of $14 \%$ and matures after five years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is $16 \%$.

## SECTION-C <br> ANSWER ANY TWO QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 1200 WORDS.

18. Discuss the problems of Financial statement analysis.
19. Describe in detail the money market instruments.
20. a) Calculate the value of a call option using the B-S model given the following information
Current market price of the share (S) Rs 75
Volatility (Std deviation,): 45
Exercise price (E) :Rs 80
Risk free rate (rf): 0.12
Time to expiration ( t ) $: 6$ months or 0.5 years.
If an investor wants to buy a put with the same exercise price and expiration dates, as call option, what will be the value of Put?
b) A Machine will cost Rs $1,00,000$ and will provide annual net cash inflow of Rs 30,000 for 6 years. The cost of capital is $15 \%$. Calculate the machines net present value and Suggest whether the machine should be purchased.
(5 Marks)
21. The returns of two assets under four possible states of nature are given below:

| State of nature | Probability | Return on asset 1 | Return on asset 2 |
| :---: | :---: | :---: | :---: |
| 1 | 0.10 | $5 \%$ | $0 \%$ |
| 2 | 0.30 | $10 \%$ | $8 \%$ |
| 3 | 0.50 | $15 \%$ | $18 \%$ |
| 4 | 0.10 | $20 \%$ | $26 \%$ |

a)What is the standard deviation of the return on asset1 and asset2?
b) What is the covariance between the returns on assets 1 and 2?
c) What is the coefficient of correlation between the returns on assets 1 and 2 ?

