VPM's
DR VN BRIMS, Thane
Programme: MMS (2016-18) (Finance)
Third Semester Examination October 2017

Subject	**Mutual Fund**		
Roll No.		**Marks**	**60 Marks**
Total No. of Questions	**7**	**Duration**	**3 Hours**
Total No. of printed pages	**3**	**Date**	**27.10.2017**

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q. 1 (a) A mutual fund company introduced two schemes i.e. Dividend Plan (Plan-D) and Bonus Plan (Plan-B). The face value of the unit is Rs. 10. On 1.4.2012, Mr. Neel invested Rs. 2,00,000 each in Plan-D and Plan-B when the NAV was Rs. 38.20 and Rs. 35.60 respectively. Both the plans matured on 31.3.2017.

Particulars of dividend and bonus declared over the period are as follows:

Date	**Dividend %**	**Bonus Ratio**	**Net Asset Value (Rs.) Plan-D**	**Plan-B**
30.9.2012	10		39.10	35.60
30.6.2013		1:5	41.15	36.25
31.3.2014	15		44.20	33.10
15.9.2015	13		45.05	37.25
30.10.2015		1:8	42.70	38.30
27.3.2016	16		44.80	39.10
11.4.2016		1:10	40.25	38.90
31.3.2017			40.40	39.70

What is the effective yield per annum in respect of the above two plans?**(10 Marks)**

(b) On 1st April, 2017 Fair Return Mutual Fund has the following assets and prices at 4.00 p.m.

Shares	**No. of Shares**	**Market Price Per Share (Rs.)**
A Ltd.	10,000	19.70
B Ltd.	50,000	482.60
C Ltd.	10,000	264.40
D Ltd.	1,00,000	674.90
E Ltd.	30,000	25.90
No. of units of fund		8,00,000

Calculate:

(i) NAV of the Fund on 1st April, 2017.

(ii) Assuming that on 1st April, 2017, Mr. X, a HNI, send a cheque of Rs. 50,00,000 to the Fund and Fund Manager immediately purchases 18,000 shares of C Ltd. and balance is held in bank. Then what will be position of fund?

(iii) Now suppose on 2nd April, 2017 at 4.00 p.m. the market price of shares is as follows:

Shares	**Rs.**
A Ltd.	20.30
B Ltd.	513.70
C Ltd.	290.80
D Ltd.	671.90
E Ltd.	44.20

Then what will be the new NAV? **(10 Marks)**

Attempt Any FOUR from the Remaining SIX Questions

Q2) *Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks*

a) Calculate the NAV of a regular income scheme on per unit basis of Red Bull mutual fund from the following information:

Particulars	Rs. in crores
Listed shares at cost (ex-dividend)	30
Cash in hand	0.75
Bonds & Debentures at cost (ex-interest)	2.30
Of these, bonds not listed & not quoted	1.0
Other fixed interest securities at cost	2.50
Dividend accrued	0.8
Amount payable on shares	8.32
Expenditure accrued	1.00
Value of listed bonds & debentures at NAV date	10

Number of units (Rs.10 face value) 30 lakhs

Current Realizable value of fixed income securities of face value of Rs.100 is 106.50.

The listed shares were purchased when index was 7,100 & the present index is 9,000.

Unlisted Bonds and debentures are at cost. Other fixed interest securities are also at cost.

b) What is an exchange traded fund? What are its important features?

c) The following information is available regarding four Mutual Funds:

Mutual Fund	Return %	Standard Deviation %	Beta
A	12 %	15	0.80
B	16 %	22	0.76
C	21 %	37	1.15
D	13 %	24	1.32

Risk Free rate is 10% and Face Value is Rs. 100 each.

Evaluate the performance of these Mutual Funds using Sharpe Ratio & Treynor's Ratio. Comment on the evaluation after ranking the funds.

Q3) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) (i) The following particulars relate to a mutual fund scheme:

Sector	Investment in shares (at cost) Rs. crores	Index on Purchase Date	Index on Valuation Date
IT & ITES	28	1750	2950
Infrastructure	15	1375	2475

The outstanding number of units is 1.25 crores. Calculate the Net Asset Value (NAV) per unit.

(ii) Following information is available regarding a mutual fund:
Return =13, Risk=16, Beta= 0.90, Risk free rate=10
Calculate Shape ratio & Treynor's ratio.

b)An investor purchased 300 units of a mutual fund at Rs. 12.25 per unit on 31st December, 2015. As on 31st December, 2016 he has received Rs. 1.25 as dividend and Rs. 1.00 as capital gains distribution per unit. Required:

(i) The return on investment, if the NAV as on 31st December, 2016 is Rs.13.00.

(ii) The return on investment as on 31st December, 2016, if all dividends & capital gains distributions are reinvested into additional units of the fund at Rs. 12.50 per unit.

c)What are the investor's rights & obligations under the Mutual Fund Regulations?

Q4) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) Equi-Stable is a portfolio model wherein 20% of Fund value is invested in Fixed Income Bearing Instruments. The balance of 80% is divided among old industry stock (iron & steel), Automotive Industry stock, Information Technology stocks, Infrastructure Company stocks and Financial Services Sector in the ratio of 4:2:6:3:5.

Three mutual funds X, Y and Z offer a fund scheme based on the Equi-stable portfolio model. The actual return on Equi-stable portfolios of each of the three funds for the past 3 years is as follows:

Year	1	2	3
Portfolio X	17.35 %	18.70%	21.60%
Portfolio Y	17.20 %	18.25%	22.15%
Portfolio Z	17.10%	18.60%	22.00%

Beta factor of the Equi-stable portfolio is measured at 1.35. Return on market portfolio indicates that Rs. 1,000 invested will fetch Rs. 153 in a year (including capital appreciation and dividend yield). RBI bonds, guaranteed by the Central Government yields 4.50%.

Rate the fund managers of X, Y and Z.

b) (i) You can earn a return of 15% by investing in equity shares on your own. You are considering a recently announced equity mutual fund scheme where the initial issue expense is 5%. You believe that the mutual fund scheme will earn 18%. At what recurring expenses (in percentage terms) will you be indifferent between investing on your own and investing through the mutual fund?

(ii) The following particulars are furnished about Mutual Fund Scheme P:

Dividend Distributed= Rs.1.75, Capital Appreciation= Rs. 2.97, Opening NAV=Rs. 32, Beta= 1.46, GOI bonds carry an interest of 6.84% and NIFTY has increased by 12.13%. Ascertain Jensen's Alpha.

c) What are the drawbacks of investments in Mutual Fund?

5) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) A Fund made an issue of 20 lakh units of Rs. 10 each on January 01, 2017. No entry load was charged. It made the following investments:

Particulars	**Rs. Lakhs**
1,00,000 equity shares of Rs. 100 each @ Rs. 160	160
7% Government Securities	16
9% Debentures (Unlisted)	10
10% Debentures (Listed)	10

During the year, operating expenses were Rs. 10 lakhs and in addition to interest, dividend of Rs. 24 lakhs was received. Calculate net cash balance and NAV per unit at the end of the year.

b) A mutual fund has an NAV of Rs. 12.50 per unit at the beginning of the year. At the end of the year, the NAV increases to Rs. 13.40. In the meanwhile, the Fund distributes Rs. 0.85 as dividend and Rs. 0.70 as capital gains.

(i) Calculate the fund's rate of return during the year.

(ii) Assuming that the investor had 240 units and that the distributions have been reinvested at an average NAV of Rs. 12.80, find out the rate of return.

c) State any 5 RBI Guidelines relating to Infrastructure Debt Fund Schemes (IDF Schemes).

Q6) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) Mr. X on 1.7.2014, during the initial offer of some Mutual Fund invested in 10,000 units having face value of Rs. 10 for each unit. On 31.3.2015, the dividend operated by the M.F. was 10% and Mr. X found that his annualized yield was 153.33%. On 31.12.2016, 20% dividend was given. On 31.3.2017, Mr. X redeemed all his balance of 11,296.11 units, when his annualized yield was 73.52%. What are the NAVs as on 31.3.2015, 31.12.2016 and 31.3.2017?

b) An investor holds 1100 units in a gilt fund. The current NAV is Rs. 12.95. He would like to switch his holdings to an equity fund, whose NAV is Rs. 15.95. If the exit load for the gilt fund is 0.75% and the entry load for the equity fund is 0.50%, what is the value of his holding in the equity fund, after the switch?

c) Write a short note on "Role of Mutual Funds in the Financial Market".

Q7) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) Distinguish between Open-ended and Close-ended Schemes of Mutual Fund.

b) Write a short note on "Money Market Mutual Fund".

c) Who can be appointed as Asset Management Company (AMC)? Write the conditions to be fulfilled by an AMC.