

7. MUTUAL FUNDS**MODEL WISE ANALYSIS OF PAST EXAM PAPERS**

MODEL NO.	N-10	M-11	N-11	M-12	N-12	M-13	N-13	M-14	N-14	M-15	N-15	M-16	N-16	M-17	N-17	M-18
Model – 1	-	06	08	-	-	-	-	-	-	-	-	08	-	-	-	-
Model – 2	-	-	-	-	-	08	-	-	-	-	-	-	-	-	-	-
Model – 3	-	-	04	-	-	-	-	-	-	-	-	-	-	-	-	-
Model – 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Model – 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Model – 6	-	-	-	-	06	-	-	-	-	-	-	-	-	-	-	5

Model – 1 : Calculation of NAV

Model – 2 : Appreciation/Depreciation of value of investments & Sale of investments

Model – 3 : Dividend Equalisation

Model – 4: Problems on Accounting of Investments

Model – 5 : Movement of unit holder funds

Model – 6 : Yield from various mutual fund schemes

Model – 7 : Theory

Model – 8 : Miscellaneous

Problem No. in this material	Problem No. in new SM	Problem No. in old PM	RTP	MTP	Previous Exams	Remarks
CRD 1	ILL 1	-	-	-	-	CA INTER
CRD 2	-	-	N14	-	-	CA FINAL
CRD 3	-	-	-	-	M16	CA FINAL
CRD 4	ILL 3 & 4	-	-	-	-	CA INTER
CRD 5	ILL 6	-	-	-	-	CA INTER
CRD 6	ILL 5	-	-	M18	-	CA INTER
CRD 7	PQ 1	-	-	-	-	CA INTER
CRD 8	PQ 4	-	-	-	M18	CA INTER
ASG 1	ILL 2	-	-	-	-	CA INTER
ASG 2	PQ 3	-	-	-	-	CA INTER
ASG 3	-	-	-	M18	-	CA INTER
ASG 4	-	-	M14	-	-	CA FINAL
ASG 5	PQ 5	-	-	-	-	CA INTER
ASG 6	-	-	N15	-	-	CA FINAL
ASG 7	PQ 2	-	-	-	-	CA INTER
ASG 8	-	-	M 18	-	-	CA INTER
TQ 1	TQ 1	-	-	M18	-	CA INTER
TQ 2	TQ 2	-	-	-	-	CA INTER
TQ 3	-	-	-	-	-	-
TQ 4	-	Q.NO - 1	-	-	-	CA FINAL

1. INTRODUCTION & MEANING

- a) A mutual fund is an entity which collects money from different investors into a pool and invests it in shares, bonds and other securities. Mutual fund issues units to the investors in accordance with quantum of money invested by them. Investors of mutual fund are known as unit holders.
- b) A mutual fund is required to be registered with securities and exchange board of india (SEBI) which regulates securities markets before it can collect funds from the public.

As per section 2(q) of Securities and Exchange Board of India (SEBI) (Mutual Funds) Regulations, 1996, "Mutual Fund" means a fund established in the form of a trust to raise monies through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments or gold or gold related instruments or real estate assets.

"Unit" means the interest of the unit holders in a scheme, which consists of each unit representing one undivided share in the assets of a scheme.

2. Advantages Of Mutual Funds:

The following are the advantages of mutual fund schemes:

- a) **Professional management:** The management of the investments i.e.; the decisions on purchase, sale and holding of the assets is done by professional investment managers instead of the ultimate investors
- b) **Diversification of risks:** As the money is pooled into a relatively larger sum, a mutual fund is better able to invest in many different types of assets (diversification of portfolio). This reduces the risk of fluctuations in returns associated with investing in a particular type of asset.

3. Functioning Of Mutual Funds:

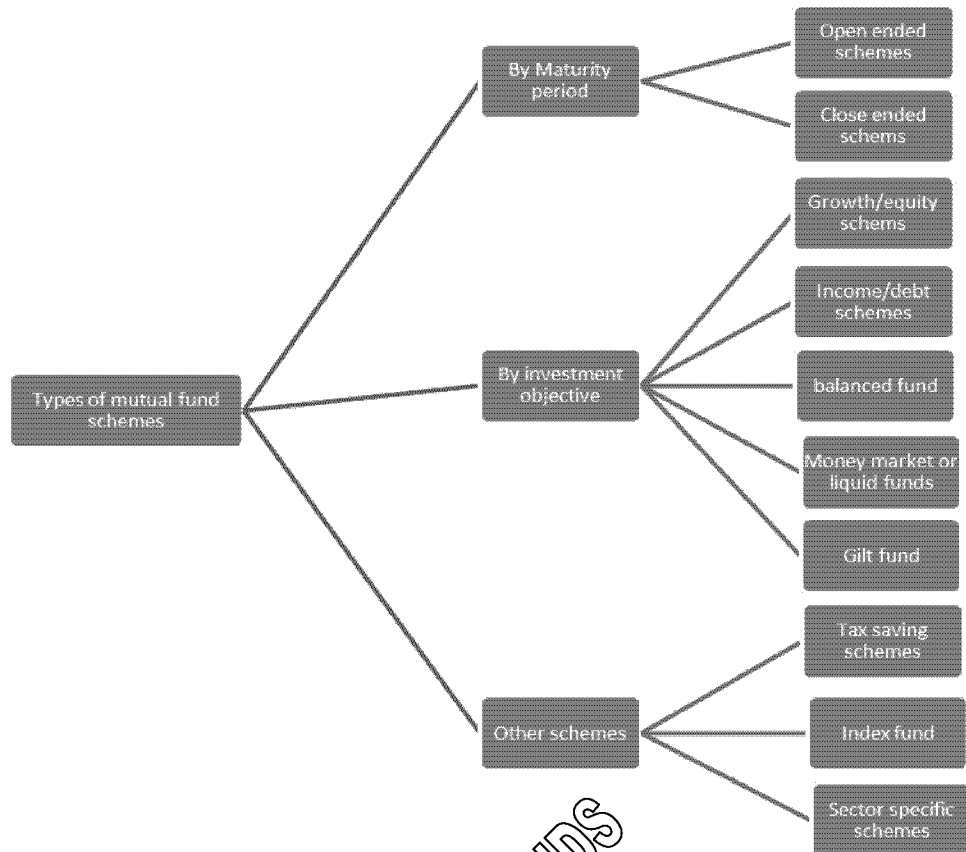
The following flow chart describes broadly the working of a mutual fund:



4. ORGANISATION OF MUTUAL FUNDS: A mutual fund is set up in the form of a trust, which has sponsor, trustees, Asset Management Company (AMC) and custodian.

- a) **Sponsor** - He is like a promoter of a company. A sponsor can be a big company, bank or financial institution.
- b) **Trustees** - Hold the property of the mutual fund for the benefit of its unit holders. Sponsor appoints the trustees.
- c) **Asset Management Company (AMC)** - approved by SEBI manages the funds by making investments in various types of securities. It is a company formed and registered under the companies act, 1956 or 2013 and approved as such by SEBI.
- d) **Custodian** - who is registered with SEBI, holds the securities of various schemes of the fund in its custody.

5. TYPES OF MUTUAL FUNDS: A wide variety of mutual fund schemes are there to serve the needs of the investors. The following chart gives an overview of various types of schemes:



a) **By maturity period:**

- i) **Open ended scheme:** Open ended schemes sell and repurchase units on a continuous basis. These schemes do not have a fixed maturity. Key feature of open ended fund is liquidity.
- ii) **Close ended schemes:** Close ended schemes offer units for subscription initially for a short time. After the subscription closes, redemption of units happens only at the end of the maturity period. To provide liquidity, such units are listed in stock exchanges.
- iii) **Interval schemes:** These are the schemes which combine the features of open ended and close ended schemes.

b) **By investment objective:**

- i) **Growth or equity schemes:** Invest primarily in equity shares and stocks. They provide higher dividend and capital appreciation, but the returns may fluctuate.
- ii) **Income or debt schemes:** Invest primarily in bonds, debentures, government securities. They provide steady income, but growth is limited.
- iii) **Balanced funds:** To provide income and capital appreciation through investment in both equity and debt securities. It is a mix of both equity and debt schemes.
- iv) **Money market or liquid fund:** These funds invest only in money market instruments like treasury bills, commercial paper and short term instruments. These funds provide easy liquidity.
- v) **Gilt funds:** These funds invest exclusively in government securities.

c) **Other schemes:**

- i) **Tax saving scheme:** These schemes offer tax rebates to the investor's. These schemes are equity oriented and invest predominantly in equities.
- ii) **Index schemes:** these schemes invest primarily in index stocks. The performance these funds are similar to the performance of index.
- iii) **Sector specific schemes:** These funds invest only in specific sectors as specified in the offer document.

6. NET ASSET VALUE (NAV) OF A SCHEME:

- NAV of mutual fund scheme is basically the per unit market value of all the assets of scheme. Simply stated, NAV is the value of the assets of each unit of the scheme.
- The performance of a mutual fund is denoted by the net asset value (NAV).
- The NAV of the mutual fund is determined as follows

Net asset value (NAV) =

Example: Scheme name: XYZ; Scheme size: Rs. 50,00,00,000 (Rupees Fifty crores); Face value of units: Rs. 10; No. of units : 5,00,00,000 (Scheme size/ face value of units) Investments: In shares; Market value of shares : Rs. 75,00,00,000 (Rupees seventy five crores)

$$\text{NAV} = \frac{\text{Market value of investments}}{\text{No. of units}} = \frac{75,00,00,000}{5,00,00,000} = \text{Rs. 15}$$

- Thus, each unit with face value of Rs. 10 has a market value of Rs. 15. Thus, if the NAV is more than the face value (Rs. 10), it means your money has appreciated and *vice versa*.
- NAV also includes dividends, interest accruals and reduction of liabilities and expenses, besides market value of investments. As per Regulation 48 (2) of SEBI (Mutual Funds) Regulations, 1996, NAV of the scheme shall be calculated on daily basis.

7. INVESTMENT VALUATION NORMS: The market value of investments should be determined on an individual investment basis or by category of investment basis, but not on an overall basis for the entire investment portfolio. The investments are valued on the following basis:

- Traded security:** Market value of traded security is the last closing price quoted in a stock exchange (where the security is mostly traded) immediately before the valuation day.
- Non – traded security:** Non-traded securities (i.e.; securities not traded in a period of 30 days prior to the valuation day), shall be valued “in-good faith” by the asset management company on the basis of appropriate valuation methods.

8. ACCOUNTING POLICIES APPLICABLE TO MUTUAL FUND:**a) Cost of investments:**

- Cost of investments acquired/purchased should include brokerage, stamp charges and any customary charge.
- In respect of privately placed debt instruments any front end discount offered should be deducted from the cost of the investment.
- “Average cost” method must be followed in determining holding cost of investments and gain or loss on sale of investments.

b) Purchase or sale of investments: Transactions for purchase or sale of investments should be recognized in the accounts on the trade date and not as of the settlement date to ensure proper recording of all investments traded during a financial year and their reflection in the financial statements.**c) Valuation of investments:**

- Investments should be marked to market and carried in the balance sheet at market value.
- Provision should be created for depreciation in the value of investments and charged to revenue account.
- However, a reserve should be created for unrealized gain arising out of appreciation of investments since such unrealized gain cannot be distributed as dividend income.

Journal entries:

For increase in value of investments		Amt.(Rs.)	Amt.(Rs.)
At the end of accounting year			
Investment A/c	Dr.	XXX	
	To unrealized appreciation Reserve A/c		XXX

At the beginning of next accounting year		
unrealized appreciation reserve A/c	Dr.	XXX
To Investment A/c		XXX
For decrease in value of investments		
Revenue A/c	Dr.	XXX
To Provision for depreciation A/c		XXX

d) **Recognition of income:**

- i) Dividend income is recognized when the share is quoted on ex-dividend basis and not on the date of declaration of dividend.
- ii) Interest income is recognized on the date of declaration, for investments not quoted on a stock exchange

e) **Bonus or rights issue:**

- i) **Bonus issue:** Bonus shares should be recognized only when the original shares on which the bonus entitlement accrues are traded on the stock exchange on the ex-bonus issue
- ii) **Rights issue:** Rights entitlements should be recognized only when the original shares on which the right entitlement accrues are traded on the stock exchange on the ex-right basis.

9. **DIVIDEND EQUALISATION:**

- a) To compensate for the old unit holders, an equalization payment is added to the cost of new units; for the amount of income that has arisen up to the date of purchase of the new units.
- b) Dividend equalization per unit = $\frac{\text{Income arisen upto the date of sale of investment}}{\text{No. of old units}}$
- c) Dividend equalization is required so as to bring parity between old investors and new investors.

Entries for sale of units and distribution of dividend:

For sale of units of an open ended scheme:		Amt.(Rs.)	Amt.(Rs.)
Bank A/c	Dr	XXX	
To Unit capital A/c			XXX
To Reserves A/c			XXX
To Dividend equalization A/c			XXX
For transfer of dividend equalization:			
Dividend equalization A/c (no.of units* dividend equalization per unit)	Dr	XXX	
To Revenue A/c			XXX
For distribution of dividend:			
Revenue A/c	Dr	XXX	
To Bank A/c (pre & post earnings + dividend equalization payment)			XXX

10. **MOVEMENT IN UNIT CAPITAL AND MOVEMENT OF UNIT HOLDER FUNDS:**

The movement in unit holder funds is disclosed as follows:

Particulars	No. of units (lakhs)	Rs.in (Lakhs)
Opening balance of net assets	XXX	XXX
Add: Par value of units sold	XXX	XXX
Add: Net income for the year	XXX	XXX
Add: Transfer from reserve or equalization fund	XXX	XXX
Less: Par value of units repurchased	(XXX)	(XXX)
Closing balance of net assets	XXX	XXX

PROBLEMS FOR CLASSROOM DISCUSSION

MODEL 1: PROBLEMS ON NET ASSET VALUE

PROBLEM NO 1: Sparrow Holdings is a SEBI Registered Mutual Fund which made its maiden N.F.O (New Fund Offer) on 10th April, 2018 at Rs. 10 face value per unit. Subscription was received for 90 lakhs units. An underwriting arrangement was also entered into with Affinity Capital Markets Ltd., that agreed to underwrite the entire NFO of 100 lakh units on a commission of 1.5%. Out of the monies received Rs.892.50 lakhs was invested in various capital market instruments. The marketing expenses for the N.F.O amounted to Rs. 11.25 lakhs. During the financial year ended March 2018 the Fund sold securities having cost of Rs. 127.25 lakh (FV Rs. 54.36 lakhs) for Rs. 141.25 lakhs. The fund in turn purchased securities for Rs. 130 lakhs. The management expenses of the fund are regulated by SEBI stipulations which state that the same shall not exceed 0.25% of the average funds invested during the year. The actual amount spent towards management expenses was Rs. 2.47 lakhs of which Rs. 47,000 was in arrear. The dividends earned on the investments held amounted to Rs. 2.51 lakhs of which a sum of Rs. 25,000 is yet to be collected. The fund distributed 80% of realized earnings. The closing market value of the portfolio was Rs. 1120.23 lakhs.

You are required to determine the closing per unit NAV of the fund.

(A)(NEW SM) (ANS.: NET ASSET VALUE PER UNIT – RS.12)
(SOLVE PROBLEM NO: 1 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: _____

PROBLEM NO 2: (PRINTED SOLUTION AVAILABLE) Calculate the NAV of a Mutual Fund Scheme from the information given below:

At the beginning of the year:

Number of units outstanding - 1 Crore units of Rs.10 each

Investment at cost - Rs.10 crores (Market Value Rs.16 crores)

Outstanding Liabilities - Rs.5 crores

Other Information:

- Additional 20 lakhs units were sold during the year at Rs.24.
- No additional investments were made during the year and as at the year-end, 50% of the investments at year beginning were quoted at 80% of the book value.
- 10% of the investments had witnessed a permanent fall of 10% below cost.
- The balance investments were quoted at Rs.13.60 crores.
- Outstanding liabilities towards custodian charges, salaries and commission etc. applicable to the scheme were 1 crore.

(B)(CA Final RTP - N14) (Ans.: Net asset value per unit – Rs.14.58)
(Solve Problem No: 2 & 3 of Assignment Problems as rework)

Note: _____

PROBLEM NO 3: (PRINTED SOLUTION AVAILABLE) On 1st April, 2018, Good Return Mutual Fund has the following Assets and prices at 3.00 p.m.

Shares of	No. of shares	Market price per share (Rs.)
A Ltd.	10,000	18.50
B Ltd.	35,000	384.40
C Ltd.	10,000	263.60
D Ltd.	75,000	575.60
E Ltd.	20,000	27.65

No. of units of fund 5,00,000 units

Calculate:

- Net asset value (NAV) of the Fund.
- Assuming Mr. Suresh, sent a cheque of Rs.75,00,000 to the Fund on 1st April, 2018 and Fund Manager purchases 15,000 shares of C Ltd. and balance is held in bank. What will be the new position of the fund?
- Calculate the new Net asset value (NAV) of the fund, if on 2nd April, 2018, at 3.00 p.m. the market price of shares is as follows:

Shares of	(Rs.)
A Ltd.	21.30
B Ltd.	417.00
C Ltd.	289.80
D Ltd.	512.20
E Ltd.	35.00

(B)(M16 – 8M) (ANS.: NAV OF THE FUND ON 1ST APRIL- RS.120; REVISED POSITION OF FUND –RS.6,74,98,000; NO. OF UNITS – 5,62,500; NAV OF THE FUND ON 2ND APRIL – RS.115.047)(SOLVE PROBLEM NO: 4 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: _____

MODEL 2: PROBLEMS ON APPRECIATION AND DEPRECIATION OF INVESTMENTS AND SALE OF INVESTMENTS

PROBLEM NO 4: The investment portfolio for a mutual fund scheme includes 10,000 shares of A Ltd. and 8,000 shares of B Ltd. acquired on 30.10.2017. The cost of A Ltd shares is Rs. 20 while that of B Ltd shares is Rs. 30. The market values of these shares at the end of 2017 -18 were Rs. 19 and Rs. 32 respectively. Suppose that shares of both of the companies were disposed off on 31.05.17 realizing Rs. 18.50 per A Ltd share and Rs. 33.50 per B Ltd share. Show important accounting entries in books of the fund in the accounting year 2017 – 18.

(A)(NEW SM) (SOLVE PROBLEM NO: 5&6 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: _____

MODEL 3: PROBLEMS ON DIVIDEND EQUALISATION

PROBLEM NO 5: On 1.4.2017 a mutual fund scheme had 9 lakh units of face value Rs.10 outstanding. The scheme earned Rs.81 lakh in 2017-18, out of which Rs.45 lakh was earned in first half-year. 1lakh units were sold on 30.09.17 at NAV of Rs.60. Show important accounting entries for sale of units and distribution of dividend at the end of 2017-18.

(A) (NEW SM) (SOLVE PROBLEM NO: 7 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: _____

MODEL 4: PROBLEMS ON ACCOUNTING OF INVESTMENTS

PROBLEM NO 6: (PRINTED SOLUTION AVAILABLE) A fund purchased 10,000 debentures of a company on 1st June, 2017 for Rs.10.7 lakh and further 5,000 debentures on 1st Nov, 2017 for Rs. 5.45 lakh. The debentures carry fixed annual coupon of 12%, payable on every 31st March and 30th September. On Feb 28th, 2018 the fund sold 6,000 of these debentures for Rs.6.78 lakh. Nominal value per debenture is Rs.100.Show Investment in Debentures A/c in books of the fund.

(A)(NEW SM) (CA INTER MTP M18)(ANS.: CLOSING BALANCE OF INVESTMENT IN DEBENTURES A/C IS 9.54 LAKHS)

Note: _____

MODEL 5: PROBLEMS ON MOVEMENT OF UNIT HOLDER FUNDS

PROBLEM NO 7: Investors Mutual Fund is registered with SEBI and having its registered office at Pune. The fund is in the process of finalizing the annual statement of accounts of one of its open ended mutual fund schemes. From the information furnished below, you are required to prepare a statement showing the movement of unit holders funds for the financial year ended 31st March, 2018.

Particulars	Rs.'000
Opening Balance of net assets	12,00,000
Net Income for the year (Audited)	85,000
8,50,200 units issued during 2017-2018	96,500
7,52,300 units redeemed during 2017-2018	71,320
The par value per unit is Rs. 100	

(A)(NEW SM) (ANS.: CLOSING BALANCE OF NET ASSETS – RS.13,10,180)

MODEL 6: PROBLEMS ON YIELD FROM VARIOUS SCHEMES

PROBLEM NO 8: (PRINTED SOLUTION AVAILABLE) Ramesh Goyal has invested in three mutual funds. From the details given below, find out effective yield on per annum basis in respect of each of the schemes to Ramesh Goyal upto 31-03-2018.

Mutual Fund	X	Y	Z
Date of Investment	1-12-2017	1-1-2018	1-3-2018
Amount of investment (Rs.)	1,00,000	2,00,000	1,00,000
NAV at the date of investment (Rs.)	10.50	10.00	10.00
Dividend received upto 31-3-2017 (Rs.)	1,900	3,000	Nil
NAV as on 31-3-2017 (Rs.)	10.40	10.10	9.80

(A)(NEW SM)(SIMILAR: M18-5M) (ANS.: EFFECTIVE YIELD RA OF SCHEME X-2.87%; SCHEME Y-10.14%; SCHEME Z-(23.55%)

(SOLVE PROBLEM NO: 8 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: _____

ASSIGNMENT PROBLEMS

PROBLEM NO 1: Calculate the year-end NAV of the Mutual Fund scheme on the basis of the information given below:

- UTI launched a new Fund scheme for Rs. 6,000 crore.
- Underwriting Commission is 1% of the fund shared equally by SBI, PNB, Syndicate Bank and UTI Bank.
- The Fund was launched on 1.4.2017 with a face value of Rs. 1000 per unit.
- Underwriting Commission was paid in full.
- Management Expense was allowed by SEBI @ 1% of the Fund raised. However, during the year management expense was of Rs.45 crore only. The management decided to defer the payment of Rs. 5crore to the next financial year.
- On 1.5.2018, the total fund received was invested after deduction of underwriting commission and Rs.100 crore to meet the day to day management expenses. The investment fund received yielded 10% interest per annum. The interest was received for 3 quarters and the interest of last quarter is yet to be received. The interest realized in cash has been distributed to the unit holders @ 80%. The financial year runs from April to March. The quarter starts from the date of investment i.e. 1.5.2018.

(A) (NEW SM) (ANS.: NET ASSET VALUE PER UNIT – Rs.1013.32)

PROBLEM NO 2: A Mutual Fund raised 100 lakh on April 1, 2018 by issue of 10 lakh units of Rs. 10 per unit. The fund invested in several capital market instruments to build a portfolio of Rs. 90 lakhs. The initial expenses amounted to Rs. 7 lakh. During April, 2018, the fund sold certain securities of cost Rs. 38 lakhs for Rs. 40 lakhs and purchased certain other securities for Rs. 28.20 lakhs. The fund management expenses for the month amounted to Rs. 4.50 lakhs of which Rs. 0.25 lakh was in arrears. The dividend earned was Rs. 1.20 lakhs. 75% of the realized earnings were distributed. The market value of the portfolio on 30.04.2018 was Rs. 101.90 lakh. Determine NAV per unit.

(A)(NEW SM) (ANS.: NET ASSET VALUE PER UNIT – RS.11.10)

PROBLEM NO 3: A Mutual Fund raised 100 lakh on April 1, 2018 by issue of 10 lakh units of Rs. 10 per unit. The fund invested in several capital market instruments to build a portfolio of Rs. 90 lakhs. The initial expenses amounted to Rs. 5 lakh. During April, 2018, the fund sold certain securities of cost Rs. 38 lakhs for Rs. 40 lakhs and purchased certain other securities for Rs. 28.20 lakhs. The fund management expenses for the month amounted to Rs. 4.50 lakhs of which Rs. 0.35 lakh was in arrears. The dividend earned was Rs. 1.20 lakhs. 75% of the realized earnings were distributed. The market value of the portfolio on 30.04.2018 was Rs. 112 lakh. Determine NAV per unit.

(B)(CA INTER MTP M18)(ANS.: NET ASSET VALUE PER UNIT – RS.12.31)

PROBLEM NO 4: On 1st April, 2018, Fair Return Mutual Fund has the following shares and prices at 3.00 p.m.

Shares of	No. of shares	Market price per share (Rs.)
P Ltd.	5,000	19.70
Q Ltd.	25,000	482.60
R Ltd.	5,000	264.40
S Ltd.	50,000	674.90
T Ltd.	15,000	25.90

No. of units of fund 4,00,000 units

Calculate:

- NAV of the Fund.
- Assuming Mr. Mohan, sent a cheque of Rs.25,00,000 to the Fund on 1st April, 2018 and Fund Manager purchases 9,000 shares of R Ltd. and balance is held in bank. What will be the new position of the fund?
- Now suppose on 2nd April 2018, at 3.00 p.m. the market price of shares is as follows:

Shares of	(Rs)
P Ltd.	20.30
Q Ltd.	513.70
R Ltd.	290.80
S Ltd.	671.90
T Ltd.	44.20

Calculate the new NAV?

(B)(CA FINAL RTP M14) (ANS.: NAV OF THE FUND ON 1ST APRIL- RS 119.0475; REVISED POSITION OF FUND – RS.5,01,19,000; NAV OF THE FUND ON 2ND APRIL- RS 122.075)

PROBLEM NO 5: The investment portfolio of a mutual fund scheme includes 5,000 shares of X Ltd. and 4,000 shares of Y Ltd. acquired on 31-12-2016. The cost of X Ltd. shares is Rs.40 while that of Y Ltd. shares is Rs.60. The market value of these shares at the end of 2016-17 were Rs. 38 and Rs. 64 respectively. On 30-06-2017, shares of both the companies were disposed off realizing Rs. 37 per X Ltd's share and Rs. 67 per Y Ltd's share. Show important accounting entries in the books of the fund for the accounting years 2016-17 and 2017-18.

(A)(NEW SM)

PROBLEM NO 6: The investment portfolio for a mutual fund scheme includes 25,000 shares of Sun Ltd. @Rs.20 each and 20,000 shares of Moon Ltd. @Rs.30 each acquired on 31.10.2016. The market value of these shares at the end of 2016-17 were Rs. 19 and Rs. 32 respectively. On 31.05.17, shares of both the companies were disposed off realizing Rs.18.50 per share of Sun Ltd. And Rs.33.50 per share of Moon Ltd. Pass important accounting entries in books of the fund for the accounting year 2016 -17 and 2017 –18.

(B) (CA FINAL RTP N15)

PROBLEM NO 7: On 1.4.2017, a mutual fund scheme had 18 lakh units of face value of Rs. 10 each was outstanding. The scheme earned Rs. 162 lakhs in 2017-18, out of which Rs. 90 lakhs was earned in the first half of the year. On 30.9.2017, 2 lakh units were sold at a "NAV" of Rs. 70. Pass Journal entries for sale of units and distribution of dividend at the end of 2017- 18.

(A) (NEW SM)

PROBLEM NO 8: Amar has invested in two mutual funds. From the details given below, you are required to calculate effective yield on per annum basis in respect of each of the schemes to Amar upto 31-03-2018.

Mutual Fund	X	Y
Date of Investment	1-12-2017	1-1-2018
Amount of investment (Rs.)	2,00,000	4,00,000
NAV at the date of investment (Rs.)	10.50	10.00
Dividend received upto 31-3-2017 (Rs.)	3,800	6,000
NAV as on 31-3-2017 (Rs.)	10.40	10.10

(B)(ANS.: EFFECTIVE YIELD P.A OF SCHEME X-2.87%; SCHEME Y-10.14%)(CA INTER RTP M18)

PRINTED SOLUTIONS TO SOME SELECTIVE PROBLEMS

PROBLEM NUMBERS TO WHICH SOLUTIONS ARE PROVIDED: 2, 3, 6, 8.

PROBLEM NO. 2

Calculation of NAV of a Mutual Fund Scheme

Units as at the end of the year		Units in Crores
Number of units at the beginning of the year		1.00
Add: Units issued during the year		0.20
Units as at end of the year		1.20
Net Asset Value of the scheme		Rs. in crores
Market value of Investments	(50% of Rs. 10 crores) x80%	4.00
	10% x Rs. 10 crores -(10% below cost)	0.90
	Balance Investment at Market Price	13.60
Total Market Value		18.50
Less : Mutual fund scheme liabilities		(1.00)
Net asset value of the scheme		17.50
NAV per Unit= B/A=	Rs. 17.50 crore/1.2 crore	Rs. 14.58

PROBLEM NO. 3

a) NAV of the Fund:

$$= \frac{\text{Rs. } 1,85,000 + \text{Rs. } 1,34,54,000 + \text{Rs. } 26,36,000 + \text{Rs. } 4,31,70,000 + \text{Rs. } 5,53,000}{5,00,000}$$

$$= \frac{\text{Rs. } 5,99,98,000}{5,00,000} = \text{Rs. } 119.996 \text{ rounded off as Rs. } 120.$$

b) The revised position of the fund on 1st April 2018 shall be as follows

Shares	No. of shares	Price	Amount (Rs.)
A Ltd.	10,000	18.50	1,85,000
B Ltd.	35,000	384.40	1,34,54,000

C Ltd.	(10000+15000)25000	263.60	65,90,000
D Ltd.	75,000	575.60	4,31,70,000
E Ltd.	20000	27.65	5,53,000
Cash[75,00,000-(15,000x263.60)]			<u>35,46,000</u>
			<u>6,74,98,000</u>

$$\text{No. of units of funds} = 5,00,000 + \frac{75,00,000}{120} = 5,62,500 \text{ units}$$

c) On 2nd April 2018, the new NAV of the fund will be as follows

Shares	No. of shares	Price	Amount(Rs.)
A Ltd.	10,000	21.30	2,13,000
B Ltd.	35,000	417.00	1,45,95,000
C Ltd.	25,000	289.80	725,45,000
D Ltd.	75,000	512.20	3,84,15,000
E Ltd.	20,000	35.00	7,00,000
Cash			<u>35,46,000</u>
			<u>6,47,14,000</u>

$$\text{NAV as on 2nd April 2018} = \frac{\text{Rs.6,47,14,000}}{5,62,500} = \text{Rs.115.047 Per unit}$$

PROBLEM NO. 6

Investment in Debentures A/c

		Rs. Lakh			Rs. Lakh
June 1, 2017	To Bank	10.70	June 1, 2017	By Interest Recoverable (Note 1)	0.20
Nov 1, 2017	To Bank	5.45	Nov 1, 2017	By Interest Recoverable (Note 2)	0.05
Feb 28, 2018	To Interest Recoverable (Note 3)	0.30	Feb 28, 2018	By Bank	6.78
Feb 28, 2018	To Profit on disposal (Note 4)	0.12	Mar 31, 2018	By Balance c/d	9.54
		<u>16.57</u>			<u>16.57</u>

Working Notes:

Note 1: $10,000 \times 100 \times 12/100 \times 2/12 = \text{RS } 0.20 \text{ Lakhs}$

Note 2: $5,000 \times 100 \times 12/100 \times 1/12 = \text{Rs.0.05 Lakhs}$

Note 3: $6,000 \times 100 \times 12/100 \times 5/12 = \text{Rs. } 0.30 \text{ Lakhs}$

Note 4: Cost of investments (per unit) = $[(10,70,000 - 20,000) + (5,45,000 - 5,000)] / 15,000 \text{ units}$
 $= [10,50,000 + 5,40,000] / 15,000 = \text{RS } 106$

Cost of investments sold = $\text{Rs. } 106 \times 6,000 = \text{Rs. } 6,36,000$

Sale proceeds = $\text{Rs. } 6,78,000 - \text{RS } 30,000 (\text{interest}) = \text{Rs. } 6,48,000$

Profit = $\text{Rs. } 6,48,000 - \text{Rs. } 6,36,000 = \text{Rs. } 12,000$

PROBLEM NO. 8

Calculation of effective yield on per annum basis in respect of three mutual fund schemes of Ramesh Goyal upto 31.03.2018

		X	Y	Z
1	Amount of Investment (Rs.)	1,00,000	2,00,000	1,00,000
2	Date of investment	1.12.2017	1.1.2018	1.3.2018

3	NAV at the date of investment (Rs.)	10.50	10.00	10.00
4	No. of units on date of investment [1/3]	9,523.809	20,000	10,000
5	NAV per unit on 31.03.2018 (Rs.)	10.40	10.10	9.80
6	Total NAV of mutual fund investments on 31.03.2018 [4 x 5]	99,047.61	2,02,000	98,000
7	Increase/ decrease of NAV [6-1]	(952.39)	2,000	(2,000)
8	Dividend received upto 31.3.2018	1,900	3,000	Nil
9	Total yield [7+8]	947.61	5,000	(2,000)
10	Yield % [9/1] x 100	0.95%	2.5%	(2%)
11	Number of days	121	90	31
12	Effective yield p.a. [10/11] x 365 days	2.87%	10.14%	(23.55%)

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THE END

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