MUTUAL FUNDS CLASS 1 HOME WORK SUPPORT COVERAGE

Question			Answer			Lecture Time
Q. No	Page no.	Book	Q. No	Page no.	Book	
15	54	HW Q BOOK	15	150	HW ANS BOOK	00:00:31 - 00:10:17
12	52	HW Q BOOK	12	147	HW ANS BOOK	00:10:18 - 00:12:46
13	53	HW Q BOOK	13	148	HW ANS BOOK	00:12:47 – 00:14:35
21	56	HW Q BOOK	21	155	HW ANS BOOK	00:14:36 – 00:19:02

PART III: VARIOUS TYPES OF PLAN

Topic 12 TYPES OF PLAN

Question 15: SSEI HW Book Page No. 54

A Mutual Fund having 300 units has shown its NAV of ₹ 8.75 and ₹ 9.45 at the beginning and at the end of the year respectively. The Mutual Fund has given two options:

i. Pay ₹ 0.75 per unit as dividend and ₹ 0.60 per unit as a capital gain, or

ii. These distributions are to be reinvested at an average NAV of ₹ 8.65 per unit.

What difference it would make in terms of return available and which option is preferable?

(*Source: ICAI*)

ANSWER:

i. Returns for the year
(All changes on a Per -Unit Basis)

Change in Price:	₹ 9.45 – ₹8.75 = ₹ 0.70
Dividends received:	₹ 0.75
Capital gains distribution	₹ 0.60
Total reward	₹ 2.05
Holding period reward:	$\frac{₹\,2.05}{₹\,8.75} \times 100 = 23.43\%$

ii. When all dividends and capital gains distributions are re-invested into additional units of the fund @ (₹ 8.65/unit)

Dividend + Capital Gains per unit = ₹ 0.75 + ₹ 0.60 = ₹ 1.35
Total received from 300 units = ₹1.35 x 300 = ₹405/-.
Additional Units Acquired = ₹405/₹8.65 = 46.82 Units.
Total No. of Units = 300 units + 46.82 units = 346.82 units.
Value of 346.82 units held at the end of the year = 346.82 units x ₹9.45 = ₹3277.45
Price Paid for 300 Units at the beginning of the year = 300 units x ₹8.75 = ₹2,625.00

Holding Period Reward

₹ (3277.45 – 2625.00) = ₹652.45
Holding Period Reward (₹652.45/ 2625.00)×100 = 24.85%

Conclusion: Since the holding period reward is more in terms of percentage in option-two i.e., reinvestment of distributions at an average NAV of ₹8.65 per unit, this option is preferable.

PART III: VARIOUS TYPES OF PLAN

Topic 12 TYPES OF PLAN

Question 12: **SSEI HW Book Page No. 52**

Z has Mutual Fund having 500 units has shown its NAV of ₹ 9.45 and ₹ 10.25 at the beginning and at the end of the year respectively. The Mutual Fund has given two options:

i. Pay ₹ 0.85 per unit as dividend and ₹ 0.70 per unit as a capital gain, or

ii. These distributions are to be reinvested at an average NAV of ₹ 9.55 per unit.

Advice which option is preferable and what difference it would make in terms of return available.

(Source: ICAI)

ANSWER:

i. Returns for the year

(All changes on a Per -Unit Basis)

Change in Price:	₹ 10.25 – ₹9.45 =	₹ 0.80
Dividends received:		₹ 0.85
Capital gains distribution		₹ 0.70
Total reward		₹ 2.35

Holding period reward: $\frac{2.35}{9.45} \times 100 = 24.87\%$

ii. When all dividends and capital gains distributions are re-invested into additional units of the fund @ (₹9.55/unit)

Dividend + Capital Gains per unit = ₹ 0.85 + ₹ 0.70 = ₹ 1.55

Total received from 300 units = ₹ 1.55 x 500 = ₹ 775/-.

Additional Units Acquired = ₹ 775/₹ 9.55 = 81.15 Units.

Total No. of Units = 500 units + 81.15 units = 581.15 units.

Value of 581.15 units held at the end of the year = 581.15 units x ₹10.25 = ₹ 5956.79

Price Paid for 500 Units at the beginning of the year = 500 units x ₹9.45 = ₹ 4725.00

Holding Period Reward

₹ (5956.79 – 4725.00) = ₹ 1231.79

Holding Period Reward = (1231.79/ 4725)× 100 = 26.07%

Conclusion: Since the holding period reward is more in terms of percentage in option -two i.e., reinvestment of distributions at an average NAV of ₹9.55 per unit, this option is preferable.

PART III: VARIOUS TYPES OF PLAN

Topic 12 TYPES OF PLAN

Question 13: **SSEI HW Book Page No. 53**

An investor purchased 300 units of a Mutual Fund at Rs. 12.25 per unit on 31st December, 2009.

As on 31st December, 2010 he has received Rs. 1.25 as dividend and Rs. 1.00 as capital gains distribution per unit.

Required:

i. The return on the investment if the NAV as on 31st December, 2010 is Rs. 13.00.

ii. The return on the investment as on 31st December, 2010 if all dividends and capital gains distributions are reinvested into additional units of the fund at Rs. 12.50 per unit.

(*Source: ICAI*)

ANSWER:

Return for the year (all changes on a per year basis)

Particulars	**Rs. /Unit**
Change in price (Rs. 13.00 – Rs. 12.25)	0.75
Dividend received	1.25
Capital gain distribution	1.00
Total Return	3.00

$$\text{Return on investment} = \frac{3.00}{12.25} \times 100 = 24.49\%$$

Alternatively, it can also be computed as follows:

$$\frac{(NAV_1 - NAV_0) + D_1 + CG_1}{NAV_0} X 100$$

$$= \frac{(13 - 12.25) + 1.25 + 1.00}{12.25} X 100$$

$$= 24.49\%$$

If all dividends and capital gain are reinvested into additional units at Rs. 12.50 per unit the position would be.

Total amount reinvested = Rs. 2.25 × 300 = Rs. 675

Additional units added = ₹ 675/ 12.50 = 54 units

Value of 354 units as on 31-12-2010 = Rs. 4,602

Price paid for 300 units on 31-12-2009 (300 $\times$ Rs. 12.25) = Rs. 3,675

$$\text{Return} = \frac{₹\ 4{,}602 - ₹\ 3{,}675}{₹\ 3{,}675} = \frac{₹\ 927}{₹\ 3{,}675} = 25.22\%$$

PART IV: PERFORMANCE EVALUATION AND OTHER TOPICS

Topic 15 DIVIDEND EQUALISATION

Question 21: SSEI HW Book Page No. 56

On 1st January, 2020, an open ended scheme of mutual fund had outstanding units of 300 lakhs with a NAV of ₹ 20.25. At the end of January 2020, it had issued 5 lakhs units at an opening NA V plus a load of 2%, adjusted for dividend equalisation. At the end of February 2020, it had repurchased 2.5 lakhs units at an opening NAV less 2% exit load adjusted for dividend equalisation. At the end of March 2020, it had distributed 70 per cent of its available income. In respect of January - March quarter, the following additional information is available:

Value appreciation of the portfolio	₹ 460 lakhs
Income for January	₹ 24 lakhs
Income for February	₹ 36 lakhs
Income for March	₹ 47 lakhs

You are required to calculate:

i. Income available for distribution
ii. Issue price at the end of January
iii. Repurchase price at the end of February
iv. Closing Value of Net Assets at the end of March.

(Source: ICAI)

ANSWER:

i. Calculation of Income Available for Distribution

	Units (Lakh)	Per Unit (₹)	Total (₹ In lakh)
Income from January	300	0.0800	24.0000
Add: Dividend equalization collected on issue	5	0.0800	0.4000
	305	0.0800	24.4000
Add: Income from February		0.1180	36.0000
	305	0.1980	60.4000
Less: Dividend equalization paid on repurchase	2.50	0.1980	(0.4950)
	302.50	0.1980	59.9050
Add: Income from March		0.1554	47.0000
	302.50	0.3534	106.9050
Less: Dividend Paid		0.2474	(74.8335)
	302.50	0.1060	32.0715

ii. Calculation of Issue Price at the end of January

	₹
Opening NAV	20.250
Add: Entry Load 2% of ₹ 20.25	0.405
	20.655
Add: Dividend Equalization collected on Issue Price	0.080
	20.735

iii. Calculation of Repurchase Price at the end of February

	₹
Opening NAV	20.250
Less: Exit Load 2% of ₹ 20.250	(0.405)
	19.845
Add: Dividend Equalization paid on Issue Price	0.198
	20.043

iv. Closing NAV at the end of March

		₹ (Lakh)
Opening Net Asset Value (₹ 20.25 × 300)		6075.000
Portfolio Value Appreciation		460.000
Issue of Fresh Units (5 × 20.735)		103.675
Income Received (24 + 36 + 47)		107.000
		6745.675
Less: Units repurchased (2.5 × 20.043)	- 50.1075	
Income Distributed	-74.8335	(-124.941)
Closing Net Asset Value		6620.734
Closing Units (300 + 5 – 2.5) lakh		302.50 lakh
Closing NAV as on 31st March		₹ 21.8867