SUGGESTED SOLUTION

FINAL May 2019 EXAM

Strategic Financial Management

Prelims (Test Code - F N J 5 1 0 5)

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Ans. 1

(a)

Computation of Market Price per share = PV of Inflows

Year	Nature	Cash Flow	PVF @ 17.50%	DCF
1	Dividend	(`5 + 10%) = 5.500	0.8511	4.6811
2	Dividend	(`5.500 + 10%) = 6.050	0.7243	4.3820
3	Dividend	(`6.050 + 12%) = 6.776	0.6164	4.1767
4	Dividend	(`6.776 + 12%) = 7.589	0.5246	3.9812
5	Dividend	(`7.589 + 12%) = 8.500	0.4465	3.7953
6	Dividend	(`8.500 + 12.50%) = 9.562	0.3800	3.6336
7	Dividend	(`9.562 + 12.50%) = 10.758	0.3234	3.4791
7	MP at end of $Y_7 = \frac{D_8}{K_e - g}$	$\frac{Rs.10.758 \times (1.11)}{17.50\% - 11\%} = 183.71$	0.3234	59.4118
	Market Price			**`87.5408**

Market Price of Mahesh Ltd's shares should be `87.5408.

(b) Hedge Ratio $= \frac{\text{SD of Change in Spot Price of Asset}}{\text{SD of Change in Future Price of Underlying Asset}} \times$ Corr. between Change in Spot & Futures Price

$= \frac{\sigma_S}{\sigma_F} \times \rho FS = \frac{0.04}{0.06} \times 0.75 = 0.50$

Hence, to have a perfect hedge, the amount to be invested in Copper Futures should be half of amount invested in Asset.In Quantity Terms, Sell Futures Contract should be entered for Rs 2370000.

(c)

Issue Price = Present Value of Future Cash Outflows

Year	Nature	`	Disc. Factor @ 16%	Discounted Cash Flow
1-4	Interest	9% ×`100 =`9	2.798	`25.18
5-8	Interest	10% ×`100 =`10	4.344-2.798 = 1.546	`15.46
9-10	Interest	14% ×`100 =`14	4.833 - 4.344 = 0.489	`6.85
10	Maturity Proceeds	`100 + 5% =`105	0.227	`23.84
	Total			**`71.33**

(d)

1. Cost of Future =`17.50
2. Cost of Pepper = Present Value of Exercise Price + Value of Call - Value of Put =`0.45-0.58 + 18 =**`17.87**
3. **Conclusion:** Since there is difference between Spot Price and Futures Price, Arbitrage opportunity exists.

Ans. 2

(a)

Particulars	`Crores
1. Listed Shares (Cost 20.00 × $\frac{\text{Present Index } 2{,}300}{\text{Previous Index } 1{,}000}$)	46.00
2. Cash in Hand	1.23
3. Bonds and Debentures at Cost	
a. Unlisted / Unquoted Bonds (Cost 1.00 Less 20% Diminution)	0.80
b. Listed Bonds and Debentures	8.00
c. Other Fixed Interest Securities (Cost `4.50 Cr. x Current Realizable Value 106.50 ÷ FV `100.00)	4.79
4. Dividend Accrued	0.80
Total of Assets	**61.62**
1. Amount Payable on Shares	6.32
2. Expenditure Accrued	0.75
Total of Liabilities	**7.07**
Net Asset Value (`Crores)	**54.55**

No. of Units Outstanding (in Crores)	**0.20**
NAV Per Unit $= \frac{\text{Net Assets of the Scheme}}{\text{Number of Units outstanding}} = \frac{54.55}{0.20} =$	**`272.75**

(b)

1. Computation of Buy Rate for the Bank

Facts : The Bank has sold HKD to its customer. Therefore, to cover itself, the Bank would have bought HKD from London Market. Therefore, Bid Rate is relevant. Relevant rate for Banks opposite position is Ask Rate.

`/ HKD Ask Rate	=	`/ US $ [Ask Rate] × US $ / HK $ [Ask Rate]
`/ HKD Ask Rate	=	`/ US $ [Ask Rate] × 1 ÷ HKD / US $ [Ask Rate]
Therefore, `/HKD	=	`42.85 / US $ × 1 ÷ 7.5880
	=	**`5.6471 per HKD**

2. Computation of Gain / Loss to Bank

Particulars	**Value**
Rate at which Bank has sold HKD to the customer	`5.7000
Less: Rate at which Bank has bought HKD from London Market	(`5.6471)
Gain per HKD Sold	**`0.0529**
HKD Sold	**100 Lakhs**
Total Gain to Bank [HKD 100 Lakhs ×`0.0529 per HKD]	**`5.29 Lakhs**

Ans. 3

(a)

1. Computation of Annual Depreciation

Particulars	**`**
Purchase Price	20,00,000
Add: Carriage Inward and Installation Charges	15,000
Add: Cost of Training Workers to handle new machine	5,000
Add: Fees paid to Consultant for advice	10,000
Total Cost of New Machine	**20,30,000**
Useful Life	**10 Years**
Annual Depreciation (Total Cost ÷ No. of Years)	**2,03,000**

2. Computation of Annual Cash Savings

Particulars	**`**
Annual Savings (Assumed to be after Depreciation)	2,00,000
Less: Tax on Annual Savings (`2,00,000 × 50%)	(1,00,000)
Savings After Tax	1,00,000
Add: Depreciation on New Machinery (Non-Cash Item)	2,03,000
After Tax Cash Savings	**3,03,000**

3. Net Salvage Value of Existing Machinery

Particulars	**`**
Proceeds on Sale	20,000
Less: Cost of Removal	(5,000)
Net Proceeds	15,000
Less: WDV	(50,000)
Net Loss Due to Sale	(35,000)
Tax Savings due to Loss on Sale (Loss `35,000 × 50%)	17,500
Total Cash Inflow due to Sale (Sale Proceeds 15,000 + Tax Savings 17,500)	**32,500**

4. Computation of Net Present Value

Particulars	**Net Cash Flow**	**Period**	**Disc. Factor**	**Disc. Cash Flow**
(a) Annual After Tax Cash Savings	3,03,000	1 - 10	6.145	18,61,935
(b) Net Salvage Value of Existing Machinery	32,500	0	1.000	32,500
(c) Working Capital Funds released	10,000	10	0.386	3,860

Present Value of Cash Inflows				**18,98,295**
Less: Initial Investment in Equipment [Total `20,30,000 -Consultant Charges already paid `10,000]	20,20,000	0	1.000	(20,20,000)
Less: Initial Investment in Working Capital	10,000	0	1.000	(10,000)
Net Present Value of the Proposal				**(1,31,705)**

Recommendation: Incremental Cash Flow due to the use of new machine is negative. Therefore, the proposalshould not be implemented by the Company.

(b)

Particulars	**Alternative 1**	**Alternative 2**
1. Supplier's Credit	60 Days Nil Interest	90 Days (30 Days Credit@ 7.75% p.a.)
2. Bank Loan	30 Days @ 9.5% p.a.	NA
3. Amount in USD	1 Crore	1 Crore
4. Applicable Forward Rate	63.15	63.45
5. Amount in `[(c) ×(d)]	63.15 Crores	63.45 Crores
6. Interest in `	[63.15× 9.5% × 30/365] = 0.5 Crores	[63.45× 7.75% ×30/365] = 0.41 Crores
7. Total Cash Outflow [(e)+(f)]	63.65Crores	`63.86 Crores

Conclusion: Alternative 1 is better because of lower Cash Outflow.

Ans. 4

(a)

1. Market Value before Merger

Particulars	**RIL**	**SIL**
1. Market Value = EAT × PE Multiple	(`20 Lakhs × 10) =`200 Lakhs	(`10 Lakhs × 5) =`50 Lakhs
2. Market Price per Share =EPS × PE Multiple	(`2 × 10) =`20	(`1 × 5) =`5

2. Market Value of RIL Post Merger

Particulars	**w/o Synergy**	**With Synergy**
1. Total Earnings of RIL after Merger= RIL 20 + SIL 10 + Synergy 20% thereon	**`30.00 Lakhs**	**`36.00 Lakhs**
2. Total Number of Shares Outstanding After Merger= Present 10,00,000 + now issued 2,50,000 (See Note below) =	**12.50 Lakhs**	**12.50 Lakhs**
3. EPS = a ÷ b [Total Earnings ÷ Total Shares]	`2.40	`2.88
4. Market Price Per Share= EPS × PE Multiple 10 times	**`24**	**`28.8**
5. Market Value = [MPS × No. of Shares Outstanding] = (d × b)	**`300 Lakhs**	**`360 Lakhs**

Note: No. of Shares issued to SIL = 1 RIL Share for 4 SIL Shares = (10 Lakhs SIL Shares × $1/4^{th}$)=**2,50,000 RIL Stores**

3. Computation of Gain / Loss to Shareholders

Particulars	**Without Synergy**		**With Synergy**	
For Shareholders of	**RIL**	**SIL**	**RIL**	**SIL**
No. of Shares in RIL (Post Merger) held by Shareholders	10 Lakhs	2.5 Lakhs	10 Lakhs	2.5 Lakhs
Market Price per Share	`24	`24	`28.80	`28.80
Market Value after Merger	`240 Lakhs	`60 Lakhs	`288 Lakhs	`72 Lakhs
Less: Market Value Before Merger	(`200 Lakhs)	(`50 Lakhs)	(`200 Lakhs)	(`50 Lakhs)
Gain to Shareholders	**`40 Lakhs**	**`10 Lakhs**	**`88 Lakhs**	**`22 Lakhs**

Evaluation : Shareholders will be better off in terms of wealth due to Merger, in both cases.

(b)

Particulars	If Actual Rate is 9.60%	If Actual Rate is 8.80%
Forward Rate quoted by Bank	9.30%	9.30%
Profit / (Loss)	Since the Actual Rate is higher than the FRA, the profit is 9.60 - 9.30 = 0.30	Since the Actual Rate is lower than the FRA, the Loss is 8.80 - 9.30 = (0.50)
Profit / (Loss) on Settlement **(See Note Below)**	60Crores $\times \frac{(0.096-0.093)\times\left(\frac{3}{12}\right)}{1+0.096\left(\frac{3}{12}\right)}$ = 60 Crores × (0.00075 ÷ 1.024) = 4,39,453	60 Crores $\times \frac{(0.088-0.093)\times\left(\frac{3}{12}\right)}{1+0.080\left(\frac{3}{12}\right)}$ = 60 Crores × (0.00125 ÷ 1.02) = (7,35,294)

Note: Profit / (Loss) on Settlement is identified using the following -

Profit / (Loss) = Principal $\times \frac{(\boldsymbol{ActualRate-ForwardRate})\times\left(\frac{\boldsymbol{Period}}{\boldsymbol{12}}\right)}{\boldsymbol{1+ActualRate}\left(\frac{\boldsymbol{Period}}{\boldsymbol{12}}\right)}$

Ans. 5

(a)

1. Current Price of the Instrument

Discount on the Bond = $100 \times \frac{45}{360} \times 6\% =$`0.75

Current Price of Bond = Face Value - Discount =`100 - `0.75 =**`99.25**

2. Bond Equivalent Yield (using simple compounding)

Bond Equivalent Yield = $\frac{\text{Face Value} - \text{Current Price}}{Current\ Price} \times \frac{360 days}{45 days} = \left[\frac{100.00-99.25}{99.25}\right] \times \frac{360}{45} \times 100 =$**6.045% p.a.**

Alternatively, Bond Equivalent Yield = $\frac{Coupon\ Rate}{Current\ Price} = \frac{6}{99.25} =$**6.045% p.a.**

3. **Effective Annual Return:**Here, the Return is compounded **periodically**, i.e. once in 45 days (period to maturity of the Bond). So, Effective Annual Return = $[(1+R)^{NK} - 1] = \left[\left(1+\frac{0.06045}{8}\right)^{\frac{360}{45}}\right] - 1 =$**6.21% p.a.**

Note : Here, **N**= Number of years = 1, **K**= No. of times compounding = $\frac{360\ days}{45\ days} = 8$ p.a.

R= Interest Rate per period = $\frac{6.045\%}{8} = 0.7556\% = 0.007556$

(b)

1. Computation of Covariance and Correlation Co-efficient

Years	R_M	R_S	$D_M = (R_M - \bar{R}_M)$	$D_S = (R_S - \bar{R}_S)$	D_{M^2}	D_{S^2}	$D_M \times D_S$
(1)	**(2)**	**(3)**	**(4) = [(2) - 6]**	**(5) = [(3)-9]**	**(6)** $= (4)^2$	**(7)** $= (5)^2$	**(8) = (4) × (5)**
1	15	18	9	9	81	81	81
2	7	9	1	0	1	0	0
3	16	20	10	11	100	121	110
4	-13	-10	-19	-19	361	361	361
5	4	5	-2	-A	4	16	8
6	7	12	1	3	1	9	3
	36	**54**	**0**	**0**	**548**	**588**	**563**

	Market Portfolio	Shares of S
Mean	$\bar{R}_M = \frac{\sum \bar{R}_M}{n} = \frac{36.6}{6} = \mathbf{6}$	$\bar{R}_S = \frac{\sum \bar{R}_S}{n} = \frac{54}{6} = \mathbf{9}$
Variance	$\sigma_{M^2} = \frac{\sum D_{M^2}}{n} = \frac{548}{6} = \mathbf{91.33}$	$\sigma_{S^2} = \frac{\sum D_{S^2}}{n} = \frac{588}{6} = \mathbf{98}$
Standard Deviation	$\sigma_M = \sqrt{91.33} = \mathbf{9.56}$	$\sigma_S = \sqrt{98} = \mathbf{9.90}$

2. Computation of Covariance and Correlation

Combination	Market and S	Combination	Market and S
Covariance	$Cov_{M,S} = \frac{\sum[D_M \times D_S]}{n} = \frac{563}{6}$ $= \mathbf{93.83}$	**Correlation**	$\rho_{M,S} = \frac{Cov_{M,S}}{\sigma_M \times \sigma_S} = \frac{98.83}{9.56 \times 9.90}$ $= \mathbf{0.99}$

3. Computation of Beta : Beta of Security= $\beta_S = \frac{Cov_{M,S}}{\sigma_{M^2}} = \frac{93.83}{91.33} = \mathbf{1.03}$

4. Computation of Systematic and Unsystematic Risk

Particulars	Standard Deviation Approach	Variance Approach
Total Risk	9.90	98%
Systematic Risk	$\beta \times \sigma_M$ =1.03 × 9.56 = 9.847%	$\beta^2 \times \sigma_{M^2} = 1.03^2 \times 9.56^2$ =9.847 = 1.061 × 91.39 = 96.96%
Unsystematic Risk = Total Risk **Less** Systematic Risk	9.90% - 9.847% = 0.053%	98% - 96.96% = 1.04%

Ans. 6

(a)

Securities of	Infosys
Spot Price [S_x]	`350
Expected rate of Dividend [Y]	30% or 0.30
Borrowing Rate	20%
Tenor / Time Period [t] in Years	3 months or 0.25 Year
Theoretical Forward Price [TFP_X] $[TFP_X] = (AS_X \times e^{rt}) -$ Dividend at T_3	=`350 × $e^{0.20 \times 0.25} - (30\% \times 10)$ =`350 × $e^{0.05} - 3$ = (`350 × 1.0513) – 3 =**`364.96**
3 –Month Futures Contract Rate [AFP_X]	`370
[TFP_X] Vs. [AFP_X]	AFP_X is **Higher**
Inference	AFP_X is **overvalued**
Recommended Action	Buy Spot. Sell Future

Note: Since the Dividend is payable at t_3 no discounting is required.

Cash Flows arising out of the Activities to gain on the Arbitrage

Particulars	`
(a) Borrow for a period of 3 months any Buy Stock at T_0	`350
(b) Receive the Dividend at the end of 3 months	3
(c) Sell the Futures at the Forward Price at the end of 3 months	370
(d) Repay the amount of Borrowing together with Interest = $(350 \times e^{0.20 \times 0.25})$	367.96
(e) **Net Cash Inflow** [(b) + (c) – (d)]	**`5.04**

(b)

1. Computation of Present Value of Tax Saving on Depreciation

Particulars		`Lakhs
(a) Depreciation Value	[Cost Less Estimated Scrap Value] = (300 – 0)	300.00
(b) Annual Deprecation	[Depreciation Value `300 Lakhs ÷ Period 3 Yrs]	100.00
(c) Tax Saving per Annum at 35%	[Depreciation `100 Lakhs × 35%]	35.00
(d) **PV of Tax Savings on Depreciation**=Tax Savings p.a. × PVIFA (10%, 3 years) 2.487		**87.05**

2. Computation of Present Value of Lease Rentals

Year	Lease Rental	After Tax Lease Rental = Lease Rent × (1 – 0.35)	PV Factor	PV of Lease Rental
1	3X	1.95X	0.909	1.7726X
2	2X	1.30X	0.826	1.0738X
3	X	0.65X	0.751	0.4882X
Present Value of Lease Rental				**3.3346X**

At IRR = 10%, PV of lease Rental + PV of Tax Saving on Depreciation = Investment

3.3346X +`87.05 lakhs =`300.00 Lakhs
3.3346X =`300 Lakhs –`87.05 Lakhs
X $= \frac{Rs.212.95\ Lakhs}{3.3346}$ =**`63.86 Lakhs**

Therefore, Lease Rent to be quoted for 3 Years are –
Year 1 (3 ×`63.86) =`191.58 Lakhs
Year 2 (2 ×`63.86) =`127.72 Lakhs
Year 3 (1 ×`63.86) =`63.86 Lakhs

(c)

1. Computation of Theoretical Forward Rate [TFP]

Particulars	**Value**
Spot Price $[S_x]$	`900
Risk Free Interest Rate [r]	9% or 0.09
Period [t]	3 Mths or 3/12 Yrs. i.e. 0.25
Theoretical Forward Rate $[TFP_X]$ $= S_x \times e^{rt}$ =`500 × $e^{0.09 \times 0.25}$	**`511.38**
=`500 × $e^{0.0225}$ =`500 × 1.02276	

2. Evaluation and Suggested Course of Action

Particulars	**Case A**	**Case B**
3-Months Futures Contract Rate AFP_X	`520	`500
TFP_X Vs. AFP_X	AFP_X is Higher	AFP_X is Lower
Valuation in Futures Market	Overvalued	Undervalued
Action	Buy Spot. Sell Future.	Sell Spot. Buy Future.

Ans. 7

(a)

Aspect	**Bills Discounting**	**Factoring**
Parties	Buyer of Goods = Drawee. Seller of Goods = Drawer. Financier = Payee.	Buyer of Goods = Debtor. Seller of Goods = Client. Financier = Factor.
Nature	Bill Discounting is a method of borrowing from Commercial Banks.	It is a method of management of Book Debts / Receivables.
Basis of Financing	Security provision as well as requirement of finance, which determine the amount of financing.	Basis of financing is turnover with a specified party.
Pattern of financing	The entire amount of the Bill of Exchange is discounted and provided at the time of transaction itself.	Factor gives an advance (say 90%) at the time of transaction, and provides the balance (i.e. 10%), at the time of settlement / end of credit period.
Additional Services	The Financier (Banker) provides advance / finance against the Bill of Exchange / Invoice.	Factor provides financing services, and other services like Debtors follow-up, Debtors Ledger Maintenance, Collection Mechanism, Credit Reports on Debtors, etc.
Income to Financier	Banker earns "Discounting Charges" on the transaction.	Factor earns "Interest" for the financing service, and "Commission" for other services rendered.
Risk of Bad Debts	In Bill Discounting, risk of bad debts is retained by the Seller of goods.	In non-recourse factoring, the risk of bad debts is passed on to the Factor.
Statute	Negotiable Instrument Act is applicable.	There is no specific applicable Statute as such.

(b) The following major aspects should form part of a project report:

Aspect	**Items to be included in Project Report**
1. Promoters	Experience of Promoters, their past performance records.
2. Industry Analysis	Brief description and prospects of general industrial environment outside and within the country.
3. Economic Analysis	Demand and Supply position of the product under consideration, Competitor's market shares and marketing strategies, export potential of the product,

	consumer preferences, etc.
4. Technical Analysis	Technical Know-how, Plant Layout, Production Process, Installed and Operating Capacity of Plant and Machinery
5. Inputs	Availability of Raw Materials within and outside the home country, reliability of Suppliers, Job Work facilities available, Cost Escalations, Transportation Charges, Manpower Requirements, Effluent Disposal Mechanisms.
6. Project Cost	Item-wise Break up of Project Cost, viz. Cost of Land, Site Development, Buildings, Plant and Machinery, Utilities e.g. Power, Fuel, Water, Vehicles, Technical Know-How, Working Capital Margins, Preliminary/Pre-Operative Expenses, Provision for Contingencies.
7. Financial Analysis	Estimates of Production Costs, Revenue, Tax Liabilities, Profitability and Sensitivity of Profits to different, elements of Costs and Revenue, Financial Position and Cash Flows, Working Capital Requirements, Return on Investment, Promoters Contribution, Debt and Equity Financing, etc.
8. SCBA	SCBA = Social Cost Benefit Analysis. Ecological Matters, Value Additions, Technology Absorptions, Level of Import Substitution, etc.
9. SWOT Analysis	Strengths and Weaknesses in handling environmental opportunities and threats, viz. Liquidity / Fund constraints in Capital Market, limit of resources available with Promoters, Business/Financial Risks, micro/macro-economic considerations subject to Government restrictions, role of Banks/Financial Institutions in project assistance, Cost of Equity and Debt Capital in the Financial Plan, etc.
10. Imple-mentation Schedule	Date of Commencement (i.e. Zero Date), Duration of the Project, Trial Runs, Cushion for Cost and Time Overruns, Date of Completion of the Project, using Network Analysis techniques.

(c)

1. **Price vs Fair Value:** Although Price tends to fluctuate they cannot reflect Fair Value. This is because the future is uncertain. The market springs surprises continually and as Prices reflect the surprises they fluctuate.
2. **Out-performing the Market:** Inability of Institutional Portfolio Managers to "out-perform" may imply that they lack competence in an efficient market. However, this is contrary to the concept of "efficient market", since market efficiency itself exists due to Portfolio Managers doing their job well in a competitive setting.
3. **Market Inefficiencies:** Markets, though becoming increasingly efficient everywhere with the passage of time, are never perfectly efficient. So, there are opportunities all the time although their durations are decreasing. So, smart Investors can look forward to booking gains consistently out of stock market deals.
4. **Inadequate Information:** Information is neither freely available nor rapidly transmitted to all Participants in the Stock Market. There may be a calculated attempt by some Companies to circulate misinformation. This reduces the effectiveness of EMH.
5. **Limited Information Processing Capabilities:** Human information processing capabilities are sharply limited. Hence, Market Price Trends cannot reflect all possible price-sensitive information.
6. **Irrational Behaviour:** It is generally believed that Investors' rationality will ensure a close correspondence between market prices and intrinsic values. But in practice this is not true. Many Theorists have argued that all sorts of consideration enter into the market valuation which is in no way relevant to the prospective yield. The market seems to function largely on hit or miss tactics, rather than on the basis of informed beliefs about the long term prospects of individual enterprises.
7. **Monopolistic Influence:** A market is regarded as highly competitive, only if no single Buyer or Seller has undue influence over prices. In practice, powerful institutions and big operators have a significant influence over the market. Their monopolistic power diminishes the competitiveness of the market.
8. **Short Run vs Long Run:** Efficient Market may be achieved only in the very-long run. The following inefficiencies and anomalies exist regularly in the market –
   - **i.** Stock Price adjust **gradually**, not rapidly to announcements of unanticipated changes in quarterly earnings.
   - **ii.** Small Firms' portfolio seemed to out-perform large Firms' portfolio.
   - **iii.** Low PE Multiple Stock tend to outperform large PE Multiple stock.

iv. Monday's return (i.e. Opening Day Return) is lower than return for the other days of the week.

(d)

Sharpe Ratio	Treynor Ratio
Here, Risk is determined as the degree of volatility in returns - the variability in period-on-period returns - expressed through the **Standard Deviation** of the stream of returns.	Here, Risk is determined by the **Beta** of the Portfolio - the degree of "momentum" that has been built into the portfolio by the Fund Manager in order to derive his excess returns. So, High Beta (> 1) implies that the portfolio will move faster (up as well as down) than the market.
Since Standard Deviation is considered as a measure of risk, it takes into account **both Systematic Risk and Unsystematic Risk.**	This ratio captures only the systematic risk in its computation.
This Ratio assumes that both types of Risk (systematic and unsystematic Risk) have to be considered in evaluation.	This Ratio assumes that unsystematic or specific risk can be **diversified** and hence, only incorporates the Systematic Risk (Beta) to gauge the portfolio's performance.
It is appropriate for any **general** type of portfolio.	It is more appropriate for a **completely diversified portfolio,**where the element of unsystematic risk would be very negligible.
More suitable for **sector-specific Mutual Funds,**since Unsystematic Risk would also be present.	More suitable for **Equity Diversified Funds**, since Unsystematic Risk would be made negligible by holding a diversified portfolio.

(e)

1. **Advantages / Features:**
   - **i.** Since Shares are valued based on the Actual Cash Flows received by the Investors, it is **theoretically the correct** valuation model.
   - **ii.** As per DDM, since the Current Sale Price of the Stock = PV of its Future Cash Flows. So, this implies that the Future Sale Price of the Stock = Sum of the Cash Flows **subsequent** to the sale, discounted by the Capitalization Rate.
   - **iii.** The security with a greater risk must potentially pay a greater rate of return, to induce Investors to buy the security. So, this model provides a means of developing an **Explicit Expected Return** for the market.
   - **iv.** In an **efficient market**, the Market Price of a Stock is considered to be equal to the Intrinsic Value of the Stock, where the Capitalization Rate is equal to the Market Capitalization Rate, the Average Capitalization Rate of all Market Participants.

2. **Disadvantages:**
   - **i.** In Bond Pricing, if the Bond is held to maturity, its Cash Flows and Interest Rate of those Cash Flows are known with certainty, unless the Bond Issuer defaults. However, DDM depends on projections about Company's growth rate and future capitalization rates of the remaining Cash Flows, and is **comparatively subjective / inexact**.
   - **ii.** DDM is affected by bearish / bullish market, e.g. in a Bear Market, the Capitalization Rate will be higher than in a Bull Market, since Investors will demand a higher required rate of return to compensate them for a perceived greater amount of risk.
   - **iii.** DDM is subject to errors in estimation of Capitalization Rate or Growth Rate. Also, the greater the length of time considered, the more likely both factors will be wrong.
   - **iv.** DDM assumes that Investor expectations as a whole is constant. However, different investors may have different opinions about the Company's future. So, the True Intrinsic Value of a Stock is **unknowable**.

MARKS ALLOCATION SHEET

Que. No.	Sub point No.(if any)	Name of Chapter	Description of Concept	Mark Allocation	Total Marks
1	(a)	Dividend policy	Calculation of market price	6	6
1	(b)	Futures	calculation of hedge ratio	3	
1	(b)	Futures	Amount to achieve perfect hedge	1	4
1	(c)	Bond valuation	Calculation of issue price of the debentures	5	5
1	(d)	Options	Calculation of cost of pepper	4	
1	(d)	Options	Conclusion	1	5
2	(a)	Mutual fund	Calculation of net asset value	9	
2	(a)	Mutual fund	Calculation of NAV per unit	1	10
2	(b)	International finance	Calculation of buy rate for the bank	2	
2	(b)	International finance	Calculation of gain/loss	4	6
3	(a)	Capital budgeting	Calculation of annual depreciation	2	
3	(a)	Capital budgeting	Calculation of annual cash saving	1.5	
3	(a)	Capital budgeting	Calculation of net salvage value of existing machinery	1.5	
3	(a)	Capital budgeting	Calculation of NAV	4	
3	(a)	Capital budgeting	Recommendation	1	10
3	(b)	FOREX	Evaluation of alternative – 1	2.5	
3	(b)	FOREX	Evaluation of alternative – 2	2.5	
3	(b)	FOREX	Conclusion	1	6
4	(a)	Merger & Acquition	Calculation of MV before merger	3	
4	(a)	Merger & Acquition	Calculation of post-merger market value	4	
4	(a)	Merger & Acquition	Calculation of gain/loss to share holders	4	
4	(a)	Merger & Acquition	Evaluation	1	12
4	(b)	Derivative	Calculation of profit/loss on settlement if actual rate is 9.60	2	
4	(b)	Derivative	Calculation of profit/los on settlement if actual rate is 8.80`	2	4
5	(a)	Money market operations	Calculation of current price of the instrument	2	
5	(a)	Money market operations	Calculation of bond equivalent yield	2	
5	(a)	Money market operations	Calculation of effective annual return	2	6
5	(b)	Portfolio management	Calculation of covariance and correlation co –efficient	4	
5	(b)	Portfolio management	Calculation of beta	2	
5	(b)	Portfolio management	Calculation of total risk	2	
5	(b)	Portfolio management	Calculation of systematic risk	2	10

6	(a)	Futures	Calculation of theoretical forward price	4	
6	(a)	Futures	Recommendation	2	6
6	(b)	Leasing decision	Calculation of PV of tax saving on depreciation	2	
6	(b)	Leasing decision	Calculation of PV of lease rental	4	6
6	(c)	Futures	Calculation of theoretical forward rate	3	
6	(c)	Futures	Action	1	4
7	(a)	Finical services	Any 4 points each has 1 mark	4	4
7	(b)	Basic concept	Any 8 contents each has 0.5 mark	4	4
7	(c)	Security analysis	Any 4 points each has 1 mark	4	4
7	(d)	Mutual fund	Any 4 points each has 1 mark	4	4
7	(e)	Dividend policy	Advantages any 2 (each has 1 mark)	2	
7	(e)	Dividend policy	Disadvantages any 2 (each has 1 mark)	2	4