SUGGESTED ANSWERS

SECTION-A

1.

(i) (A)

(ii) (B)

(iii) (B)

(iv) (C)

(v) (A)

(vi) (A/B)

(vii) (D)

(viii) (B)

(ix) (A)

(x) (D)

(xi) (B)

(xii) (D)

(xiii) (A/B/C/D)

(xiv) (B)

(xv) (B)

SECTION – B

2. (a)

(i) **Calculation of Net Initial Cash Outflow**

Particulars	(₹)
Cost of New Machine	1200000
Less: Sale Proceeds of existing machine	(240000 - 40000)200000
Net Purchase Price	1000000
Paid in year 0	800000
Paid in year 1	200000

Calculation of Additional Depreciation

Year	1	2	3	4
	(₹)	(₹)	(₹)	(₹)
Opening WDV of Machine	1000000	800000	640000	512000
Depreciation on new machine @ 20 %	200000	160000	128000	102400
Closing WDV	800000	640000	512000	409600
Depreciation on old machine (480000 / 8)	60000	60000	60000	60000
Incremental depreciation	140000	100000	68000	42400

Calculation of Annual Profit before Depreciation and Tax (PBDT)

Particulars	Incremental Values (₹)
Sales	1225000
Contribution	612500
Less : Indirect Cost	118750
Profit before Depreciation and Tax (PBDT)	493750

Calculation of Incremental NPV

Year	PVF @ 12 %	PBTD (₹)	Incremental Depreciation (₹)	PBT (₹)	Tax @ 30% (₹)	Cash Inflows (₹)	PV of Cash Inflows (₹)
	(1)	(2)	(3)	(4)	(5) = (4) x 0.30	(6) = (4) – (5) + (3)	(7) = (6) x (1)
1	0.893	493750	140000	353750	106125	387625	346149
2	0.797	493750	100000	393750	118125	375625	299373
3	0.712	493750	68000	425750	127725	366025	260610
4	0.636	493750	42400	451350	135405	358345	227907
							1134039
Add: PV of Salvage- Year 4 (₹100000 x 0.636)							63600
Less: Initial Cash Outflow – Year 0							800000
Year 1 (₹ 200000 x 0.893)							178600
Less: Working Capital – Year 0							250000
Year 2 (₹ 300000 x 0.797)							239100
Add: Working Capital released – Year 4 (₹ 550000 x 0.636)							349800
Incremental Net Present Value							79739

(ii) Advice:

Since the Incremental Net Present Value (NPV) is positive (₹ 79739), the company should replace the existing machine with a new machine.

Alternative solution:

Calculation of Net Initial Cash Outflow

Particulars	(₹)
Cost of New Machine	1200000
Less : Sale Proceeds of existing machine	(240000 - 40000) 200000
Net Purchase Price	1000000
Paid in year 0	800000
Paid in year 1	200000

Calculation of Additional Depreciation

Year	1	2	3	4
	(₹)	(₹)	(₹)	(₹)
Opening WDV of Machine	1200000	960000	768000	614400
Depreciation on new machine @ 20 %	240000	192000	153600	122880
Closing WDV	960000	768000	614400	491520
Depreciation on old machine (480000 / 8)	60000	60000	60000	60000
Incremental depreciation	180000	132000	93600	62880

Calculation of Annual Profit before Depreciation and Tax (PBDT)

Particulars	Incremental Values (₹)
Sales	1225000
Contribution	612500
Less: Indirect Cost	118750
Profit before Depreciation and Tax (PBDT)	493750

Calculation of Incremental NPV

Year	PVF @ 12 %	PBTD (₹)	Incremental Depreciation (₹)	PBT (₹)	Tax @ 30% (₹)	Cash inflows (₹)	PV of Cash Inflows (₹)
	(1)	(2)	(3)	(4)	(5) = (4) x 0.30	(6) = (4) – (5) + (3)	(7) = (6) x (1)
1	0.893	493750	180000	313750	94125	399625	356865
2	0.797	493750	132000	361750	108525	385225	307024
3	0.712	493750	93600	400150	120045	373705	266078
4	0.636	493750	62880	430870	129261	364489	231815
							1161782
Add: PV of Salvage- Year 4 (₹ 100000 x 0.636)							63600
Less: Initial Cash Outflow – Year 0							800000
Year 1 (₹ 200000 x 0.893)							178600
Less: Working Capital – Year 0							250000
Year 2 (₹ 300000 x 0.797)							239100
Add: Working Capital released – Year 4 (₹ 550000 x 0.636)							349800
Incremental Net Present Value							107482

(ii) Advice:

Since the Incremental Net Present Value (NPV) is positive (₹ 107482), the company should replace the existing machine with a new machine.

2. (b)

Let normal annual lease rent per annum is χ. (₹ In Lakh)

P. V. of cash inflows must equal the P.V. of cash outflows at 12%				
	End of Year	**Cash Flow**	**P. V. Factor**	**Discounted Cash Flows**
Assets Cost	0	-300	1	-300
Depreciation Shield	1 – 4	75 x .35 = 26.25	0.893 + 0.797 + 0.712 + 0.636 = 3.038	79.7475
Lease Rent	1	2χ x 0.65	0.893	1.1609χ
Lease Rent	2	2χ x 0.65	0.797	1.0361χ
Lease Rent	3	1χ x 0.65	0.712	0.4628χ
Lease Rent	4	1χ x 0.65	0.636	0.4134 χ
Total Inflows of lease rent				3.0732 χ

3.0732 χ = 300 – 79.7475(Depn. Shield)

or, 3.0732 χ = 220.2525(Net cost of ownership)

or χ = 220.2525 / 3.0732 = 71.6688 Lakh

Lease Rent for First Year: 2 x 71.6688 = ₹ 143.3376 Lakh

Lease Rent for Second Year: 2 x 71.6688 = ₹ 143.3376 Lakh
Lease Rent for Third Year: 1 x 71.6688 = ₹ 71.6688 Lakh
Lease Rent for Fourth Year: 1 x 71.6688 = ₹ 71.6688 Lakh

3. (a)

(i) **Computation of expected NPV for each project:**

Project Titan			Project Orion		
Cash Flow (₹)	**Probability**	**Weighted Value (₹)**	**Cash Flow (₹)**	**Probability**	**Weighted Value (₹)**
160000	0.15	24000	130000	0.25	32500
200000	0.25	50000	180000	0.35	63000
280000	0.35	98000	300000	0.25	75000
420000	0.25	105000	360000	0.15	54000

Expected Cashflow (E[CF])	₹ 277000	₹ 224500
PVIFA (9 %, 3 Years)	2.513	2.513
Total Cash inflow	696101	564169
Less: Initial Investment	500000	500000
Expected NPV	196101	64169

(ii) **Calculation of Standard Deviation of cash flows for each project**

Project Titan

Cash Flow (A)	**Probability (P)**	**Deviation from Expected cashflow (B=A–Expected Cash flow)**	**Square of the Deviation ($C=B^2$)**	**Square of the deviation x Probability (C x P)**
160000	0.15	– 117000	13689000000	2053350000
200000	0.25	– 77000	5929000000	1482250000
280000	0.35	3000	9000000	3150000
420000	0.25	143000	20449000000	5112250000
			Variance	8651000000
Standard Deviation				93011

Project Orion

Cash Flow (A)	**Probability (P)**	**Deviation from Expected cash flow (B=A–Expected Cash flow)**	**Square of the deviation ($C=B^2$)**	**Square of the deviation x Probability (C x P)**
130000	0.25	– 94500	8930250000	2232562500
180000	0.35	– 44500	1980250000	693087500
300000	0.25	75500	5700250000	1425062500
360000	0.15	135500	18360250000	2754037500
			Variance	7104750000
Standard Deviation				84290

(iii) Determination of coefficient of variation for each project

Coefficient of Variation (CV) = Standard Deviation / Expected Cashflow

CV-Project Titan = 93011/277000 = 0.336

CV-Project Orion = 84290 /224500 = 0.375

(iv) **Recommendation**: Since, the co-efficient of Variation (CV) is higher for project Orion, it is riskier than Project Titan. However, Project Titan with lower risk may be preferred.

3. (b)

(i) **Computation of Dividends for 7 years.**

D_1= 6 (1.20) = ₹ 7.20

D_2=6$(1.20)^2$ = ₹ 8.64

D_3=6$(1.20)^3$ = ₹ 10.37

D_4= 6$(1.20)^4$ = ₹ 12.44

D_5 = 12.44 (1.19) = ₹ 14.80

D_6 = 12.44 (1.19) (1.18) = ₹ 17.47

D_7 = 12.44 (1.19) (1.18) (1.17) = ₹ 20.44

Price at the end of 7th Year:

Year	Dividend (₹)	PVIF@20%	PV (₹)
1	7.20	0.8333	6.00
2	8.64	0.6944	6.00
3	10.37	0.5787	6.00
4	12.44	0.4823	6.00
5	14.80	0.4019	5.95
6	17.47	0.3349	5.85
7	20.44	0.2791	5.70
		TOTAL	41.50
Current Market Price			₹ 172.45
Less : PV of Dividend upto the year ending 7thyear			₹ 41.50
PV of Expected Market Price at the end of 7th year			₹ 130.95

Let g be the growth rate,

Then = 130.95 = [20.44 (1 + g) x 0.2791] / (0.20 – g)

Or, 130.95 = (5.70 + 5.70g) / (0.20 – g)

Or, 26.19 – 130.95g = 5.70 + 5.70 g

Or, 136.65 g = 20.49

g= (20.49) / (136.65) = 0.15 i.e. 15%

Thus, the stable growth rate after the end of 7th year shall be 15%.

(ii) Since the growth rate is equal to target growth rate, it may worth to purchase the share.

Alternative Solution:

(i) Computation of Dividends for 7 years.

D_1 = ₹ 6

D_2 =6 (1.20) = ₹ 7.20

D_3=6$(1.20)^2$ = ₹ 8.64

D_4=6$(1.20)^3$ = ₹ 10.37

D_5 = 10.37(1.19) = ₹ 12.34

D_6 = 10.37 (1.19) (1.18) = ₹ 14.56

D_7= 10.37 (1.19) (1.18) (1.17) = ₹ 17.04

Price at the end of 7th year

Year	Dividend (₹)	PVF@20%	PV (₹)
1	6.00	0.8333	5.00
2	7.20	0.6944	5.00
3	8.64	0.5787	5.00
4	10.37	0.4823	5.00
5	12.34	0.4019	4.96
6	14.56	0.3349	4.88
7	17.04	0.2791	4.76
		TOTAL	34.60
Current Market Price			₹ 172.45
Less: PV of Dividends upto the year ending 7th year			₹ 34.60
PV of Expected Market Price at the end of 7th year			₹ 137.85

Let g be growth rate then: $137.85 = \frac{17.04\,(1+g)}{0.20-g} \times 0.2791$

Or, 137.85 = (4.76 + 4.76g) / (0.20 – g)
Or, 27.57 – 137.85 g = 4.76 + 4.76g
By solving the equation,
g = 0.16 i.e. 16%
Thus, the stable growth rate after the end of the7 years shall be 16%.

(ii) Since growth rate is more than target growth rate it is worth to purchase the share.

4. (a)

(i) Value of Zero-Coupon Bond till maturity

Present value of bond = Face Value / $(1+r)^n$
= 100000 /[$(1 + 0.08)^{10}$ $(1 + 0.09)^{10}$ $(1 + 0.10)^5$]
= 100000 x 0.4632 x 0.4224 x 0.6209
= ₹ 12148.26
Value of Bond = ₹ 12148.26

(ii) Value of Zero-Coupon Bond if the issuer exercises the call option at the end of Year 15

Present value of bond= Face Value / $(1+r)^n$
= 101000 / [$(1 + 0.08)^{10}$ $(1 + 0.09)^5$]
= 101000 x 0.4632 x 0.6499
= ₹ 30404.40
Value of Bond = ₹ 30404.40

(iii) Value of Zero-Coupon Bond if the investor exercises the put option at the end of Year 18

Present value of bond = Face Value / $(1 + r)^n$
= 80000 / [$(1 + 0.08)^{10}$ $(1 + 0.09)^8$]
= 80000 x 0.4632 x 0.5019
= ₹ 18598.41
Value of Bond = ₹ 18598.41

(iv) The investor should expect the bond to be held till maturity as lowest present value of bond (12148.26).

4. (b)

(i) Number of Units in Each Scheme

Fund Alpha:

units = ₹ 250000 ÷ ₹ 11.20 = 22321.43 units

Fund Beta:

Units = ₹ 300000 ÷ ₹ 10.50 = 28571.43 units

Fund Gamma:

Initial Units = ₹ 150000 ÷₹ 10.00 = 15000 units

Bonus (1:10) = 15000 x (1/10) = 1500 units

Total Units = 15000 + 1500 = 16500 units

(ii) Total NAV as on 31-Mar-2025

Fund	Units	NAV (₹)	Value (₹)
Alpha	22321.43	₹ 11.10	₹ 247768
Beta	28571.43	₹ 9.70	₹ 277143
Gamma	16500	₹ 10.60	₹ 174900

Total NAV Value = ₹ 699811

(iii) Total yield (%) on investment

Name of Mutual Funds	Capital Yield	Dividend Yield	Total
Alpha	247768 – 250000 = – 2232	7500	5268
Beta	277143 – 300000 = – 22857	NIL	– 22857
Gamma	174900 – 150000 = 24900	3750	28650
		Total	11061

Total Yield (%) = (11061 / 700000) x 100= 1.58%

(iv) No. of days investment was held

Name of Mutual Funds	Alpha	Beta	Gamma
Let number of days be	X	Y	Z
Initial Investment	250000	300000	150000
Yield (₹)	5268	–22857	28650
Yield (%)	2.11	–7.62	19.10
Period of holding (Days)	(2.11 ÷ 10.80) x 365 = 71 days	[(-7.62) ÷ (-13.25)] x 365 = 210 days	(19.10 ÷ 20.45) x 365 = 341 days

5. (a)

(i) Compute Levered Beta (β_L)

$$\beta_L = \beta_{UL} \, x \, (1 + D/E)$$

Omega Hydraulics Ltd. :

$$\beta_L = 0.90 \, x \, (1 + 0.60)$$

$$= 0.90 \, x \, 1.60 = 1.44$$

Vertex Industrial solution Ltd. :

$$\beta_L = 0.82 \, x \, (1 + 0.90)$$

$$= 0.82 \, x \, 1.90 = 1.56$$

(ii) **Computation of Risk-free return (R_F)**

Particulars	Value
Face Value of Treasury Bills	100
Coupon rate on Face Value (in %)	6.50 %
Return on Treasury Bills (in Value) (100 x 6.50 %)	6.5
Market Price of Treasury Bills	95
Risk Free Return (R_F) [Actual Return 6.50 / Market Price 95]	6.84%

Risk free return = 6.84 %

Expected Return Using CAPM

$$E(R) = R_F + [\beta \, x \, (R_M - R_F)]$$

Omega Hydraulics Ltd. :

Ke = 6.84 % + 1.44 x (14.50 % – 6.84 %)

=6.84 % + 11.03% = 17.87 %

Vertex Industrial Solutions Ltd. :

Ke = 6.84 % + 1.56 * (14.50 % – 6.84 %)

=6.84% + 11.95 % = 18.79 %

(iii) **Comparison of Actual vs Expected Returns:**

Company	Expected Return (Ke)	Actual Return	Performance
Omega Hydraulics Ltd.	17.87 %	16.00 %	Underperforming
Vertex Industrial Ltd.	18.79 %	20.00 %	Over performing

5. (b)

(i) **Assessment of Portfolio Beta**

Share	Weight (W)	Beta (B)	(W x B)
ASL	0.35	0.35	0.1225
NSL	0.25	1.25	0.3125
ZNL	0.40	0.80	0.320

Portfolio Beta = 0.755

(ii) **Assessment of Residual Variance**

ASL = $0.015 – (0.35)^2 \times (0.12)^2 = 0.0132$

NSL = $0.035 – (1.25)^2 \times (0.12)^2 = 0.0125$

ZNL = $0.020 – (0.80)^2 \times (0.12)^2 = 0.0108$

(iii) **Assessment of Portfolio Variance on the basis of Markowitz Theory**

$W_A \times W_A \times \sigma_A^2$	+	0.35 x 0.35 x 0.015	0.0018
$W_A \times W_N \times COV(AN)$	+	0.35 x 0.25 x 0.025	0.0022
$W_A \times W_Z \times COV(AZ)$	+	0.35 x 0.40 x 0.035	0.0049
$W_N \times W_A \times COV(AN)$	+	0.25 x 0.35 x 0.025	0.0022
$W_N \times W_N \times \sigma_N^2$	+	0.25 x 0.25 x 0.035	0.0022
$W_N \times W_Z \times COV(NZ)$	+	0.25 x 0.40 x 0.060	0.0060
$W_Z \times W_A \times COV(ZA)$	+	0.40 x 0.35 x 0.035	0.0049
$W_Z \times W_N \times COV(ZN)$	+	0.40 x 0.25 x 0.060	0.0060
$W_Z \times W_Z \times \sigma_Z^2$		0.40 x 0.40 x 0.020	0.0032
			0.0334

6. (a)

(i) **Weighted Average Portfolio Beta:**

Security	No. of Shares (Lakh)	MPS (₹)	Total Value (₹ In Lakh)	Beta	Product in Lakh
AS Ltd.	4.50	500	2250	1.40	3150
BM Ltd.	6.00	750	4500	1.20	5400
ZM Ltd.	3.00	250	750	1.60	1200
	13.50		7500		9750

$$\text{Portfolio Beta} = \frac{9750}{7500} = 1.30$$

(ii) **Assessment of Government Securities to be acquired for Beta (β) = 0.975**

Particulars	BETA	Amount	Product
Govt. Securities	O	χ	O
Other Securities	1.30	$1-\chi$	$1.3-1.3\chi$
Total		1	$1.3-1.3\chi$

$$\text{Portfolio Beta } (\beta) = 0.975 = \frac{1.3-1.3\chi}{1}$$

Or, $0.975 = 1.3 - 1.3\ \chi$

$$\chi = \frac{0.325}{1.3} = 0.25 \text{ i.e. } 25\ \%$$

Amount to be invested in Govt. Securities = 7500 x 0.25 = ₹ 1875 Lakh

(iii) **No. of shares to be disposed off**

Security	M.V. of investment (₹ In Lakh)	Value of Disposed off (₹ In Lakh) 25%	MPS (₹)	No. of Shares to be disposed off (in Lakh)
AS Ltd.	2250	562.50	500	1.125
BM Ltd.	4500	1125.00	750	1.50
ZM Ltd.	750	187.50	250	0.75
Total	7500	1875.00		3.375

(iv) **Analysis of Number of NIFTY Contracts to be bought / Sold:**

No. of NIFTY Contracts.

$$750000000 \times \frac{1.3-0.975}{24375 \times 100} = \frac{243750000}{2437500} = 100 \text{ Contracts.}$$

No. of NIFTY Contracts to be sold = 100 Contracts

6. (b)

(i) **Expected Share Price :**

₹ 540 x 0.10 + ₹ 560 x 0.15 + ₹ 580 x 0.05 + ₹ 600 x 0.35 + ₹ 620 x 0.20 + ₹ 640 x 0.15

= ₹ 54 + ₹ 84 + ₹ 29 + ₹ 210 + ₹ 124 + ₹ 96

= ₹ 597

(ii) **Value of Call Option (intrinsic value of Option)**

₹ 590 – ₹ 590 = Nil

Alternatively:

(ii) If Price after 3 month = ₹ 597
Value of Call option = 597 – 590 = ₹ 7

(iii) **If the option is held till maturity the expected Value of Call Option**

Expected price (X)	Value of Call (C)	Probability (P)	Expected Value of Option
₹ 540	0	0.10	0
₹ 560	0	0.15	0
₹ 580	0	0.05	0
₹ 600	₹ 10	0.35	₹ 3.50
₹ 620	₹ 30	0.20	₹ 6.00
₹ 640	₹ 50	0.15	₹ 7.50
Total			₹ 17.00

Alternatively, it can also be calculated as follows:

Expected price (X)	Exercise price (E)	Probability (P)	Expected Value of Option CP (X – E) x P
₹ 540	₹ 590	0.10	Not Exercised*
₹ 560	₹ 590	0.15	Not Exercised*
₹ 580	₹ 590	0.05	Not Exercised*
₹ 600	₹ 590	0.35	₹ 3.50 (10 x 0.35)
₹ 620	₹ 590	0.20	₹ 6.00 (30 x 0.20)
₹ 640	₹ 590	0.15	₹ 7.50 (50 x 0.15)
Total			₹ 17.00

* If the stock price goes below ₹ 590, option is not exercised at all.

(iv) Price to be quoted at the stock exchange to get the value of the call option
Strike Price + Value of Call Option
₹ 590 + ₹ 17 = ₹ 607

7. (a)

(i) **Forward Contracts**
USD Amount = 500000
Forward Rate = ₹ 84.10
Rupee Outflow = 500000 x 84.10 = ₹ 42050000

(ii) **USD Call Option:**
Strike Price = ₹ 84.00
Premium = ₹ 0.90
Maximum Effective Rate = ₹ 84.90
Rupee Outflow = 500000 x 84.90 = ₹ 42450000

(iii) **Cross Rates:**
Forward EUR/INR = ₹ 84.10 ÷1.12 = ₹ 75.089
Cross Currency Hedge via EUR:
USD to Pay = 500000
EUR/USD Forward = 1.12
EUR Required = 500000 ÷ 1.12=446428.57 EUR
INR Outflow = 446428.57 x ₹ 75.089 =₹ 33521874.89

(iv) Recommendation if INR Expected to Depreciate to ₹ 85.50/USD

Strategy	Effective INR Rate	Rupee Outflow
Forward Contract	₹ 84.10	₹ 42050000
Call Option	₹ 84.90(Maximum)	₹ 42450000
Cross Currency	via EUR	₹ 33521874.89
No Hedge	₹ 85.50	₹ 42750000

Recommendation: Globe Tech Ltd. should hedge using the EUR cross-currency route, as it results in the lowest outflow.

7. (b)

(i) Nominal Interest Rates - Using Fisher Equation:

Average Inflation Rate - India:

Avg. Inflation= (6.3 + 6.8) / 2 = 6.55 %

Fisher Equation:

1 + Nominal rate = (1 + Real rate) x (1 + Expected inflation rate)

India:

1 + Nominal rate = (1+0.012) x (1 + 0.0655)

1 + Nominal rate = 1.0783

Nominal Rate = 0.0783 = 7.83 %

US:

1 + Nominal rate = (1 + 0.015) x (1+ 0.024)

1 + Nominal rate = 1.0394

Nominal Rate = 0.0394 = 3.94 %

(ii) Interest Rate Parity (IRP) based Forward rate:

Forward Rate = Spot Rate x $(1 + r_{INR}) / (1 + r_{USD})$

Forward Rate = 82.50 x (1 + 0.0783) / (1 + 0.0394)

Forward Rate = ₹ 85.59 / USD

(iii) Purchase Power Parity (PPP) based Future exchange rate:

Future exchange rate = Spot Rate * (1 + inflation INR) / (1 + inflation USD)

Future exchange rate = 82.50 x (1 + 0.0655) / (1 + 0.024)

Future exchange rate = ₹ 85.84 / USD

8. (a)

Variants of Stablecoin:

(i) Fiat - collateralized stablecoins

This type of stablecoin is linked to the sovereign legal tenders of countries. Some of the most well-known fiat-collateralized stablecoins, for instance, include Tether and TUSD (True USD). However, these stablecoins are not created by the central authority.

(ii) Commodity-backed stablecoins

These are backed by reserved assets other than fiat currencies - by commodities. Real estate, gold, silver, and various other precious metals are examples of commodities. KitcoGold, for example, is backed by the company's gold reserves, and the token itself is based on the Ethereum - backed ERC-20 block chain ecosystem.

(iii) Crypto-backed stablecoins

This type of stablecoins is backed by any other cryptocurrency. Due to the volatile nature of cryptocurrencies, these stablecoins must be overcompensated in order to be collateralized. For example, to buy $ 500 worth of the crypto-backed stablecoin, Maker DAO's Dai, one needs to deposit $ 1000 in ETH.

(iv) Algorithmic stablecoins

These are primarily non-backed stablecoins in which prices, token numbers, and other variables are manipulated with the help of special algorithms, software, and code in order to better manage supply and demand.

8. (b)

Different Types of Foreign Bonds are appended as follows:

(i) Yankee Bonds:

These are US dollar denominated issues by foreign borrowers (usually foreign governments or entities, supranational and highly rated corporate borrowers) in the US bond markets. Reliance Industries Ltd. has been the most successful corporate to tap this instrument with a 50-year, $50 million Yankee Bond issue in 2013.

(ii) Samurai Bonds:

These are bonds issued by non-Japanese borrowers in the domestic Japanese markets. Borrowers are supranational and have at least a minimum investment grade rating (A rated). The maturities range between 3-20 years.

(iii) Bulldog Bonds:

These are sterling denominated foreign bonds which are raised in the UK domestic securities market. The maturity of these bonds will be either for very short periods (5 years) or for very long maturities (25 years and above). Bonds with intermediate maturity periods are rare. These bulldog bonds are generally subscribed by long-term institutional investors like pension funds and life insurance companies.

(iv) Shibosai Bonds:

These are the privately placed bonds issued in the Japanese markets. The qualifying criteria is less stringent as compared to Samurai or Euro Yen bonds. Shibosai bonds are offered to a different market segment that consists of institutional investors, including banks.

8. (c)

A financial institution securitizes part of its balance sheet for three main reasons: These are discussed below.

(i) Funding the assets that is owns

Banks can use securitization to (1) support rapid asset growth, (2) diversify their funding mix and reduce cost of funding, and (3) reduce maturity mismatches. Banks aim to optimize their funding between a mix of retail, interbank, and wholesale sources. Securitization is a prime component in this mix. Securitization also helps a bank to reduce its funding costs.

(ii) Balance sheet capital management

Banks use securitization to improve balance sheet capital management. Securitization provides (1) regulatory capital relief, in some cases (depending on the form of the transaction), (2) "economic" capital relief, and (3) diversified sources of funding.

(iii) Risk Management and Credit risk transfer

Once assets have been securitized, the credit risk exposure on these assets for the originating bank is reduced considerably. This is because assets have been sold to the SPV. Securitization can also be used to remove nonperforming assets from banks' balance sheets. This will remove credit risk as well as potentially negative sentiment from the balance sheet apart from freeing up regulatory capital as before.