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SUGGESTED SOLUTION

FINAL MAY 2019 EXAM

SUBJECT- SFM

Test Code – FNJ 7136

BRANCH - () (Date :)

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Answer 1:

(A)

If foreign exchange risk is hedged

				Total (Rs.)
Sum due	Yen78,00,000	US$1,02,300	Euro 95,920	
Unit input price	Yen 650	US$10.23	Euro 11.99	
Unit sold	12000	10000	8000	
Variable cost per unit	Rs.225/-	395	510	
Variable cost	Rs.27,00,000	Rs.39,50,000	Rs. 40,80,000	Rs. 1,07,30,000
Three months forward rate for selling	2.427	0.0216	0.0178	
Rupee value of receipts	Rs.32,13,844	Rs.47,36,111	Rs. 53,88,764	Rs. 1,33,38,719
Contribution	Rs.5,13,844	Rs. 7,86,111	Rs. 13,08,764	Rs. 26,08,719
Average contribution to sale ratio				19.56%
If risk is not hedged				
Rupee value of receipt	Rs.31,72,021	Rs.47,44,898	Rs. 53,58,659	Rs. 1,32,75,578
Total contribution				Rs. 25,45,578
Average contribution to sale ratio				19.17%

(7 marks)

AKC Ltd. Is advised to hedge its foreign currency exchange risk. **(1 mark)**

(B)

Cost of capital by applying Free Cash Flow to Firm (FCFF) Model is as follows:-

Value of Firm = $V_0 = \frac{FCFF_1}{K_c - g_n}$

Where –

$FCFF_1$ = Expected FCFF in the year 1

K_c= Cost of capital

g_n = Growth rate forever

Thus, Rs. 1800 lakhs = Rs. 54 lakhs /(K_c-g)

Since g = 9%, then K_c = 12%

Now, let X be the weight of debt and given cost of equity = 20% and cost of debt = 10%, then 20%

(1 – X) + 10% X = 12%

Hence, X = 0.80, so book value weight for debt was 80%

∴ Correct weight should be 60 of equity and 72 of debt.

∴ Cost of capital = K_c = 20% (60/132) + 10% (72/132) = 14.5455% and correct firm's value

= Rs. 54 lakhs/(0.1454 – 0.09) = Rs. 974.73 lakhs. **(8 marks)**

(C)

- Angel investors invest in small startups or entrepreneurs. Often, angel investors are among an entrepreneur's family and friends. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.

- Angel investors provide more favorable terms compared to other lenders, since they usually invest in the entrepreneur starting the business rather than the viability of the business. Angel investors are focused on helping startups take their first steps, rather than the possible profit they may get from the business. Essentially, angel investors are the opposite of venture capitalists.

- Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. These are affluent individuals who inject capital for startups in exchange for ownership equity or convertible debt. Some angel investors invest through crowd funding platforms online or build angel investor networks to pool in capital.

- Though angel investors usually represent individuals, the entity that actually provides the fund may be a limited liability company, a business, a trust or an investment fund, among many other kinds of vehicles.

- Angel investors who seed start-ups that fail during their early stages lose their investments completely. This is why professional angel investors look for opportunities for a defined exit strategy, acquisitions or initial public offerings (IPOs). **(8 marks)**

Answer 2:

(A)

Assuming share prices are normally distributed, for level of 99%, the equivalent Z score from Normal table of Cumulative Area is 2.33. Volatility in terms of rupees is: 2% of Rs. 1 Crore = Rs. 2 lakh.

The maximum loss for 1 day at 99% Confidence Level is Rs.2 lakh x 2.33 = Rs.4.66 lakh, and expected maximum loss for 10 trading days shall be:

√10 x Rs.4.66 lakh = 14.73 lakhs or 14.74 lakhs **(4 marks)**

(B)

Duration of Bond X

Year	*Cash flow*	*P.V. @ 10%*		*Proportion of bond value*	*Proportion of bond value x time (years)*
1	1070	.909	972.63	1.000	1.00 0

Duration of the Bond is 1 year **(2 marks)**

Duration of Bond Y

Year	*Cash flow*	*P.V. @ 10%*		*Proportion of bond value*	*Proportion of bond value x time (years)*
1	80	.909	72.72	0.077	0.077
2	80	.826	66.08	0.071	0.142
3	80	.751	60.08	0.064	0.192
4	1080	.683	737.64	0.788	3.152
			936.52	1.000	3.563

Duration of the Bond is 3.563 years **(2 marks)**

Let x_1 be the investment in Bond X and therefore investment in Bond Y shall be $(1 - x_1)$. Since the required duration is 2 year the proportion of investment in each of these two securities shall be computed as follows:

$2 = x_1 + (1 - x_1)\ 3.563$

$x_1 = 0.61$

Accordingly, the proportion of investment shall be 61% in Bond X and 39% in Bond Y respectively.

Amount of investment

Bond X	**Bond Y**
PV of Rs. 1,00,000 for 2 years @ 10% x 61% = Rs. 1,00,000 (0.826) x 61% = Rs. 50,386 No. of Bonds to be purchased = Rs. 50,386/Rs. 972.73 = 51.79 i.e. approx. 52 bonds	PV of Rs. 1,00,000 for 2 years @ 10% x 39% = Rs. 1,00,000 (0.826) x 39% = Rs. 32,214 No. of Bonds to be purchased = Rs. 32,214/Rs. 936.52 = 34.40 i.e. approx. 34 bonds

(3 marks)

Note: The investor has to keep the money invested for two years. Therefore, the investor can invest in both the bonds with the assumption that Bond X will be reinvested for another one year on same returns. **(1 mark)**

(C)

Cluster based approach to lending is intended to provide a full-service approach to cater to the diverse needs of the MSE sector which may be achieved through extending banking services to recognized MSE clusters. A cluster based approach may be more beneficial (a) in dealing with well-defined and recognized groups (b) availability of appropriate information for risk assessment (c) monitoring by the lending institutions and (d) reduction in costs. The banks have, therefore, been advised to treat it as a thrust area and increasingly adopt the same for SME financing. United Nations Industrial Development Organisation (UNIDO) has identified 388 clusters spread over 21 states in various parts of the country. The Ministry of Micro, Small and Medium Enterprises has also approved a list of clusters under the Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and Micro and Small Enterprises Cluster Development Programme (MSE-CDP) located in 121 Minority Concentration Districts. Accordingly, banks have been advised to take appropriate measures to improve the credit flow to the identified clusters. Banks have also been advised that they should open more MSE focused branch offices at different MSE clusters which can also act as counseling. Centres for MSEs. Each lead bank of the district may adopt at least one cluster. **(4 marks)**

(D)

Strategy 1: This strategy is covered by High Risk: Low Reward category and worst as it leaves all exposures unhedged. Although this strategy does not involve any time and effort, it carries high risk.

Strategy 2: This strategy covers Low Risk: Reasonable reward category as the exposure is covered wherever there is anticipated profit otherwise it is left.

Strategy 3: This strategy is covered by High Risk: High Reward category as to earn profit, cancellations and extensions are carried out. Although this strategy leads to high gains but it is also accompanied by high risk.

Strategy 4: This strategy is covered by Low Risk : Low Reward category as company plays a very safe game.

Diagrammatically all these strategies can be depicted as follows:

High Risk

Low	Strategy 1	Strategy 3	High
Reward	Strategy 4	Strategy 2	Reward

Low Risk

(1 mark x 4 = 4 marks)

Answer 3:

(A)

Working Notes:

1. Calculation of Cost of Funds/ Discount Rate

Competing Company's Information	
Equity Market Value	1850.00

Debt Market Value	510.00
Equity Beta	1.35

Assuming debt to be risk free i.e. beta is zero; the beta of competitor is un-geared as follows:

Asset Beta = Equity Beta x $\frac{E}{E+D(1-t)} = 1.35 \text{ x } \frac{1850}{1850+510(1-0.20)} = 1.106$

Equity beta for Its Entertainment Ltd. in Nepal

Assets beta in Nepal	1.106
Ratio of funding in Nepal	
Equity	55.00%
Debt	45.00%

(3 marks)

1. 1.106 = Equity Beta x $\frac{55}{55+45(1-0.30)}$

Equity Beta = 1.74

Cost of Equity as per CAPM

Market Return 11.00%

Risk free return 8.00%

Cost of Equity = Risk free return + (Market Return - Risk free return)

= 8.00% + 1.74(11.00% - 8.00%) = 13.22%

WACC = 13.22% x 0.55 + 9%(1- 0.20) x 0.45 = 10.51% **(2 marks)**

2. Present Value Factors at the discount rate of 10.51%

Year	0	1	2	3	4	5
PVAF	1.000	0.905	0.819	0.741	0.670	0.607

3. Calculation of Capital Allowances

Year	1	2	3	4
Opening Balance (NPR Crore)	200.00	160.00	128.00	102.40
Less: Depreciation (NPR Crore)	40.00	32.00	25.60	20.48
Closing Balance (NPR Crore)	160.00	128.00	102.40	81.92

(1 mark)

Calculation of Present of Free Cash Flow

Year	0	1	2	3	4	5
Expected Annual visitors			5040000	5040000	5040000	5040000
Entry ticket price per visitor (NPR)			242.55	254.68	267.41	280.78
Profit from sale of Food and Beverages per visitor (NPR)			33.08	34.73	36.47	38.29
Profit from sale of						
Fancy Gift Items per visitor (NPR)			27.56	28.94	30.39	31.91
Revenue per visitor (NPR)			303.19	318.35	334.26	350.98
Total Revenue (NPR crores)			152.81	160.45	168.47	176.89
Less: Annual Staffing Cost (NPR crores)			71.66	75.25	79.01	82.96
Annual Insurance Costs (NPR crores)			5.51	5.79	6.08	6.38
Other running and maintenance costs (NPR crores)			25.00	29.00	33.00	37.00
Depreciation Allowances (NPR crores)			40.00	32.00	25.60	20.48
Total Expenses (NPR crores)			142.18	142.03	143.69	146.82
PBT (NPR crores)			10.63	18.41	24.78	30.07
Tax on Profit (NPR crores)			2.13	3.68	4.96	6.01
Net Profit (NPR crores)			8.51	14.73	19.83	24.06
Add: Depreciation Allowances (NPR crores)			40	32	25.6	20.48
Park Construction Cost (NPR crores)	-225	-225				
After tax assets realisation value (NPR crores)						250
Working capital (NPR crores)		-65.00	-3.25	-3.41	-3.58	75.25
Net cash Flow (NPR crores)	-225.00	-290.00	45.26	43.32	41.84	369.78
PVF at discount rate	1.00	0.90	0.82	0.74	0.67	0.61
Present Values (NPR crores)	-225.00	-262.42	37.06	32.10	28.06	224.35

Net Present Value (NPR crores) -165.86 **(6 marks)**

(B)

Area	Description/Meaning	Rationale
Economic Analysis	Analysis of the entire economy, growth of different sectors, future prospects, trends in income, expenditure, and consumption patterns.	• Growth of an Entity is based on general economic growth. • Consumption pattern of people affects corporate investments, profits, dividends and share prices.

2. Industry Analysis	Analysis of the Industry to which an Entity belongs, its demand pattern, cost structure, economic and Government constraints, etc.	• All Sectors of the economy do not grow at the same rate. • Basic profitability of every Company depends upon the Industry to which it belongs.
3.Company Analysis	Analysis of the Company's fundamental / key success factors, track record, growth prospects, its strengths and weaknesses, etc.	• Share Prices are influences by the company's performance and position, and its capacity to capitalize on the opportunities available in the economy / industry.
4. Group Analysis	Analysis of the Group to which a Company belongs, Parent-Subsidiaries relationships, Buyer-Seller relationships between them, financing pattern, etc.	• Group to which the Company belongs, has an impact on financial stability, access to debt market, revenue prospects, etc.

(4 marks)

(C)

(i) SWAP ratio based on current market prices:

EPS before acquisition:

Mani Ltd. : Rs.2,000 lakhs / 200 lakhs: Rs.10

Ratnam Ltd.: Rs.4,000 lakhs / 1,000 lakhs: Rs. 4

Market price before acquisition:

Mani Ltd.: Rs.10 × 10 Rs.100

Ratnam Ltd.: Rs.4 × 5 Rs. 20

SWAP ratio: 20/100 or 1/5 i.e. 0.20 **(2 marks)**

(ii) Market Price after acquisition:

EPS after acquisition : Rs.15.00 P/E

ratio after acquisition 10 × 0.9 9

Market price of share (Rs. 15 X 9) Rs.135.00 **(2 marks)**

Answer 4:

(A)

Final settlement amount shall be computed by using formula:

$$= \frac{(N)(RR\text{-}FR)(dtm/DY)}{\left[1+RR(dtm/DY)\right]}$$

(1 mark)

Where,

N = the notional principal amount of the agreement;

RR = Reference Rate for the maturity specified by the contract prevailing on the contract settlement date;

FR = Agreed-upon Forward Rate; and

dtm = maturity of the forward rate, specified in days (FRA Days)

DY = Day count basis applicable to money market transactions which could be 360 or 365 days.

Accordingly,

If actual rate of interest after 6 months happens to be 9.60%

$$=\frac{(\text{Rs.60 Crore})(0.096\text{-}0.093)(3/12)}{\left[1+0.096(3/12)\right]}$$

$$=\frac{(\text{Rs.60 Crore}))(0.00075)}{1.024}=\text{Rs.4,39,453}$$

Thus, banker will pay Parker & Co. a sum of Rs. 4,39,453 **(3 marks)**

Actual Rate	**9.60%**
Interest payable	
Rs. 60 crore x 0.096 x 3/12	(Rs.1,44,00,000)
Compensation Receivable: Rs. 60 crore x (0.096 – 0.093) x 3/12	Rs. 4,50,000
Interest Cost to Company (In Rs.)	Rs. 1,39,50,000
Annual Interest Cost to Company (In %)(Rs. 1,39,50,000/ Rs. 60crore) x 12/3	9.30%

(4 marks)

(B)

(i) Market Risk Premium (A) = 14% – 7% = 7%

Share	Beta	Risk Premium (Beta x A) %	Risk Free Return %	Return %	Return Rs.
Oxy Rin Ltd.	0.45	3.15	7	10.15	8,120
Boxed Ltd.	0.35	2.45	7	9.45	14,175
Square Ltd.	1.15	8.05	7	15.05	33,863
Ellipse Ltd.	1.85	12.95	7	19.95	89,775
Total Return					1,45,933

Total Investment Rs. 9,05,000 **(3 marks)**

(i) Portfolio Return = (Rs. 145933 / Rs. 905000) x 100 = 16.13% **(1 mark)**

(ii) Portfolio Beta = Portfolio Return = Risk Free Rate + Risk Premium x β = 16.13%

$$7\% + 7\,\beta = 16.13\%$$

$$\beta = 1.30$$ **(1 mark)**

Alternative Approach

First, we shall compute Portfolio Beta using the weighted average method as follows:

$$\text{Beta}_P = 0.45X\frac{0.80}{9.05} + 0.35X\frac{1.50}{9.05} + 1.15X\frac{2.25}{9.05} + 1.85X\frac{4.50}{9.05}$$

$$= 0.45x0.0884 + 0.35X0.1657 + 1.15X0.2486 + 1.85X0.4972 = 0.0398 + 0.058 + 0.2859 + 0.9198 = 1.3035$$

Accordingly,

(i) Portfolio Return using CAPM formula will be as follows:

$R_P = R_F + \text{Beta}_P(R_M - R_F)$

$= 7\% + 1.3035(14\% - 7\%) = 7\% + 1.3035(7\%)$

$= 7\% + 9.1245\% = 16.1245\%$

(ii) Portfolio Beta

As calculated above 1.3035

(5 marks)

(C)

PROBLEMS IN SECURITIZATION:

Following are main problems faced in growth of Securitization of instruments especially in Indian context:

(1) Stamp Duty

Stamp Duty is one of the obstacle in India. Under Transfer of Property Act, 1882, a mortgage debt stamp duty which even goes upto 12% in some states of India and this impeded the growth of securitization in India. It should be noted that since pass through certificate does not evidence any debt only able to receivable, they are exempted from stamp duty.

Moreover, in India, recognizing the special nature of securitized instruments in some states has reduced the stamp duty on them.

(2) Taxation

Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act experts' opinion differ a lot. Some are of opinion that in SPV as a trustee is liable to be taxed in a representative capacity then other are of view that instead of SPV, investors will be taxed on their share of income. Clarity is also required on the issues of capital gain implications on passing payments to the investors.

(3) Accounting

Accounting and reporting of securitized assets in the books of originator is another area of concern. Although securitization is slated to an off-balance sheet instrument but in true sense receivables are removed from originator's balance sheet. Problem arises especially when assets are transferred without recourse.

(4) Lack of standardization

Every originator follows own format for documentation and administration have lack of standardization is another obstacle in growth of securitization.

(5) Inadequate Debt Market

Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized or asset backed securities.

(6) Ineffective Foreclosure laws

For last many years there are efforts are going on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments especially mortgaged backed securities less attractive as lenders face difficulty in transfer of property in event of default by the borrower. **(7 marks)**

Answer 5:

(A)

Bank will buy from customer at the agreed rate of Rs. 65.40. In addition to the same if bank will charge/ pay swap difference and interest on outlay funds.

(i) Swap Difference

Bank Sells at Spot Rate on 30 November 2015	Rs. 65.22
Bank Buys at Forward Rate of 31 December 2015 (65.27 + 0.15)	Rs. 65.42
Swap Loss per US$	Rs. 00.20
Swap loss for US$ 1,00,000	Rs. 20,000

(1.5 marks)

(ii) Interest on Outlay Funds

On 30th November Bank sells at	Rs. 65.22
It buys from customer at	Rs. 65.40
Outlay of Funds per US$	Rs. 00.18

Interest on Outlay fund for US$ 1,00,000 for 31 days

Rs. 275.00 (US$100000 x 00.18 x 31/365 x 18%) **(1.5 marks)**

(iii) Charges for early delivery

Swap loss	Rs. 20,000.00
Interest on Outlay fund for US$ 1,00,000 for 31 days	Rs. 275.00
	Rs. 20,275.00

(1.5 marks)

(iv) Net Inflow to Mr. X

Amount received on sale (Rs. 65.40 x 1,00,000)	Rs. 65,40,000
Less: Charges for early delivery payable to bank	(Rs.20,275)

Rs. 65,19,725 **(1.5 marks)**

(B)

Calculation of Income available for Distribution

	Units (Lakh)	Per Unit (Rs.)	Total (Rs. In lakh)
Income from April	300	0.0765	22.9500
Add: Dividend equalization collected on issue	6	0.0765	0.4590
	306	0.0765	23.4090
Add: Income from May		0.1125	34.4250
	306	0.1890	57.8340
Less: Dividend equalization paid on repurchase	3	0.1890	(0.5670)
Add: Income from June	303	0.1890	57.2670
		0.1500	45.4500
	303	0.3390	102.7170
Less: Dividend Paid		0.2373	(71.9019)
	303	0.1017	30.8151

(3 marks)

Calculation of Issue Price at the end of April

	Rs.
Opening NAV	18.750
Add: Entry Load 2% of Rs. 18.750	(0.375)
	19.125
Add: Dividend Equalization paid on Issue Price	0.0765
	19.2015

(1 mark)

Calculation of Repurchase Price at the end of May

	Rs.
Opening NAV	18.750
Less: Exit Load 2% of Rs. 18.750	(0.375)
	18.375
Add: Dividend Equalization paid on Issue Price	0.1890
	18.564

(1 mark)

Closing NAV

		Rs. (Lakh)
Opening Net Asset Value (Rs. 18.75 × 300)		5625.0000
Portfolio Value Appreciation		425.4700
Issue of Fresh Units (6 × 19.2015)		115.2090
Income Received (22.950 + 34.425 + 45.450)		102.8250
		6268.504
Less: Units repurchased (3 × 18.564)	-55.692	
Income Distributed	-71.9019	(-127.5939)
Closing Net Asset Value		6140.9101
Closing Units (300 + 6 – 3) lakh		303 lakh

Closing NAV as on 30th June		Rs. 20.2670

(3 marks)

(C)

(a) Calculation of Profit after tax (PAT)

		Rs.
Profit before interest and tax (PBIT)		32,00,000
Less: Debenture interest (Rs. 64,00,000 × 12/100)		7,68,000
Profit before tax (PBT)		24,32,000
Less: Tax @ 35%		8,51,200
Profit after tax (PAT)		15,80,800
Less: Preference Dividend		
(Rs. 40,00,000 × 8/100)	3,20,000	
Equity Dividend (Rs. 80,00,000 × 8/100)	6,40,000	9,60,000
Retained earnings (Undistributed profit)		6,20,800

(1.5 marks)

Calculation of Interest and Fixed Dividend Coverage

$$= \frac{\text{PAT + Debenture interest}}{\text{Debenture interest + Preference dividend}}$$

$$= \frac{15,80,800 + 7,68,000}{7,68,000 + 3,20,000} = \frac{23,48,800}{10,88,000} = 2.16 \text{ times}$$

(0.5 mark)

(b) Calculation of Capital Gearing Ratio

$$\text{Capital Gearing Ratio} = \frac{\text{Fixed interest bering funds}}{\text{Equity shareholders' Funds}}$$

$$= \frac{\text{Preference Share Capital + Debentures}}{\text{Equity Share Capital + Reserves}} = \frac{40,00,000 + 64,00,000}{80,00,000 + 32,00,000} = \frac{1,04,00,000}{1,12,00,000} = 0.93$$

(1 mark)

(c) Calculation of Yield on Equity Shares:

Yield on equity shares is calculated at 50% of profits distributed and 5% on undistributed profits:

	(Rs.)
50% on distributed profits (Rs. 6,40,000 × 50/100)	3,20,000
5% on undistributed profits (Rs. 6,20,800 × 5/100)	31,040
Yield on equity shares	3,51,040

$$\text{Yield on equity shares \%} = \frac{\text{Yield on shares}}{\text{Equity share capital}} \text{ x } 100$$

$$= \frac{3,51,040}{80,00,000} \text{ x } 100 = 4.39\% \text{ or, } 4.388\%$$

(1.5 mark)

Calculation of Expected Yield on Equity shares

Note: There is a scope for assumptions regarding the rates (in terms of percentage for every one time of difference between Sun Ltd. and Industry Average) of risk premium involved with respect to Interest and Fixed Dividend Coverage and Capital Gearing Ratio. The below solution has been worked out by assuming the risk premium as:

(i) 1% for every one time of difference for Interest and Fixed Dividend Coverage.

(ii) 2% for every one time of difference for Capital Gearing Ratio.

(a) Interest and fixed dividend coverage of Sun Ltd. is 2.16 times but the industry average is 3 times. Therefore, risk premium is added to Sun Ltd. Shares @ 1% for every 1 time of difference.

Risk Premium = 3.00 – 2.16 (1%) = 0.84 (1%) = 0.84%

(b) Capital Gearing ratio of Sun Ltd. is 0.93 but the industry average is 0.75 times. Therefore, risk premium is added to Sun Ltd. shares @ 2% for every 1 time of difference.

Risk Premium = (0.75 – 0.93) (2%)

= 0.18 (2%) = 0.36%

	(%)
Normal return expected	9.60
Add: Risk premium for low interest and fixed dividend coverage	0.84
Add: Risk premium for high interest gearing ratio	0.36
	10.80

Value of Equity Share

$= \frac{\text{Actual yeild}}{\text{Expected yield}} \text{ x paid up value of share} = \frac{4.39}{10.80} \text{ x } 100 = \text{Rs.}40.65\,.$ **(1.5 marks)**

Answer 6:

(A)

(i) The number of shares to be issued by Tatu Ltd.:

The Exchange ratio is 0.5
So, new Shares = 2,40,000 x 0.5 = 1,20,000 shares. **(2 marks)**

(ii) **EPS of Tatu Ltd. after acquisition:**

Total Earnings	(Rs. 24,00,000 + Rs.4,80,000)	Rs.28,80,000	
No. of Shares	(8,00,000 + 1,20,000)	9,20,000	
EPS	(Rs. 28,80,000)/ 9,20,000)	Rs.3.13	**(2 marks)**

(iii) **Equivalent EPS of Mantu Ltd.:**

No. of new Shares	0.5
EPS	Rs.3.13
Equivalent EPS (Rs. 3.13 x 0.5)	Rs.1.57

(2 marks)

(v) **Market Value of merged firm:**

Total number of Shares	9,20,000
Expected Market Price	Rs.31.30
Total value (9,20,000 x 31.30)	Rs.2,87,96,000

(2 marks)

(B)

Efficient and sound financial market of a country plays an important role in the nation's economic development. The contribution of various types of financial markets in economic development has been discussed as below:

(i) Capital Market

Capital market is the market where long term debt and equity funds are traded. Industries which require capital on a large scale may tap the capital market. The primary role of capital market is to transfer surplus funds to deficit sectors which are in dire need of money.

Capital market can be divided into primary market and secondary market.

(a) Primary market is utilized by companies for the purpose of setting up new businesses or for expanding or modernizing the existing business.
(b) Secondary market provides an opportunity to the company to raise the market price of their shares, thereby enabling them to attract more capital from investors and loans from banks.

(ii) Money Market

Money market is the market where short-term funds are traded. In simple term, it means that all the financial assets or instruments which can be easily converted into money are traded in this market. The short-term money requirement of the borrowers can be easily met with the funds provided by the money market.

(iii) Foreign Exchange Market

Foreign exchange earned through foreign direct investment in India can be used to remove the poverty and for other productive purposes. Inflow of foreign exchange increases the scale of production and national income of the country. With the rise in the demand of domestic goods, resources of a country are fully utilized and it helps in reducing the unemployment of a country.

Foreign exchange (forex) markets provide traders with a lot of flexibility. This is because there is no restriction on the amount of money that can be used for trading. They have the choice of entering into spot trade or they could enter into a future agreement.

(iv) Derivative Market

A derivative is an instrument whose value is derived from value of one or more underlying like commodities, metals, currency, bonds, stocks, etc. The four main derivatives are : Forward, futures, options and swap.

Since all transactions related to derivatives take place in future, it provides individuals with better opportunities because an individual who want to short (sell) some stock for long time can do it only in futures or options hence the biggest benefit of this is that it gives numerous options to an investor or trader to execute all sorts of strategies. **(5 marks)**

(C)

Date	**1** **Sensex**	**2** **EMA for Previous day**	**3** **1-2**	**4** **3×0.062**	**5** **EMA** **2 ± 4**
6	29522	30000	(478)	(29.636)	**29970.364**
7	29925	29970.364	(45.364)	(2.812)	**29967.55**
10	30222	29967.55	254.45	15.776	**29983.32**
11	31000	29983.32	1016.68	63.034	**30046.354**
12	31400	30046.354	1353.646	83.926	**30130.28**
13	32000	30130.28	1869.72	115.922	**30246.202**
17	33000	30246.202	2753.798	170.735	**30416.937**

Conclusion – The market is bullish. The market is likely to remain bullish for short term to medium term if other factors remain the same. On the basis of this indicator (EMA) the investors/brokers can take long position. **(7 marks)**