Paper 20 - Strategic Performance Management & Business Valuation

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Full Marks: 100   **Time allowed: 3 hours**

The figures in the margin on the right side indicate full marks.
Working notes should form part of the answer.

Section - A

Answer Question No. 1 which is compulsory and any two from the rest of this section

1. **Multiple choice questions:**   **[5×2=10]**
   [1 mark for right choice and 1 mark for justification]

   (i) If Cost Function is $C = \dfrac{3}{5}x + \dfrac{15}{4}$, the cost when output is 5 units will be:

       (A) 6.80
       (B) 6.75
       (C) 6.20
       (D) 6.25

   (ii) The risk which is concerned with the general economic climate (such as growth rate of income, characteristics of the labour force, level of foreign debt outstanding etc.) within the country, is termed as:
       (A) Country Risk
       (B) Political Risk
       (C) Economic Risk
       (D) Social Risk

   (iii) The necessary condition for equilibrium position of a firm is:
       (A) MC>MR
       (B) MC> Price
       (C) MC = MR
       (D) MC = AC

   (iv) The components of supply chain management are:
       (A) Plan, source, make, deliver & return
       (B) Plan, system, make, deliver & return
       (C) Plan, source, supply & return
       (D) Plan, source, make, deliver & warranty

   (v) Which of the following is not a type of an OLAP system?
       (A) ROLAP
       (B) MOLAP
       (C) RTOLAP
       (D) ZTOLAP

Answer:

(i) (B) Cost when output is 5 units $= \dfrac{3}{5} \times 5 + \dfrac{15}{4} = 6.75$

(ii) (C) Economic risk is concerned with the general economic climate within the country. Some of the factors which reflect the economic climate of a country are: the growth rate of income, characteristics of the labour force, level of foreign debt outstanding etc.

(iii) (C) MC=MR, since this is the right option.

(iv) (A) The five basic components of supply chain management are — plan, source, make, deliver & return.

(v) (D) Except ZTOLAP, all other options like ROLAP (Relational OLAP), MOLAP (Multidimensional OLAP), RTOLAP (Real-time OLAP) are the types of OLAP system.

2.(a) What is Customer Relationship Management (CRM)? State the advantages of it.
[2+8=10]
(b) Describe the four perspectives of Balanced Score Card. Also, state the limitations of Balanced Sore Card. **[6+4=10]**

Answer:

(a) Customer Relationship Management (CRM) is a business strategy comprised of process, organizational and technical change whereby a company seeks to better manage its enterprise around its customer behaviors. It entails acquiring and deploying knowledge about customers and using this information across the various customers touch points to increase revenue and achieve cost reduction through operational efficiencies.

Advantages of Customer Relationship Management: the basic advantages and benefits of CRM are these:

• satisfied customer does not consider leaving

• product development can be defined according to current customer needs

• a rapid increase in quality of products and services

• the ability to sell more products

• optimization of communication costs

• proper selection of marketing tools (communication)

• trouble-free run of business processes

• greater number of individual contacts with customers

• more time for customer

• differentiation from com petition

• real time access to information

• fast and reliable predictions

• communication between marketing, sales and services

• increase in effectiveness of teamwork

• increase in staff motivation.

(b) The four perspectives of Balanced Score Card are — (A) Financial, (B) Customers, (C) Internal Business Process, and (D) Learning and Growth.

(A) Financial: The financial perspective serves as the focus for the objectives and measures for the objectives and measures in the other scorecard perspectives. This perspective is concerned for profit of the enterprises. Under this perspective the focus will be on financial measures like operating profit, ROI, residual income, economic value added concept, revenue growth, cost reduction, asset utilization etc. These financial measures will provide feedback on whether improved operational performance is being translated into improved financial performance.

(B) Customer: This perspective captures the ability of the organization to provide quality goods and services, the effectiveness of their delivery, and overall customer service and satisfaction. Needs and desires of customers have to be attended properly because customer pay for the organization's cost and provided for its profits. This perspective typically includes several core or genetic measures that relate to customer loyalty and the result of the strategy in the targeted segment. They include market share, customer retention, new customer acquisition, customer satisfaction and customer profitability.

(C) Internal Business Processes: This perspective focuses on the internal business results that lead to financial success and satisfied customer. To meet organizational objectives and customers' expectations, organizations must identify the key business processes at which they must excel. Key processes are monitored to ensure that outcomes will be satisfactory. The principal internal business processes include the following:
   (1) Innovation processes for exploring the needs of the customers.
   (2) Operation processes with a view to providing efficient, consistent and timely delivery of product/ service.
   (3) Post service sales processes.

(D) Learning and Growth: This perspective looks at the ability of employees, the quality of information systems, and the effects of organizational alignment in supporting accomplishment of organizational goals. Processes will only succeed if adequately skilled and motivated employees, supplied with accurate and timely information, are driving them. In order to meet changing requirements and customer expectations, employees may be asked to take on dramatically new responsibilities, and may require skills, capabilities, technologies, and organizational designs that were not available before. The learning and growth perspective identifies the infrastructure that the business must build to create long-term growth and improvement. There will be focus on factors like employee capability, employee productivity, employee satisfaction, employee retention.

Limitations of Balanced Sore Card: BSC is subject to following limitations

- There is no clear relation between BSC and shareholder value.
- It does not lead to a single aggregate summary of control.
- The measures may give conflicting signals and confuse management.
- It involves substantial shifts in corporate culture.

3.(a) Cost $= 300x - 10x^2 + \dfrac{1}{3}x^3$, calculate :

   (i) Output at which Marginal Cost is minimum
   (ii) Output at which Average Cost is minimum
   (iii) Output at which Marginal Cost = Average Cost. [3+3+4=10]

   (b)(i) State the purposes of five selected ratios, as suggested by Altman for Z-score model of corporate distress prediction.
   (ii) Write a short note on NCAER model of corporate distress prediction. [5+5=10]

Answer:
(a)
(i) Cost $= 300x - 10x^2 + \dfrac{1}{3}x^3$,

Marginal Cost $= \dfrac{dc}{dx} = 300 - 20x + x^2$ (say, y)

In order that MC is minimum first derivate must be equal to zero and 2nd derivate must be positive.

$$\therefore \frac{dy}{dx} = 2x - 20 \Rightarrow 2x = 20$$

x = 10

$$\frac{d^2y}{dx^2} = 2, \text{ which is positive. It is minimum at x = 10.}$$

(ii) Average Cost = $300 - 10x + \frac{1}{3}x^2$, (y say)

$$\frac{dy}{dx} = -10 + \frac{2}{3}x = 0$$

=> x = 30/2 = 15

$$\frac{d^2y}{dx^2} = \frac{2}{3} > 0,$$

Therefore, average Cost is minimum of output at x = 15

(iii) Output at which Marginal Cost = Average Cost

$$300 - 20x + x^2 = 300 - 10x + \frac{1}{3}x^2$$

$$-20x + 10x + x^2 - \frac{1}{3}x^2 = 0$$

$$-10x + \frac{2}{3}x^2 = 0$$

$$\frac{-30x + 2x^2}{3} = 0$$

2x2 – 30x = 0

2x (x – 15) = 0

X – 15 = 0

Therefore, x = 15

(b)(i) Purposes of five selected ratios, as suggested by Altman for Z-score model of corporate distress prediction:
   (1) To measure liquidity position of the firms.
   (2) To measure reinvestment of earnings of the firms.
   (3) To measure profitability of the firms.
   (4) To measure financial leverage condition of the firms.
   (5) To measure sales-generating ability of firm's Assets.

(ii) NCAER Model: According to NCAER, an industrial undertaking may be financially viable, if its three elements are proved to be positive. The NCAER Study on Corporate Distress Prediction prescribed the following three elements/ parameters for predicting the stages of corporate sickness:

   (1) Cash profit position (a profitability measure).
   (2) Net working capital position (a liquidity measure).
   (3) Net worth position (a solvency measure).

In a firm, if any of the above three elements/parameters are found to be negative, it may be considered that the firm has a 'tendency of becoming sick'. If any two of the above three elements/parameters are found to be negative in a firm, it may be considered that the firm possesses 'incipient sickness'. If all the above three elements/ parameters are found to be negative in a firm, it may be considered that the firm is 'fully sick'.

4.(a) What is Risk Management? State the objectives of it. **[5+5=10]**

(b) Discuss the potential impact of Computers and MIS on different levels of management.
[10]

Answer:

(a) Risk management is the process of measuring or assessing risk and developing strategies to manage it. Risk management is a systematic approach in identifying, analyzing and controlling areas or events with a potential for causing unwanted change. It is through risk management that risks to any specific program are assessed and systematically managed to reduce risk to an acceptable level. Risk management is the act or practice of controlling risk. It includes risk planning, assessing risk areas, developing risk handling options, monitoring risks to determine how risks have changed and documenting overall risk management program.

Risk management is a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues. A Key ingredient of the risk measurement process is the accuracy and quality of master data that goes into the computation of different aspects of risk. It is no surprise therefore that Master Data Management is a key area. Risk management is first and foremost a 'science' and then an 'art'. Given the appetite for risk, if one uses accurate and relevant data, reliable financial models and best analytical tools, one can minimize risk and make the odds work in one's favour.

Risk Management process needs to identify measure and manage various risks so that comparison of risks and returns is possible to set corporate strategies. Risk Management is the identification and evaluation of risks to an organization including risks to its existence, profits and reputation (solvency) and the acceptance, elimination, controlling or mitigation of the risks and the effects of the risks.

Risk Management framework need a common metric to rank return and potential losses from different portfolios and risk categories.

Integrated risk management is a continuous, proactive and systematic process to understand, manage and communicate risk from an organization-wide perspective. It is about making strategic decisions that contribute to the achievement of an organization's overall corporate objectives.

Objectives of Risk Management: Risk management basically has the following objectives:
A. Anticipating the uncertainty and the degree of uncertainty of the events not happening the way they are planned.
B. Channelizing events to happen the way they are planned.
C. Setting right, at the earliest opportunity, deviations from plans, whenever they occur.
D. Ensuring that the objective of the planned event is achieved by alternative means, when the means chosen proves wrong, and
E. In case the expected event is frustrated, making the damage minimal.

(b) The potential impact of computers on top-level management may be quite significant. An important factor which may account for this change is the fast development in the area of computer science. It is believed that in future computers would be able to

provide simulation models to assist top management in planning their work activities. For example, with the help of a computer it may be possible in future to develop a financial model by using simulation technique, which will facilitate the executives to test the impact of ideas and strategies formulated on future profitability and in determining the needs of funds and physical resources.

Futurists believe that top management will realize the significance of techniques like Simulation, Sensitivity Analysis and Management Science. The application of these techniques to business problems with the help of computers would generate accurate, reliable, timely and comprehensive information to top management. Such information would be quite useful for the purpose of managerial planning and decision-making. Computerized MIS will also influence in the development, evaluation and implementation of a solution to a problem under decision making process.

Potential Impact of Computers and MIS on middle management level will also be significant. It will bring a marked change in the process of their decision-making. At this level, most of the decisions will be programmed and thus will be made by the computer, thereby drastically reducing the requirement of middle level managers. For example, in the case of inventory control system, computers will carry records of all items in respect of their purchase, issue and balance. The re-order level, re-order quantity etc., for each item of material will also be stored in computer after its predetermination. Under such a system, as soon as the consumption level of a particular item of material will touch reorder level, computer will inform for its purchase immediately.

The impact of Computers and MIS today at supervisory management level is maximum. At this level, managers are responsible for routine, day-to-day decisions and activities of the organization which do not require much judgment and discretion. In a way, Supervisory manager's job is directed more towards control functions, which are highly receptive to computerization. Potential impact of computers and MIS on supervisory level will completely revolutionize the working at this level Most of the controls in future will be operated with the help of computers. Even the need of supervisory managers for controlling the operations will be substantially reduced. Most of the operations/activities now performed manually will be either fully or partially automated.

Section - B
Answer Question No. 5 which is compulsory and any two from the rest of this section

5. **Multiple choice questions:** [5×2=10]
   [1 mark for right choice and 1 mark for justification]

   (i) **If the expected rate of return on a stock exceeds the required rate:**
       (A) The stock is experiencing super normal growth
       (B) The stock should be sold
       (C) The company is not probably trying to maximize price per share
       (D) The stock is a good buy

   (ii) **The Current ratio of A Ltd. is 2:1, while quick ratio is 1.8:1. If the current liabilities are ₹ 40,000, value of stock is:**
       (A) ₹ 5000
       (B) ₹ 8000
       (C) ₹ 6000
       (D) None of the above.

   (iii) **DCF analysis requires the revenue and expenses of:**
       (A) Past

(B) Future
(C) Past & future
(D) None of these.

(iv) X Ltd. has ₹ 100 crores worth of common equity on its balance sheet comprising of 50 lakhs shares. The company's Market Value Added (MVA) is ₹ 24 crores. What is company's stock price?
(A) ₹ 230
(B) ₹ 238
(C) ₹ 248
(D) ₹ 264

(v) In the context of an acquisition of a firm, which one of the following concepts of value is least relevant?
(A) Market Value
(B) Opportunity Cost
(C) Synergy Value
(D) Value Gap

Answer:

(i) (D) The stock is a good buy.

(ii) (B) 8000

$$\left[\frac{CA\ (current\ Assets)}{CL\ (Current\ Liabilities)}\right] = 2:1$$

CA = 2CL

$$\frac{CA-Stock}{CL} = 1.8$$

CA-Stock = 1.8CL

2CL – Stock = 1.8CL

Stock = 2CL – 1.8CL

Stock = 0.2 (40000)

Stock = 8000.

(iii) (B) Future [DCF analysis use future cash flow projections and discounts them using a required annual rate to arrive at present value estimate].

(iv) (C) ₹248

₹(100+24) crores / 50 lakhs shares

= ₹248.

(v) (B) Opportunity Cost.

6.(a) From the following information determine the Possible Value of Brand as per Potential Earning Model –

(₹ Lakhs)

	Particulars	CASE A	CASE B
(i)	Profit Before Tax (PBT)	--	15.00
(ii)	Income Tax	--	3.00
(iii)	Profit After Tax (PAT)	2,700	--
(iv)	Tangible Fixed Assets	10,000	20.00
(v)	Identifiable Intangible other than Brand	1,500	10.00
(vi)	Weighted Average Cost of Capital	15%	
(vii)	Expected Normal Return on Tangible Assets	20%	6.00

Weighted Average Cost (15%) + Normal Spread 5%		
(viii) Appropriate Capitalization Factor for Intangibles	25%	25%

[10]

(b) Kolkata Ltd. and Bombay Ltd. have agreed that Kolkata Ltd. will take over the business of Mumbai Ltd. with effect from 31st December, 2018. It is agreed that:

(i) 10,00,000 shareholders of Mumbai Ltd. will receive shares of Kolkata Ltd.. The swap ratio is determined on the basis of 26 week average market prices of shares of both the companies. Average prices have been worked out at ₹50 and ₹25 for the shares of Kolkata Ltd. and Mumbai Ltd. respectively.

(ii) In addition to (i) above, the shareholders of Mumbai Ltd. will be paid in cash based on the projected synergy that will arise on the absorption of the business of Mumbai Ltd. by Kolkata Ltd. 50% of the projected benefits will be paid to the shareholders of Mumbai Ltd.

The following projections have been agreed upon by the management of both the companies:

Year	2019	2020	2021	2022	2023
Benefit ₹ (in lakhs)	50	75	90	100	105

The benefit is estimated to grow at the rate of 2% from 2023 onwards. It has been further agreed that a discount rate of 20% should be used to calculate the cash that the holders of each share of Mumbai Ltd. will receive.

- Calculate the cash that holder of each share of Mumbai Ltd. will receive
- Calculate the total purchase consideration.

(Discounting Rate 20%: 1 year-0.833, 2 year-0.694, 3 year-0.579, 4 year-0.482, 6 year-0.335). [10]

Answer:

(a)

CASE A....

Particulars	₹ Lakhs	₹ Lakhs
Profit After Tax	2,700	2,700
Less: Normal Return from Tangible Assets (₹10,000 Lakhs x 20%)	(2,000)	(2,000)
Less: Normal Return from Other Intangible Assets (₹1,500 Lakhs x 25%)	(375)	(375)
Brand Earnings	325	325
Capitalization Factor = WACC	25%	15%
Therefore, Value of Brand	₹ 1,300 Lakhs	₹ 2,166.67 Lakhs

CASE B ...

Particulars	₹ Lakhs
Profit Before Tax	15.00
Less: Income Tax	(3.00)
Profit After Tax	12.00

Less: Normal Return Tangible Assets	(6.00)
Less: Normal Return from Other Intangible Assets (₹ 10 Lakhs x 25%)	(2.50)
Brand Earnings	3.50
Capitalization factor	25%
Therefore, Value of Brand (₹ 3.50 Lakhs ÷25%)	₹ 14 Lakhs

(b) (i) Present Value of Synergy Benefits

Year	Computation	PV = ₹ Lakhs
2019	50 x 0.833	41.65
2020	75 x 0.694	52.05
2021	90 x 0.579	52.11
2022	100 x 0.482	48.20
2023	105 x 0.402	42.21
2024 onwards (Terminal Value Note)	(105 x 102% ÷18%) x 0.402	239.19
Total		475.41

50% on the Synergy Benefits = 475.41 x 50% = ₹ 237.705 lakhs

for the business Cash for every share held in Mumbai Ltd. = 237.705 ÷10 = ₹ 23.77

Note: For every increasing cash flow at constant growth rate i.e., perpetual Cash Flow is as under:

(ii) Total Purchase Consideration

(1) Equity Share (25/50 x 10,00,000 x ₹ 50)	₹ 250.00 lakhs
(2) Cash= 50% of Synergy Benefits	₹ 237.70 lakhs
Total	₹ 487.70 lakhs

7.(a) Current equilibrium price per share (MPS) and expected earnings per share (EPS) of five companies in the same industry are given below. The cost of equity for the industry can be taken as 20%. Identify the company having maximum potential for growth.

Company	MPS	EPS
A Ltd.	75.00	12.00
B Ltd.	63.00	9.45
C Ltd.	65.00	7.80
D Ltd.	70.00	11.90
E Ltd.	80.00	8.80

[10]

(b) Following is the Profit & Loss Account and Balance Sheet for M/s. X Ltd.

(₹ in Lakhs)

	2017	2018
Turnover	652	760
Pre-tax accounting profit	134	168
Taxation	46	58
Profit after tax	88	110
Dividends	30	36
Retained earnings	58	74

Balance Sheet extracts are as follows:

(₹ in Lakhs)

	2017	2018
Fixed Assets	240	312
Net Current Assets	260	320

Total	500	632
Equity Shareholders Funds	390	472
Medium and Long-term Bank Loan	110	160

The Company's performance in regard to turnover had increased by 17% along with increase in pre-tax profit by 25% but shareholders are not satisfied by the Company's preference in the last 2 years. You are required to calculate the economic value added, as suggested by M/s. Trump & Co., USA, so that reasons of non-satisfaction can be evaluated.

You are also given:

Particulars	2017	2018
Pre-tax Cost of Debt	9%	10%
Cost of Equity	15%	17%
Tax rate	35%	35%
Interest Expenses	₹ 8	₹ 12

[10]

Answer:

(a)

Company	MPS (₹) (a)	EPS / Ke (b)	PVGO [c = (a-b)]	PVGO per Re of MPS (c / a)
A Ltd.	75.00	60.00	15.00	0.20
B Ltd.	63.00	47.25	15.75	0.25
C Ltd.	65.00	39.00	26.00	0.40
D Ltd.	70.00	59.50	10.50	0.15
E Ltd.	80.00	44.00	36.00	0.45

It is seen from the above analysis that E Ltd. has maximum potential for growth.

(b) Calculation of Return on Operating Capital (ROOC): (₹ in lakhs)

NOPAT:	2017	2018
PBT	134	168
Add: Interest Expenses	8	12
	142	180
Less: Taxes @35%	49.7	63
NOPAT (A)	92.3	117
Operating Capital:		
Equity Shareholder's Funds	390	472
Long term Debt	110	160
Operating Capital (B)	500	632
ROOC=(A/B)×100	18.46%	18.51%

Calculation of Weighted Average Cost of Capital (WACC):

Particulars	2017	2018
Kd	9%(1-0.35)× 110/500	10%(1-0.35)× 160/632
	1.287%	1.645%
Ke	15%×(390/500)	17%×(472/632)
	11.7%	12.7%
WACC	1.287%+11.7%=12.99%	1.645%+12.7%= 14.34%
EVA:		
ROOC	18.46%	18.51%
Less: WACC	12.99%	14.34%
EVA Spread	5.47%	4.17%
EVA= Spread x Operating Capital	5.47%×500 lakhs=27.35Lakhs	4.17%×632 lakhs=26.3544 Lakhs.

Since EVA has declined in year 2018 by 0.9956 Lakhs, this can be attributed as reason for non-satisfaction.

8.(a) S K Lab a pharmaceutical company in Western India was expected to have revenues of ₹ lakhs in 2018 and report net income of ₹9 lakhs in that year. The firm had a book value of assets of ₹110 lakhs and a book value of equity of ₹58 lakhs at the end of 2017. Its market capitalization was ₹85 lakhs. The firm was expected to maintain sales in its niche product, a multivitamin tablet and grow at 5% a year in the long term, primarily by expanding into the generic drug market. The beta of S K Lab traded in Mumbai Stock Exchange was 1.25. The return on 10 year GOI bond in India in 2017 was 7% and the risk premium for stocks over bond is assumed to be 3.5%. Do you consider the market price as the fair value of the shares of S K Lab? **[10]**

(b) Reliable Industries Ltd. (RIL) is considering a takeover of Sunflower Industries Ltd. (SIL). The particulars of 2 companies are given below:

Particulars	RIL	SIL
Earnings After Tax (₹)	20,00,000	10,00,000
Equity shares (No.)	10,00,000	10,00,000
EPS (₹)	2	1
P/E ratio (times)	10	5

Required:
  i. What is the market value of each company before merger?
  ii. Assuming that the management of RIL estimates that the shareholders of SIL will accept an offer of one share of RIL for four shares of SIL. If there are no synergic effects, what is the market value of the post-merger RIL? What is the new price for share? Are the shareholders of RIL better or worse off than they were before the merger?
  iii. Due to synergic effects, the management of RIL estimates that the earnings will increase by 20%. What is the new post-merger EPS and price per share? Will the shareholders be better off or worse off than before the merger? **[10]**

Answer:
(a) Expected net income = ₹ 9 lakhs

Return on equity = Net Income / Book Value of Equity = 9/58 = 15.52%

As per CAPM, Cost of equity = $R_f + \beta(r_m - R_f)$ = 7% + 1.25 (3.5%) = 11.375%

Now, $\dfrac{D_1}{k-g} = \dfrac{D_0 \times (1+g)}{k-g} = \dfrac{ROE \times BV \times PayoutRatio \times (1+g)}{k-g}$ [ROE x BV = Net Income]

$\dfrac{P}{BV} = \dfrac{ROE \times PayoutRatio \times (1+g)}{k-g} = \dfrac{ROE_1 \times PayoutRatio}{k-g}$ [ROE₁ = ROE x (1+g)]

Now, g = ROE_1 x b = ROE_1 x (1- Payout Ratio)

Thus, g/ROE_1 = 1 – Payout Ratio

Payout Ratio = 1 – g / ROE_1

Using in numerator, we get the numerator term as:

ROE_1 x Payout Ratio = ROE_1 x (1 – g / ROE_1) = ROE_1 – g

Thus, $\dfrac{P}{BV} = \dfrac{ROE_1 - g}{k-g}$

Price to book value ratio = (0.1552 – 0.05) / (0.11375 – 0.05) = 1.65

Estimated Market Value Mf equity = BV equity x Price to BV ratio = 58 x 1.65 = ₹ 95.70 lakhs

Hence the market price of total shares of S K Lab at ₹ 85 lakhs is undervalued.

(b)(i) Market value of companies before merger

Particulars	RIL	SIL
EPS (₹)	2	1
P/E ratio	10	5
Market price per share (₹) (EPS × P/E ratio)	20	5
Equity shares (No.)	10,00,000	10,00,000
Total market value (MPS × No. of Eq. Shared)	2,00,00,000	50,00,000

(ii) Post merger effect on RIL

Particulars	₹
Post merger earnings ₹ (20,00,000 + 10,00,000)	30,00,000
Equity shares (10,00,000 + 10,00,000×1/4) As exchange ratio is 1 : 4	12,50,000
EPS :	2.4
P/E ratio	10.00
Market price per share (₹) (EPS × P/E ratio) i.e., 10 × 2.4	24
Total Market Value (MPS × No. of Eq. Shares) i.e., (12,50,000 × 24)	3,00,00,000

Gains from Merger

Particulars	₹
Post Merger Market value of the firm	3,00,00,000
Less : Pre-Merger market value	
RIL ₹ 2,00,00,000	
SIL ₹ 50,00,000	2,50,00,000
	50,00,000

Apportionment of Gains between shareholders

Particulars	RIL	SIL
Post merger market value		
10,00,000 × 24	2,40,00,000	
2,50,000 × 24		60,00,000
Less : Pre merged market value	2,00,00,000	50,00,000
	40,00,000	10,00,000

Thus the shareholders of both the Co. have gained from merger

(iii) Post Merger Earnings

Increase in earnings by 20%

New earnings: ₹ 30,00,000 × 120% = ₹ 36,00,000

No. of equity share = 12,50,000

EPS = ₹ 36,00,000 ÷ 12,50,000 = ₹ 2.88

P/E ratio = 10

Market price per share = ₹ 2.88 × 10 = ₹ 28.80

∴ Hence, shareholders will be better off than before the merger situation.