REVISED SYLLABUS 2012

TEST PAPERS

Final

Group IV

QUESTION PAPERS FOR POSTAL STUDENTS ONLY

(FOR JUNE/DECEMBER 2016)

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

BOARD OF STUDIES

P17 - Strategic Performance Management

Test Paper—IV/17/SPM/2012/T-1

Time Allowed-3hours **Full Marks-100**

Section A : Performance Management [60 marks]

Question 1

(a) Describe about the concept of Performance

(b) The role of Management Accountant in Competitive Intelligence.

(c) Read the following caselet and answer the following questions:
Food Corporation of India (FCI) was established under the Food Corporation of India Act 1964 for the purpose of trading in food grains and other foodstuffs. The Act extended to the whole of India. The Corporation acts as a body corporate. The general superintendence, direction and management of the affairs and business of the Corporation vests in a board of directors, which exercises all such powers and does all such acts and things as may be exercised or performed by the Corporation under the FCI Act.
FCI performs the major functions of procurement, storage preservation, movement, transportation, distribution and sale of food grains and meets the requirements of Public Distribution System (PDS) in the country. In other words, it handles or manages the entire supply chain in food grains distribution in India. It acts as a nodal agency of the central government based on ethical business principles having regard to the interest of the producers (farmers) and consumers.

Supply chain management of food grains by FCI is actually a joint responsibility of the Central Government, the state governments and the union territories involved in the actual implementation of PDS. Functions of the centre are to procure, store and transport. The implementation and administration of PDS is the responsibility of the state government and the UT administration. They lift these commodities from central godowns mills and distribute them to consumers through the massive network of fair price shops. Monitoring, inspection and enforcement of legal provisions is also done by the state government and the UT administration.

The network of fair price shops (FPS) has been expanding over the years, adding to the supply chain. During the last decade, the number of fair price shops had increased from 3.61 lakh (1990) to 4.59 lakh (2004) as indicated in the following:

Increase in No. of Fair Price Shops

Year	No. of FPS (in lakhs)
1985	3.19
1987	3.38
1990	3.61
2004	4.59

An efficient supply chain management requires the establishment of a close link between production, procurement, transportation, storage and distribution of selected commodities. Infrastructure needs to be strengthened, particularly in the backward, remote and inaccessible areas. The system also needs to be much improved to make it cost-effective. There is need for buffer stock in such a system. But, buffer stock can be reduced by timely procurement, transportation and storage.

This would reduce the carrying costs of the goods meant for distribution. The costs can also be reduced by increasing efficiency in the distribution network.

Leakages during the movement of food grains, etc., need to be plugged. Proper and timely checks of the fair price shops, godown, etc., can also lower the cost of PDS operations and the total supply chain management. FCI has to ultimately ensure a cost-effective supply chain and, for this, appropriate modalities have to be worked out.

(i) Under which act FCI was established?
(ii) Why did the FCI adopt the Supply Chain Management?
(iii) What were results coming out after adopting the Supply Chain Management?

(d) Describe about the components of Supply Chain Management. **[2+3+ (1+1+1) +2 = 10]**

Question 2

(a) What is Divisional Profitability and objective of Divisional Profitability? What is the Investment centre?

(b) "The Performance Appraisal Process is not an annual event it is a never ending process, there is no start and no end …. just an ongoing evolution of performance."- Evaluate this Statement.

(c) A company earns a profit of ₹ 3,00,000 p.a. after meeting its interest liability of ₹ 1,20,000 on 12% Debentures. The tax rate is 50%. The number of equity shares of ₹ 10 each are 80,000 and retained earnings amount to ₹ 12,00,000. The company proposes to take up an expansion scheme for which a sum of ₹ 4,00,000 is required. It is an anticipated that after expansion, the company will be able to achieve the same return on investment as at present. The funds required for an expansion can be raised either through debt at the rate of 12% or by issuing equity shares at par.
Required to compute the ROI

(d) A company has two divisions one producing an intermediate for which there is external market and another using this intermediate in finished product and it sells in the market. Each unit of finished product uses one unit of intermediate. The sales quantity is sensitive to the price charged and the selling division has developed the following sales schedule:

Selling price per unit (₹)	500	450	400	350	300	250
Sales units (No)	1,000	2,000	3,000	4,000	5,000	6,000

Cost details are as:

Particulars	**Production Division**	**Selling Division**
Variable Cost Per unit (₹)	55	35
Fixed Cost Per annum (₹)	3,00,000	4,50,000

The transfer price is ₹ 175 based on the full cost basis.

(i) Prepare a statement of profit for each division and the company as a whole.

(ii) Determine the selling price that will maximize the selling division profit and the price that will maximize the company's profit.

(iii) Determine the which transfer price policy will maximize the overall company's profit.

[(1.5+1.5+1.5) +4.5+2+(2+1+1) = 15]

Question 3

(a) B manufacturing company sells its product at ₹1,000 per unit. Due to competition, its competitors are likely to reduce price by 15%. Bee wants to respond aggressively by cutting price by 20% and expects that the present volume of 1,50,000 units p.a. will increase to 2,00,000. Bee wants to earn a 10% target profit on sales. Based on detailed value engineering the comparative position is given below:

Particulars	**Existing (₹)**	**Target (₹)**
Direct material cost per unit	400	385
Direct manufacturing labour per unit	55	50
Direct machinery costs per unit	70	60
Direct manufacturing costs per unit	525	495
Manufacturing overheads :		
No. of orders (₹80 per order)	22,500	21,250
Testing hours (₹2 per hour)	4,500,000	3,000,000
Units reworked (₹100 per unit)	12,000	13,000

Manufacturing overheads are allocated using relevant cost drivers. Other operating costs Per unit for the expected volume are estimated as follows:

Research	₹30
Marketing	₹70
Advertisement	₹60
Design	₹ 20
	180

Required:

(i) Calculate target costs per unit and target costs for the proposed volume showing break up of different elements.

(ii) Prepare target product profitability statement. **[2+1 = 3]**

(b) S & C Ltd. is about to replace its rapidly deteriorating boiler equipment. Three types of boiler system are being considered as a suitable replacement:

A. Coal-fired, **B.** Gas-fired, and **C**. Oil-fired.

The associated costs are as follows:

(₹ in '000)

Boiler system	**A**	**B**	**C**
Cost of boiler (including installation and commissioning)	550	740	640
Annual Fuel cost	270	230	250
Annual operating labour costs	80	-	-
Annual maintenance cost	40	30	30
Annual Electricity cost	10	10	10
Total Operating Cost	400	270	290

The new boiler system is expected to last at least 10 years. The Company has an opportunity cost of finance of 10% per year. Which system should be chosen? **[3]**

(c) Does Benchmarking tantamount to Industrial Espionage? **[2]**

(d) Read the following caselet and answer the following questions:
The value chain framework is a method for breaking down the chain-from basic raw materials to end-use customers--into strategically relevant activities in order to understand the behaviour of costs and the sources of differentiation. A firm is typically only one part of the larger set of activities in the value delivery system. Suppliers not only produce and deliver inputs used in a firm's value activities, but they importantly influence the firm's cost or differentiation position as well. Similarly, distribution channels have a significant impact on firm's value activities.

Therefore, gaining and sustaining a competitive advantage requires that a firm understands the entire value delivery system, not just the portion of the value chain in which it participates. Suppliers and distribution channels have profit margins that are important to identify in understanding a firm's cost or differentiation positioning, because end-use customers ultimately pay for all the profit margins throughout the value chain. Thus, value chain analysis, in contrast to the value added analysis, takes all opportunities for exploiting linkages with firm's suppliers (such opportunities may be dramatically important to the firm) and firm's customers.

The value chain analysis can be explained taking Paper Products Industry as an example (Shank and Govindarajan). This is shown in Figure

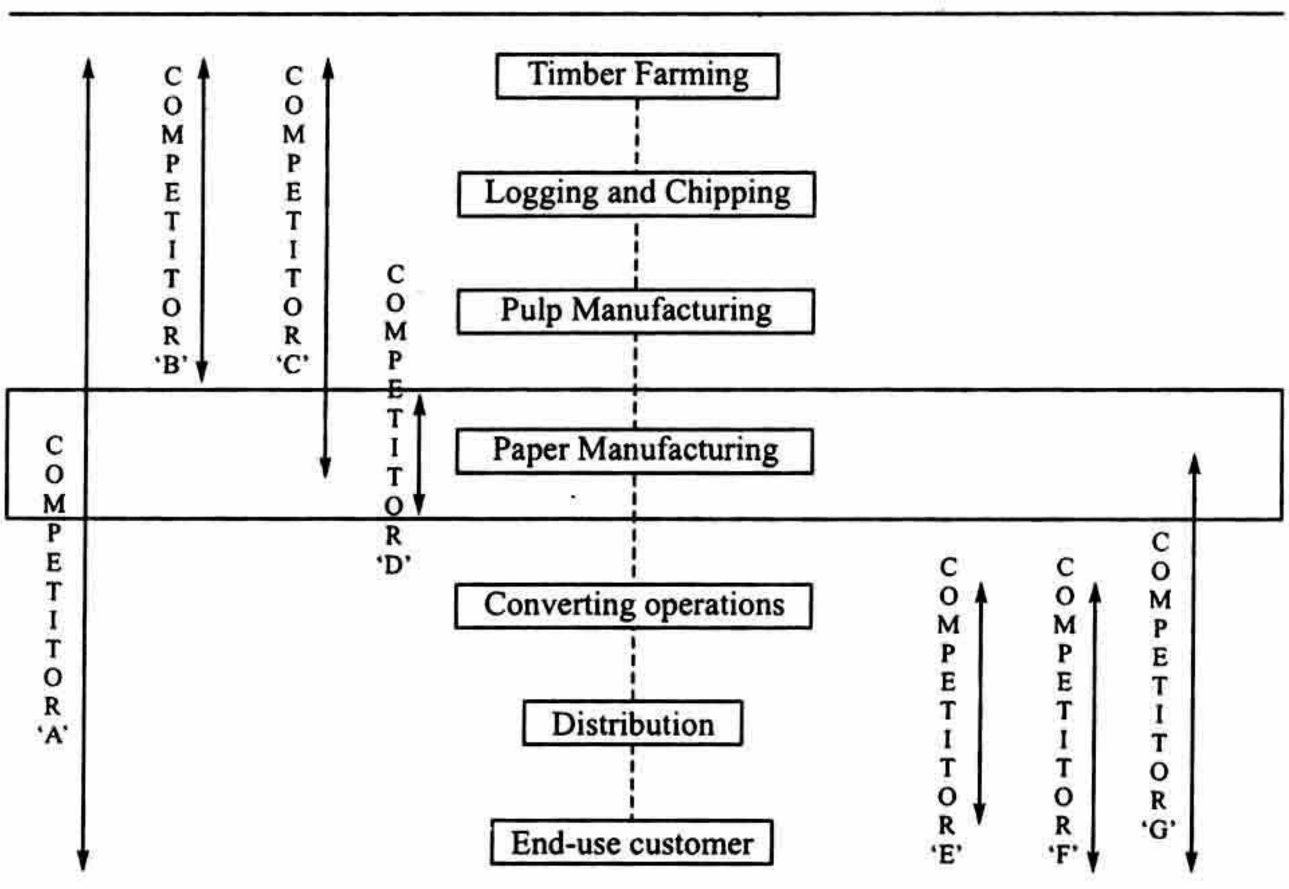


Fig: Value chain in the Paper Products Industry.

The distinct value activities (such as timber, logging, pulp mills, paper mills and conversion plants) are the building blocks by which the paper industry creates a product of value to buyers. It is possible to measure the economic value created at each stage by identifying the costs, revenues and assets for each activity. Each firm in the figure must construct a value chain analysis for the total paper industry (with the possibilities to integrate forward or backward in case of firms B, C, D, E, F and G) breaking the total value in the chain into its fundamental sources of economic value. This has potential strategic implications for every competitor in the paper products industry. These firms must ask strategic questions for value activity relating to:

- Make versus buy, and
- Forward and backward integration.

They should quantify and assess 'supplier power' and 'buyer power' and exploit linkages with suppliers and buyers.

The Methodology

Porter (1985) explained the steps involved in strategic cost analysis. Shank and Govindarajan (1989) developed them further. In short, it involves the following three major steps:

- Define the firm's value chain and assign costs and assets to value activities;
- Investigate the cost drivers regulating each value activity; and
- Examine possibilities to build sustainable competitive advantage, either through controlling cost drivers or by reconfiguring the value chain.

We explain the above steps in somewhat greater detail.

In identifying the value chain, the main thrust would be to gain competitive advantage, as competitive advantage cannot be meaningfully examined at the level of the industry as a whole. As stated earlier, a value disaggregates the firm into its distinct strategic activities. These activities are the building blocks by which a firm creates a product valuable to buyers. Activities should be isolated and separated if they satisfy any or all of the following conditions:

(a) They represent a significant percentage of operating costs;

(b) The cost behaviour of the activities or the cost drivers are different;

(c) They are performed by competitors in different ways; and

(d) They have a high potential of being able to create differentiation.

Each value activity incurs costs, generates revenues and ties up assets in the process. After identifying the value chain, operating costs, revenues and assets must be assigned to individual value activities.

The second step is to diagnose the cost drivers *(a cost driver is* a cost allocation base) that explain variations in costs in each value activity. In conventional cost and management accounting, cost is primarily a function of only one cost driver-output volume. In the value chain approach, multiple cost drivers are used for cost allocation and they differ across value activities. Recently, much interest has arisen over activity-based costing (ABC). The *ABC analysis* is largely a framework to operationalize complexity in the system.

The third step relates to developing sustainable competitive advantage about which we have made some observations earlier. Once a firm has identified the industry's value chain and diagnosed the cost drivers of each value activity, sustainable competitive advantage can be gained either by controlling cost drivers or by configuring the value chain. In achieving this goal, the key questions in respect of each value activity would be:

(a) Can cost in this activity be reduced keeping value (revenue) constant?

(b) Can value (revenue) be increased in the activity, keeping costs constant?

By scientific analysis of costs, revenues and assets in each activity, the firm can achieve both low cost and differentiation. One way to accomplish this goal is to compare the value chain of the firm with the value chains of one or more of its major competitors and then identify the actions needed to manage the firm's value chain better than their competitors. As we have mentioned earlier, the very process of performing the value chain analysis can be quite instructive. Such an exercise forces each manager to ask: "How does my activity add value to the customers who use my product (or service)?"

(i) What are the steps involved in paper industry's value chain analysis?
(ii)" In identifying the value chain, the main thrust would be to gain competitive advantage, as competitive advantage cannot be meaningfully examined at the level of the industry as a whole" – explain with the conditions in the context of value chain analysis. **[1+1 = 2]**

Question 4

(a) (i) What is the meaning of Saddle Point.
(ii) In an election campaign, the strategies adopted by the ruling and opposition party along with payoffs (ruling party's % share in votes polled) are given below:

	Opposition strategies		
Ruling Party's Strategies	Campaign one day in each city	Campaign two days in large towns	Spend two days in large rural sectors
Campaign one day in each city	55	40	35
Campaign two days in large towns	70	70	55
Spend two days in large rural sectors	75	55	65

Assume a zero sum game. Final optimum strategies for both parties and expected payoff to ruling party. **[2+3=5]**

(b) A person has two independent investments A and B available to him, but he can undertake only one at a time due to certain constraints. He can choose A first then stop, or if A is successful then take B or vice versa. The probability of success of A is 0.6, while for B it is 0.4. Both investments require an initial capital outlay of ₹ 10,000 and both return nothing if the venture is unsuccessful. Successful completion of A will return ₹ 20,000 (over cost) and successful completion of B will return ₹ 24,000 (over cost). Draw decision tree and determine the best strategy. **[2.5]**

(c) Pay offs of three acts A, B and C and states of nature X, Y and Z are given below :

Payoff (in ₹)

Acts → **State of Nature ↓**	**A**	**B**	**C**
X	–20	–50	100
Y	200	–100	–50
Z	300	500	200

The probabilities of the states of nature are 0.3, 0.4and 0.3.
Calculate the Expected Monetary value (EMV), for the above data and select the best act. Also find the EVPI. **[2.5]**

Question 5

(a) What are Normal Profit and Super Normal Profit?
(b) What are the objectives of a Pricing Policy?
(c) (i) A radio manufacturer produces 'x' sets per week at total cost of ₹ $x^2 + 78x + 2500$. He is a monopolist and the demand function for his product is $x = \frac{(600 - P)}{8}$, when the price is 'p' per set show that maximum net revenue is obtained when 29 sets are produced per week what is the monopoly price.

(ii) The price (P) per unit at which company can sell all that it produces is given by the function P(x) = 300 – 4x. The cost function is 500 + 28x, where 'x' is the number of units, find x, so that profit is maximum. **[2.5+1.5+(2+2) = 8]**

Question 6.

How to measure the Traditional Performance? **[7]**

Section B : IT and Econometric tool in Performance Management [20 marks]

Question 7

(a) Write a short note of Data Availability, Data Envelopment Analysis, Data Mining, and Data Quality.

(b) Write a short note of Hopfield Artificial Neural Network

(c) Write down the conditions that the Six sigma Doctrine demands

(d) Write on Stochastic Frontier Analysis , Malm Quist Index **[(2.5 x 4)+2.5+2.5+5 = 20]**

Section C : Enterprise Risk Management [20 marks]

Question No. 8

(a) Discuss briefly the following sentences:

(i) The offshoot of Risk Adjusted Discount Rate is the Risk Adjusted Return on Capital.

(ii) Collective risk theory was actually developed by the insurance industry for studying the insurers' vulnerability to insolvency using mathematical modeling.

(b) Can a company manage Industry Risk? Explain in detail.

[(2x3)+4 = 10]

Question No. 9

(a) "Corporate failure symptoms are interrelated" — do you agree this? Give your answer with reasonable explanation.

(b) CUSUM procedures are tools for detecting a shift from a good quality distribution to a bad quality distribution — Explain in short.

(c) Arcelor Steel Company was using its old technology to make steel while Mittal Steel Company was using the new technology and as a result, Mittal Steel Company was able to sell steel at lower price than Arcelor Steel Company due to its low cost of production — Do you find any cause that lead Arcelor Steel to fail? If yes, what is that called? How it can be prevent?

(d) The key to preventing corporate failure is to spot the warning signs early, and take corrective action quickly — Discuss the sentence.

[2+3+2+3 = 10]

Test Paper—IV/17/SPM/2012/T-2

Section A : Performance Management [60 marks]

Question 1

(a) State the components of Performance Management.

(b) "Interest of various related group is affected by the financial performance of a firm. Therefore, these groups analyze the financial performance of the firm. The type of analysis varies according to the specific interest of the party involved" - Describe the above statement.

(c) What is Process Analysis and objective of Process Analysis?

(d) Briefly describe about the Customer Satisfaction Index. **[2.5+1.5+2+4 = 10]**

Question 2.

(a) Following is the data regarding Six Divisions

(₹ in lakhs)

Particulars	A	B	C	D	E	F
Divisions Revenue	150	310	40	30	40	30
Divisions Result	25	(95)	5	5	(5)	15
Divisions Assets	20	40	15	10	10	5

The Finance Director is of the view that which Divisions are better positions.

(b) Hindustan Lever Limited, renamed Hindustan Unilever Limited

- **What is EVA?**

Traditional approaches for measuring shareholders' value creation have used parameters such as earnings capitalization, market capitalization and present value of estimated future cash flows. Extensive equity research has now established that it is not earnings *per se*, but value which is important. A new measure called 'Economic Value Added' (EVA) is increasingly being applied to understand and evaluate financial performance.

EVA = Net operating profit after taxes (NOPAT) - Cost of capital employed (COCE)
NOPAT = Profits after depreciation and taxes but before interest costs. NOPAT, thus, represents the total pool of profits available on an ungeared basis to provide a return to lenders and shareholders; and
COCE = Weighted average cost of capital (WACC) x Average capital *employed.*

Cost of debt is taken as the effective rate of interest applicable to an 'AAA' rated company like HLL with an appropriate mix of short-, medium- and long-term debt, net of taxes. We have considered pretax rate of 14% after taking into account the trends over the years. Cost of equity is the return expected by the investors to compensate them for the variability in returns caused by fluctuating earnings and share prices.
Cost of Equity = Risk-free return equivalent to yield on long-term Government bonds (taken at 12.5%)
(+)
Market-risk premium (taken at 9%) x Beta variant for the company (taken at 0.8), where the beta is a relative measure of risk associated with the company's shares as against the market as a whole.
Thus, HLL's cost of equity = 12.50% + 9.00% x 0.80 = 19.70%.

- **What does EVA show?**

EVA is the residual income after charging the company for the cost of capital provided by lenders and shareholders. It represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business.

When will EVA increase?

EVA will increase if:

(1) Operating profits can be made to grow without employing more capital, i.e. greater efficiency;

(2) Additional capital is invested in projects that return more than the cost of obtaining new capital, i.e. profitable growth; and

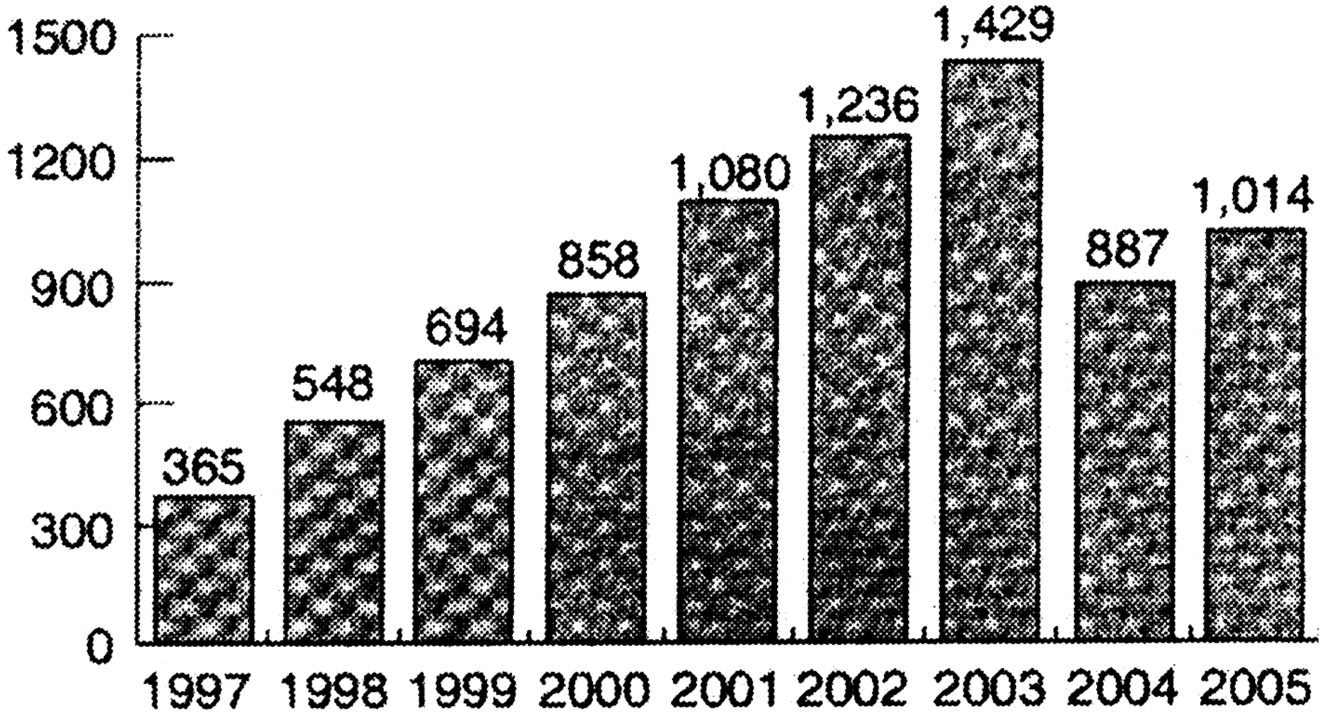
(3) Capital is curtailed in activities that do not cover the cost of capital, i.e. liquidate unproductive capital.

- **EVA in practice at Hindustan Lever Ltd.**

Hindustan Lever, the goal of sustainable long-term value creation for the shareholders is well understood by all the business groups. Following table shows the EVA trend of the company from 1997 to 2005 —

(₹ in crore)	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Cost of Capital Employed									
1.Average Debt	160	165	162	93	50	45	881	1588	360
2. Average Equity	1127	1487	1908	2296	2766	3351	2899	2116	2200
3. Average Capital Employed (1+2)	1,287	1,652	2,0702,389	2816	3396	3780	3704	2560	2678
4. Cost of Debt, post tax %	8.82	9.10	8.61	8.46	7.72	6.45	4.88	5.19	3.38
5. Cost of equity %	19.70	19.70	19.70	19.70	16.70	14.40	12.95	14.77	15.50
6.WACC	18.34	18.64	18.83	19.27	16.54	14.30	11.07	10.66	13.80
7. COCE (3x6)	236	308	390	460	466	486	418	395	353
EVA									
8.PAT before exceptional items	580	837	1070	1310	1541	1716	1804	1199	1355
9. Add. Interest after taxes	21	19	14	8	5	6	43	82	12
10. NOPAT	601	856	1084	1318	1546	1722	1847	1282	1367
11. COCE as per 7	236	308	390	460	466	486	418	395	353
12. EVA (10 – 11)	365	548	694	858	1080	1236	1429	887	1014

(Data are taken from Annual Report of HLL)



(i) "A new measure called 'Economic Value Added' (EVA) is increasingly being applied to understand and evaluate financial performance."- Explain this statement in the context of EVA.

(c) What is the aim of Transfer Pricing? **[2.5+3.5+2 = 8]**

Question 3.

(a) State the various types of Bench Marking?

(b)(i) What are the principles of the Lean Management?

(ii) IGF Ltd. supports the concept of the terotechnology or life cycle costing for new investment decisions covering its engineering activities. The finalized of this philosophy is now well established and its principles extended to all other areas of decision making.

The company is to replace a number of its machines and the Production Manager is to run between the 'X ' machine, a more expensive machine with a life of 12 years, and the 'W ' machine with an estimated life of 6 years. If the 'W' machines chosen it are likely that it would be replaced at the end of 6 years by another 'W' machine. The pattern of maintenance and running costs differs between the two types of machine and relevant data are shown below:

(₹ in '000)

Particulars	X	Y

Purchase Price	7,000	5,000
Trade in Value	1,200	1,200
Annual Repair Cost	800	1,040
Overhaul Costs (p.a.)	1,600	800
Estimated Financing Costs averaged over machine life (p.a)	10%	10%

You are required to recommend, with supporting figures , which machine to purchase, stating any assumption made. **[6+(2+4) = 12]**

Question 4.

(a)(i) Consider a modified form of "matching biased coins" game problem. The matching player is paid ₹ 8.00 if the two coins turn both heads and Re. 1.00 if the coins turn both tails. The non-matching player is paid ₹ 3.00 when the two cons do not match. Given the choice of being the matching or non-matching player, which one would you choose and what would be your strategy?

(ii) Briefly explain the rule of dominance in Game Theory.

(b) A person has two independent investments A and B available to him; but he can undertake only one at a time due to certain constraints. He can choose A first and then stop, or if A is successful then take B or vice versa. The probability of success of A is 0.6 while for B it is 0.4. Both investments require an initial capital outlay of Rs. 10.000 and both return nothing if the venture is unsuccessful. Successful completion of A will return ₹ 20,000 (over cost) and successful completion of B will return ₹ 24,000 (over cost). Draw decision tree and determine the best strategy.

(c) "The most important application of risk versus return (or mean/variance) indifference analysis concerns the construction of portfolios of financial assets and therefore lie beyond the scope of the study." – explain the Statement. **[(2.5+1.5)+3+3 = 10]**

Question 5.

(a) How profit is maximized under the condition of Perfect Competition

(b) (i) A manufacturer can sell 'x' items per month, at price P = 300 – 2x. Manufacturer's cost of production ₹ Y of 'x' items is given by Y = 2x + 1000. Find no. of items to be produced to yield maximum profit p.m.

(ii) The price (P) per unit at which company can sell all that it produces is given by the function P(x) = 300 – 4x. The cost function is 500 + 28x, where 'x' is the number of units, find x, so that profit is maximum.

(iii) A monopolist has demand curve x = 106 – 2p and average cost curve (AC) = 5 + x/50. The total revenue is (R) = xp, determine the most profitable output and maximum profit.

(iv) K ltd. sells output in a perfectly competitive market. The average variable cost function K ltd. Is AVC = 300 – 40Q + 2Q2.K ltd has an obligation to pay ₹ 500 irrespective of the output produced. What is the price below which K ltd. has to shut down its operation in the short run? **[2+(2x4) = 10]**

Question 6.

(a) "Productivity is about the effective and efficient use of all resources. Resources include time, people, knowledge, information, finance, equipment, space, energy, materials." – Explain the Statement.

(b) British Airways (BA) Ltd was formed out of a merger of a number of smaller UK air transport companies in 1935. The company's service network is one of the world's largest and extends to 570 destinations in 135 countries. BA has invested £1 billion towards service and comfort of the passengers during the last decade. It won the Business Traveller's Award for 11 successive years and its fleet of 344 aircraft is one of the largest in Western Europe. The Head Office is located near Heathrow and BA serves both Heathrow and Gatwick airports. About 60,000 people are employed in the BA group.

Heathrow is the busiest international airport in the world with over 90 airlines having their base there. 64 million passengers pass through Heathrow every year for approximately 170 destinations. Other minor, yet interesting, facts to know are : over 80 million pieces of baggages pass through the airport every year, every day over 2600 cups of tea, 6500 pints of beer and 6500 sandwitches are sold at Heathrow. The Heathrow Lost Property Office receives over 200 enquiries per day.

In 1997, the operation at Heathrow was in need of a change programme. BA's performance was poor and a new manager was hired with an experience of implementing the Balance Scorecard (BSC) as a change instrument.

The new manager was given the charge of the baggage handling unit, having 3000 workers. He immediately decided to use BSC as an instrument in the change process.

The new management team went for an offsite meeting to discuss how to turn around the operation. The team asked each unit to describe how they thought the customers judged their performance and derived measures from this perception. The metrics in the scorecard were thus developed from the customer's viewpoint for all four perspectives.

The results from the offsite session made the scorecard tangible, understandable and verifiable. The new manager asked the unit managers to set and tailor their set of performance indicators, but the importance of each metric must be explained.

The turnaround project reflected positive results through the use of BSC and the manager was given additional responsibility of the 'front-line customer service' unit.

Scorecards are now the management control system at BA Heathrow. Each unit of BA plans its operations according to the dimensions in the scorecard, evaluates investments according to it, and monitors performance. The managers at Heathrow have now decided to report the unit's performance through scorecards – even though the superior manager may not have asked for it.

Describe of the four perspectives of BSC and explain how British Airways Limited uses BSC as a management control system. **[5+5 = 10]**

Section B : IT and Econometric tool in Performance Management [20 marks]

Question 7.

(a) Statistical Quality Control (SQC) is a necessary part of the production — Discuss.

(b) What does Null Hypothesis mean?

(c) Write short note on Principal Component Analysis.

(d) Briefly explain the benefits of Total Productivity Management.

(e) Business Intelligence and Performance Management Relate to each other — explain in brief.

(f) Strategic-level information systems help senior management to tackle and address strategic issues and long-term trends — discuss in brief.

(g) What do you mean by term Data Warehousing? **[4+1+4+4+3+2+2 = 20]**

Section C : Enterprise Risk Management [20 marks]

Question No. 8

(a) What do you mean by Operational Risk? Is this risk can be managed? If yes, then how?

(b) Value at Risk essentially identifies the boundary between normal days and extreme occurrences — Discuss.

(c) Name the liquidity ratios that are proposed in Basel III. **[5+4+1 = 10]**

Question No. 9

(a) Briefly describe the techniques used in bankruptcy prediction.

(b) The Z-Score model is a quantitative model to predict financial distress of a business — Is this a true statement?

(c) The focus of responsibility for failing organizations lies with top management — Discuss in short.
[5+3+2 = 10]

Paper – 18 - Cost Financial Reporting

Test Paper – 1 [100 Marks]

Section A

1.(a) Write down the types of share based transactions and state recognition criteria of share based payment as per IFRS 2. **[4]**

(b) B Ltd. sold machinery having WDV of ₹ 800 Lakhs to B Ltd. for ₹ 1,000 Lakhs and the same machinery was leased back by B Ltd. to H Ltd. The Lease back is operating lease.

Comment if –

i. Sale price of ₹ 1,000 lakhs is equal to fair value
ii. Fair value is ₹ 1,200 lakhs
iii. Fair value is ₹ 900 lakhs and sale price is ₹ 760 lakhs
iv. Fair value is ₹ 800 lakhs and sale price is ₹ 1,000 lakhs
v. Fair value is ₹ 920 lakhs and sale price is ₹ 1,000 lakhs
vi. Fair value is ₹ 700 lakhs and sale price is ₹ 780 lakhs **[3]**

(c) Amrita purchased a computer for ₹66,000 and leased out it to Sumita for four years on leases basis, after the lease period , value of the computer was estimated to be ₹4,500; which he realized after selling it in the second hand market. Lease amount payable at the beginning of each year is ₹33,000; ₹20,460; ₹10,230 & ₹5,115. Depreciation was charged @ 40% p.a. You are required to pass the necessary journal entries in the books of Amirita. **[3]**

Section B

2. **(a)**AB Ltd. and BA Ltd. decided to amalgamate their business with a view to a public share issue. A holding company, ABA Ltd. is to be incorporated on 1st May 2014 with an authorised capital of ₹1,20,00,000 in ₹ 10 ordinary shares. The company will acquire the entire ordinary Share capital of AB Ltd. and BA Ltd. in exchange for an issue of its own shares.

The consideration for the acquisition is to be ascertained by multiplying the estimated profits available to the ordinary shareholders by agreed price earnings ratio. The following relevant figures are given:

	AB Ltd. ₹	BA Ltd. ₹
Issued Share capital		
Ordinary shares of ₹ 10 each	60,00,000	24,00,000
6% Cumulative Preference shares of ₹ 100 each	–	20,00,000
5% Debentures, redeemable in 2013		16,00,000
Estimated annual maintainable profits, before deduction of debenture interest and taxation	12,00,000	4,80,000
Price / Earning Ratio	15	10

The shares in the holding company are to be issued to members of the subsidiaries on 1st June 2014, at a premium of ₹ 2.50 per share and thereafter these shares will be marketable on the Stock Exchange.

It is anticipated that the merger will achieve significant economics but will necessitate additional working capital. Accordingly, it is planned that on 31st December, 2014, ABA Ltd. will make a further issue of 60,000 ordinary shares the public for cash at the premium of ₹ 3.75 a share. These shares will not rank for dividends until 31st December, 2014.

In the period ended 31st December, 2014, bank overdraft facilities will provide funds for the payment of ABA Ltd. of preliminary expenses estimated at ₹ 1,00,000 and management etc. expenses estimated at ₹ 12,000.

It is further assumed that interim dividends on ordinary shares, relating to the period from 1st June to 31st December, 2014 will be paid on 31st December 2014 by ABA Ltd. at 3.5% by AB Ltd. at 5% and by BA Ltd. at 2%.
You are required to project, as on 31st December 2014 for ABA Ltd., (a) the Balance Sheet as it would appear immediately after fully subscribed share issue, and (b) the Profit and Loss Account for the period ending 31st December, 2014.

Assume the rate of corporation tax to be 40% you can make any other assumption you consider relevant. **[15]**

(b) The following is the Balance Sheet (Drafted) of Ting-Tong Ltd.

Liabilities	**Amount ₹**	**Amount ₹**
Equity Share Capital		6,00,000
Reserves and Surplus		12,00,000
Secured Loans		6,00,000
Unsecured Loans		18,00,000
		42,00,000
Assets	**Amount ₹**	**Amount ₹**
Fixed Assets		21,00,000
Investments (Market Value ₹27,00,000)		12,00,000
Current Assets	12,00,000	
Less: Current Liabilities	(3,00,000)	9,00,000
		42,00,000

The company consists of three divisions. The scheme was agreed upon, according to which a new company Bell Ltd. is to be formed. It will take over investments at ₹ 9,00,000 and unsecured loans at balance sheet value. It is to allot equity shares of ₹ 10 each at par to the shareholders of Ting-Tong Ltd. in satisfaction of the amount due under the arrangement. The scheme was duly approved by the High Court. Pass journal entries in the books of Ting-Tong Ltd. **[10]**

Section C

3.(a) Sky Ltd., as listed company , entered into an expansion programme on 1st October,2013. On that date the company purchased from Cloud Ltd. its investments in two Private Limited Companies. The purchase was of

the entire share capital of Sun Ltd.

And

50% of the share capital of Moon Ltd.

Both the investments were previously owned by Cloud Ltd. after acquisition by Sky Ltd., Moon Dry Ltd. was to be run by Sky Ltd. and Cloud Ltd. as a jointly controlled entity.
Sky Ltd. makes its financial statements up to 30th September each year. The terms of acquisition were :

Sun Ltd.
The total consideration was based on price earning ratio (P/E) of 12 applied to the reported profit of ₹ 40 Lakhs of Sun Ltd. for the 30th Sept. 2013. The consideration was settled by Sky Ltd. issuing 8% debentures for ₹ 280 lakhs (at par) and the balance by a new issue of ₹ 1 equity shares, based on its market value of ₹ 2.50 each.

Moon Ltd.
The market value of Moon Ltd. on first Oct, 2013 was mutually agreed as ₹ 750 lakhs. Sky Ltd. satisfied its share of 50% of this amount by issuing 150 lakhs ₹ 1 equity shares (market value ₹ 2.50 each) to Cloud Ltd.

Sky Ltd. has not recorded in its books the acquisition of the acquisition of the above investments or the discharge of the consideration.

The summarized statements of financial position of the three entities at 30st Sept,2014 are:

₹ in thousands

Assets	Sky Ltd. ₹	Sun Ltd. ₹	Moon Ltd. ₹
Tangible Assets	68,520	54,00	42,120
Inventories	19,280	14,400	37,280
Debtors	22,400	10,120	9,240
Cash	--	6,820	80
	1,10,200	85,340	88,720
Liabilities			
Equity Capital: ₹ 1 each	20,000	40,000	50,000
Retained earnings	41,600	30,000	9,00
Trade and other payables	34,240	10,540	28,200
Overdraft	3,080	--	--
Provision for taxes	11,280	4,800	1,540
	1,10,200	**85,340**	**88,720**

The following information is relevant.

i. The book values of net assets of Sun Ltd. and Moon Ltd. on the date of acquisition were considered to be a reasonable approximation to their fair values.

ii. The current profits of Sun Ltd. and Moon Ltd. for the year ended 30th Sept,2014 were ₹ 160 lakhs and ₹ 40 lakhs respectively. No dividends were paid by any of the companies during the year.

iii. Moon Ltd., the jointly controlled entity, is to be accounted for using proportional consolidation, in accordance with AS 27 “Interests in joint venture”.

iv. Goodwill in respect of the acquisition of Moon Ltd. has been impaired by ₹ 20 lakhs at 30th Sept, 2014. Gain on acquisition, if any, will be separately accounted.

Prepare the Consolidated Balance Sheet of Sky Ltd. and its subsidiaries as at 30th Sept,2014. **[15]**

(b) The Balance Sheet (Drafted) of Akash Ltd. and Barish Ltd. are as Follows:

	Akash Ltd. ₹	**Barish Ltd.** ₹
Sources of Funds:		
Share Capital in equity shares of ₹10 Each	20,00,000	5,00,000
Reserves	2,00,000	50,000
Profit and Loss A/c as on 1st Jan,2014	3,00,000	1,00,000
Profit for the year	80,000	80,000
Add: Dividends from Barish Ltd.	40,000	----
Less; Dividends paid	----	(50,000)
Creditors	3,00,000	2,00,000
Total	29,20,000	8,80,000
Application of Funds:		
Fixed assets	20,00,000	8,00,000
Current Assets	3,20,000	80,000
Shares in Barish Ltd. at cost- 30,000 shares	6,00,000	----
Total	29,20,000	8,80,000

Akash Ltd. had acquired 40,000 shares in Barish Ltd. at ₹20 each on 1st Jan,2014 and sold 10,000 of them at the same price on 1st Oct, 2014 . The sale is cum dividend. An interim dividend of 10% was paid by Barish Ltd. on 1st July , 2014.
Prepare the consolidated Balance Sheet as at 31st December,2014. **[10]**

Section D

4. (a) What are the major steps involved in undertaking the Triple Bottom Line reporting process?

(b) Give the definition of Intellectual Capital. **[5+2]**

5. An entity issues 4,000 Convertible debentures at the start of year 1. The Debentures have a 3 years term, and are issued at par with a Face Value of ₹1,000 per Debenture, for a Total Proceeds of ₹40,00,000. Interest is payable annually in arrears at a nominal annual interest rate 6%. Each Debenture is convertible at any time up to maturity into 250 Equity Shares. When the Debentures are issued, the prevailing Market Interest rate for similar Debt without Conversion Options is 9% explain the presentation in the Financial Statement. **[5]**

6. Write a note on Employees' Stock Purchase Plans (ESPP). **[5]**

7. Mr. Investor buys a stock option of Z Ltd. in July 2008 with a Strike Price on 30th July, 2012 ₹500 to be expired on 30th August, 2012. The premium is ₹40 per unit and the market lot is 100. The margin to be paid is ₹240 per unit. Show the accounting treatment in the books of Buyer when:

(a) the option is settled by delivery of the asset, and

(b) the option is settled in cash and the Index price is ₹520 per unit. **[4]**

8. How are the users of XBRL. **[4]**

Section E

9. **(a)** Write a note on role of Public Accounts Committee. **[5]**

(b) Describe the structure of Government Accounting Standard Advisory Board. **[5]**

(c) Write a note on IGAS 3. **[5]**

Paper – 18 - Corporate Financial Reporting

Test Paper – 2 [100 Marks]

Section A

1. (a)

Particulars	Amount (₹)
Expenditure incurred till 31-03-2013	10,00,000
Interest cost capitalized for the financial year 2010-13 @ 13%	52,000
Amount borrowed till 31-03-13 is	4,00,000
Assets transferred to construction during 2013-14	2,00,000
Cash payment during 2013-14	1,50,000
Progress payment received	7,00,000
New borrowing during 2013-14 @ 13%	4,00,000

Calculate the amount of borrowing cost to be capitalised. **[5]**

(b) Utkal Industries Ltd. gives the following estimates of cash flows relating to fixed asset on 31-12-2010. The discount rate is 15%

Particulars (Year)	Cash flow (₹ in lakhs)
2011	4,000
2012	6,000
2013	6,000
2014	8,000
2015	4,000
Residual value at the end of 2015	1,000
Fixed asset purchased on 01-01-2008 for	₹40,000 lakhs
Useful life	8 years

Residual value estimate ₹1,000 lakhs at the end of 8 years. Net selling price ₹20,000 lakhs.

Calculate on 31-12-2010:

i. Carrying amount at the end of 2010.

ii. Value in use on 31-12-2010.

iii. Recoverable amount on 31-12-2010.

iv. Impairment loss to be recognized for the year ended 31-12-2010.

v. Revised carrying amount.

vi. Depreciation charge for 2011. **[5]**

Section B

2. (a) Small Ltd. and Little Ltd. two companies in the field of specialty chemicals, decided to go in for a follow on Public Offer after completion of an amalgamation of their businesses. As per agreed terms, initially a new company Big Ltd. will be incorporated on 1st January, 2012 with an authorized capital of ₹ 2 crore comprising of 20 lakh equity shares of ₹ 10 each. The holding company would acquire the entire shareholding of Small Ltd. and Little Ltd. and in turn would issue its shares to the outside holders of these shares. It is also agreed that the consideration would be a multiple of the average P/E ratio for the period 1st January, 2011 to 31st March, 2011 times the rectified profits of each company, subject to necessary adjustments for complying with the terms of the share issue.

The following information is supplied to you :

Particulars	Small Ltd.	Little Ltd.
Ordinary Shares of ₹ 10 each (Nos.)	40 lakhs	20 lakhs
10% Preference Shares of ₹ 100 each (Nos.)	2 lakhs	Nil
10% Preference Shares of ₹ 10 each (Nos.)	Nil	2 lakhs
5% Debentures of ₹ 10 each (Nos.)	4 lakhs	4 lakhs
Investments Held :		
(a) 4 lakh Ordinary Shares in Small Ltd.	-	₹ 40 lakhs
(b) 2 lakh Ordinary Shares in Little Ltd.	₹ 50 lakhs	-
Profit before Interest & Tax (PBIT) after considering the impact of Inter - Company Transactions and Holdings	₹ 50 lakhs	₹ 25 lakhs
Average P/E ratio January, 2011 to March, 2011	10	8

The following additional information is also furnished to you in respect of adjustments required for the profit figure as give above:

i. The profits of the respective companies would be adjusted for half the value of contingent liabilities as on 31st March, 2011.

ii. Debtors of Small Ltd. include an irrecoverable amount of ₹2 lakh against which ₹1 lakh was recovered but kept in Advance account.

iii. Little Ltd. had omitted to provide for increased FOREX liability of US $ 10,000 on loan availed in the Financial Year 2007-08 for purchase of Machinery. The machinery was acquired on 1st January, 2008 and put to use in Financial Year 2008-09. The additional liability arose due to change in exchange rates and is arrived at in conformity with the prevailing provisions of AS 11. The exchange rate is US $ 1 = INR 50.

iv. Small Ltd. has omitted to invoice a sale that took place on 31st March, 2011 of goods costing ₹ 2,50,000 at a mark-up of 15 per cent. Instead the goods were considered as part of closing inventory.

v. Closing Inventory of ₹45 lakhs of Little Ltd. as on 31st March, 2011 stands under-valued by 10 per cent.

vi. Contingent Liabilities of Small Ltd. and Little Ltd. as on 31st March, 2011 stands at ₹ 5 lakhs and ₹ 10 lakhs respectively.

The terms of the share issue are as under :

a. Shares in Big Ltd. will be issued at a premium of ₹13 per share for all external shareholders of Small Ltd. The Premium will be ₹15 per share for shares in Big Ltd. issued to all external shareholders of Little Ltd.

b. No shares in Big Ltd. will be issued in lieu of the investments (inter-company holdings) of both companies. Instead the shares so held shall be transferred to Big Ltd. at the close of the Financial Year ended 31st March, 2012 at Par Value consideration payable on the date of transfer.

c. Big Ltd. would in addition, to the issue of shares to outside shareholders of Small Ltd. and Little Ltd. make a preferential allotment on 31st March, 2012 of 2 lakhs ordinary shares at a premium of ₹ 28 per share to Virgin Capital Ltd. (VCL). These shares will not be eligible for any dividends declared or paid till that date.

d. Big Ltd. will go in for a 18 per cent Unsecured Bank Overdraft facility to meet incorporation costs of ₹16 lakhs and towards management expenses till 31st March, 2012 estimated at ₹14 lakhs. The overdraft is expected to be availed on 1st February, 2012 and would close on 31st March, 2012 out of the proceeds of the preferential allotment.

e. It is agreed that Interim Dividends will be paid on 31.03.2012 for the period January, 2012 to March, 2012 by Big Ltd. at 2 per cent, Small Ltd. at 3 per cent and Little Ltd. at 2.5 per cent. Ignore Dividend Distribution Tax.

f. The prevailing Income Tax Rate is 25 per cent.

Required : Compute the number of shares to be issued to the Shareholders of each of the companies and prepare the Projected Profit and Loss Account for the period from 1st January, 2012 to 31.03.2012 of Big Ltd. and its Balance Sheet as on 31st March, 2012. **[20]**

(b) D Ltd. and F Ltd. were amalgamated on and from 1st April, 2014. A new Company P Ltd. was formed to take over the business of the existing companies. The Balance Sheets (Drafted) of D Ltd. and F Ltd. as on 31st March, 2014 are given below:

Liabilities	Orange Ltd. ₹	Mango Ltd. ₹	Assets	Orange Ltd. ₹	Mango Ltd. ₹
Share Capital			Fixed Assets:		
Equity Share of ₹10 each	85,000	72,500	Land and Buildings	79,500	43,300
9% Preference Shares of ₹10 each		17,500	Investments	7,500	5,000
Reserve and Surplus:			Current Assets:		
Revaluation Reserve	12,500	8,000	Stock	32,500	26,900
General Reserve	24,000	16,000	Debtors	30,500	27,000
Export Profit Reserve	7,500	3,000	Bills Receivables	2,500	-
			Cash and Bank	30,000	25,100
Secured Loan:					
13% Debentures of ₹100 each	5,000	2,800			
Current Liabilities and Provisions					
Bills Payable	2,000	-			
Sundry Creditors	14,500	7,500			
	1,82,500	1,27,300		1,82,500	1,27,300

i. 13% Debenture holders of D Ltd. and F Ltd. are discharged by P Ltd. by issuing such number of its 15% Debentures of ₹ 100 each so as to maintain the same amount of interest.

ii. Preference Shareholders of the two companies are issued equivalent number of 12% Preference Shares of P Ltd. at a price of ₹ 12.50 per share (face value ₹10).

iii. P Ltd. will issue 2 equity shares for each equity share of D Ltd. and 2 equity shares for each equity share of F Ltd. at ₹ 15 per share having a face value ₹ 10.

iv. Export Profit Reserve is to be maintained for two more years.

Compute the purchase consideration only. **[5]**

Section C

3.(a) The Balance Sheet (Drafted) of Amar Ltd. and Vimal Ltd. as on the dates of last closing of accounts are as under:

Particulars	**Amar Ltd.**	**Vimal Ltd.**
	As on 31.03.2013	As on 31.12.2012
	₹	₹
Liabilities		
Share capital (equity share of ₹10 each)	11,00,000	5,00,000
Accumulated Profits & reserves	4,50,000	2,05,000
15% ₹100 Non- convertible debentures	-	3,00,000
Account payable	4,70,000	2,30,000
Other liabilities	1,00,000	40,000
Tax provision	1,50,000	2,50,000
Total	**22,70,000**	**15,25,000**
Assets		
Fixed Assets at cost	8,45,000	5,26,500
Less: Depreciation	1,95,000	1,21,500
	6,50,000	**4,05,00**
Investments:		
40,000 shares in Vimal Ltd.	8,00,000	-
1,000 debenture in Vimal Ltd.	1,50,000	-
Current Assets:		
Inventories	2,00,000	3,50,000
Account Receivable	2,50,000	4,65,000
Cash & Bank	2,20,000	3,05,000
Total	**22,70,000**	**15,25,000**

The following information is also available:

i. On 8th February, 2013 there was a fire at the factory of Vimal Ltd., resulting in inventory worth ₹20,000 being destroyed. Vimal received 75 per cent of the loss as insurance.

ii. The same fire result in destruction of a machine a written having down value of ₹1,00,000. The insurance company admitted the company's claim to the extent of 80 per cent. The machine was insured at its fair value of ₹1,50,000.

iii. On 13th March, 2013, Amar sold goods costing ₹1,50,000 to Vimal at a mark-up of 20 per cent. Half of these goods were resold to Amar who in turn was able to liquidate the entire stock of such goods before closure of accounts on 31st March, 2013. As on 31st March, 2013 Vimal's accounts payable show ₹60,000 due to Amar on the two transactions.

iv. Aqua acquired the holdings in Vimal on 1st January, 2011 when the reserves and accumulated profits of Vimal Ltd. stood at ₹75,000.

v. Both companies have not provided for tax on current year profits. The current year taxable profits are ₹33,000 and ₹66,000 for Amar Ltd. and Vimal Ltd. respectively. The tax rate is 33%

vi. The incremental profits earned by Vimal Ltd. for the period January, 2013 to March 2013 over that earned in the corresponding period in 2012 was ₹56,000. Except for the profits that resulted from the transactions with Amar in the aforesaid period, the entire profits have been realised in cash before 31st March, 2013.

You are requested to consolidate the accounts of the two companies and prepare a consolidated balance sheet of Amar Limited and its subsidiary as 31st march, 2013. **[20]**

(b) From the following information determine the amount of unrealized profits to be eliminated and the apportionment of the same, if M Ltd. holds 75% of the Equity Shares of N Ltd. -

A. Sales by M Ltd. to N Ltd. -

i. Goods costing ₹10,00,000 at a profit of 20% on Sale Price. Entire stock were lying unsold as on the Balance Sheet date.

ii. Goods costing ₹21,00,000 at a profit of 25% on Cost Price. 40% of the goods were included in closing stock of N.

B. Sales by P Ltd. to Q Ltd. -

i. Goods sold for ₹ 5,00,000 on which Q made profit of 25% on Cost. Entire stock were at P's godown as on the Balance Sheet date.

ii. Goods sold for ₹ 6,00,000 on which Q made profit of 15% on Sale Price. 70% of the value of goods were included in closing stock of P. **[5]**

Section D

4. State the benefits of Sustainability Reporting. **[4]**

5. (a) Discuss the different types of Hedging Relationships as per AS-30. **[5]**

(b) Carrying amount of an asset is ₹2,800 lakhs. The fair value of the part transferred is ₹2,560 and the total fair value of the assets is ₹3,200. The company received ₹2,560 lakhs on sale of the part transferred. Pass journal entries. **[2]**

6. On April 1, 2012, a company Evening Star Ltd. offered 100 shares to each of its 1,500 employees at ₹40 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan shall be subject to lock-in on transfers for three years from grant date. The market price of shares of the company on the grant date is ₹50 per share. Due to post-vesting restrictions on transfer, the fair value of shares issued under the plan is estimated at ₹48 per share.

On April 30, 2012, 1,200 employees accepted the offer and paid ₹40 per share purchased. Nominal value of each share is ₹10.

Record the issue of shares in book of the Evening Star Ltd. under the aforesaid plan. **[4]**

7.

Particulars	
Equity Share Capital	₹ 10,00,000
Reserves & Surplus	₹ 3,00,000
12% Preference Share Capital	₹ 2,00,000
10% Debenture	₹ 4,00,000
Immovable property (held as investment)	₹ 1,00,000
Profit after tax	₹ 2,00,000
Rate of tax	40%

Companies with Beta factor of 1 in similar business have market rate of return 15% . Beta factor of Utsav Ltd. is 1.1. Calculate EVA assuming Risk Free Return is 7%. **[5]**

8. Discuss the main features of XBRL. **[5]**

Section E

9. **(a)**Write a note on Committee on Public Undertakings. **[5]**

(b) What are the procedures adopted by the GASAB for formulating Standards. **[7]**

(c) Describe the structure Board Secretariat of GASAB. **[3]**

P19 - Cost and Management Audit

Test Paper—IV/19/CMAD/2012/T-1

Time Allowed-3hours **Full Marks-100**

Answer any five question

Question 1

(i) Explain the features of Cost Audit.

(ii) Explain the benefits of cost information.

(iii) Explain the Powers of Cost Auditor of the Company.

(iv) Umbrella Ltd. is engaged in the manufacture of color television sets having its factories at Kolkata and Gujarat. At Kolkata the company manufactures picture tubes which are stock transferred to Gujarat factory where it is consumed to produce television sets. Determine the Excise duty liability of captively consumed picture tubes from the following information: - Direct material cost (per unit) ₹ 1,800; Direct Labour ₹ 1,200; Indirect Labour ₹150; Direct Expenses ₹ 200; Indirect Expenses ₹ 75; Administrative Overheads ₹ 125; Selling and Distribution Overheads ₹ 150. Additional Information: - (1) Profit Margin as per the Annual Report of the company for 2014-15 was 20% before Income Tax. (2) Material Cost includes Excise Duty paid ₹ 185 (3) Excise Duty Rate applicable is 12%, plus education cess of 2% and SHEC @ 1%.

[5x4=20]

Question 2

(i) Explain the applicability of Companies (Cost Records and Audit) Rules, 2014.

(ii) Whether cost auditor of the company has to directly submit his Cost Audit Report to the Central Government?

(iii) Explain the following- **(Any two)**

(a) Audit and Ethics

(b) Responsibility for the Cost Statements

(c) Type of Audit Risk

[5+5+5x2=20]

Question 3 (Any Four)

(i) What are the areas covered by Cost Accounting Policy?

(ii) What are the duties of the Cost Auditors?

(iii) What are the need & elements of planning a Cost Audit?

(iv) Explain the Ceiling on Number of Cost Audits can do by Cost Auditors.

(v) What are the major areas of operation involves in an Internal Audit?

[5x4=20]

Question 4

(i) Discuss the following items that are shown under Annexure of the Cost Audit Report

(a) General Information ;

(b) Abridge Cost Statement.

(ii) What are the requirements for Cost audit documentation of a cost Auditors of the company?

(iii) Explain the requirement for Knowledge of Business of the client by a cost auditor.

[5x2+5+5=20]

Question 5

(i) Give a brief note on-

(a) Productivity and Efficiency Analysis

(b) Consideration of fraud in an Internal Audit

(c) Using the work of an expert in an Internal Audit

(ii) Give a brief note on the statement "Process mapping as a tool in performance management and evaluation".

[5x3+5=20]

Question 6

Write short notes on the following **(Any Four)**

(i) Internal Audit Evidence

(ii) Product/ Service Profitability Analysis

(iii) Key Costs and Contribution Analysis

(iv) Terms of Internal Audit Engagement

(v) Audit strategy

[5x4=20]

Test Paper—IV/19/CMAD/2012/T-2

Time Allowed-3hours **Full Marks-100**

Answer any five question Question 1

(i) What are the provisions under the companies Act relating to maintenance of Cost Records and Cost Audit?

(ii) What are the objectives of Cost Audit?

(iii) Explain the Objectives and Functions of the Cost Accounting Standards Board.

(iv) Explain the objectives and scope of the independent cost Auditors as explained in Cost Auditing Standard 103 on Overall Objectives of the Independent Cost Auditor and the Conduct the Audit in Accordance with this Standards.

[5x4]

Question 2

(i) What are the duty liabilities of a Cost Auditor of an company relating to reporting of frauds identified during audit?

(ii) Explain the qualification and disqualification of a Cost Auditor.

(iii) Explain the types of Educational Services and covered under the Companies (Cost Records and Audit) Rules 2014.

(iv) What is the procedure of certifying and submission of cost audit report of a company where more than one cost auditor is appointed?

[5+5x2+5]

Question 3

(i) What are the procedures for appointment of cost auditor?

(ii) What are the Penal Provisions for Companies and Cost Auditor?

(iii) Explain the following-
(a) Audit Partner
(b) Assurance engagement

[5+5+5x2]

Question 4

(i) What are the essential features of Cost accounting System?

(ii) Explain the following-
(a) Professional skepticism
(b) Audit Risk and Materiality

(iii) Opening stock of raw materials (10,000 units) ₹ 2,80,000; Purchase of Raw Materials (40,000 units) ₹ 8,00,000; Closing Stock of Raw Materials 8,000 units; Freight Inward ₹ 1,05,000; Self-manufactured packing material for purchased raw materials only ₹ 90,000 (including share of administrative overheads related to marketing sales ₹ 12,000); Demurrage charges levied by transporter for delay in collection ₹ 15,000; Normal Loss due to shrinkage 5% of materials ; Abnormal Loss due to absorption of moisture before receipt of materials 300 units. Determine the Valuation of closing stock of raw materials under Average cost method and under FIFO method.

[5+5x2+5]

Question 5

(i) What are the factors to be considered for a successful internal control system?

(ii) Write short notes on Internal Audit Questionnaire regarding purchase and Creditors.

(iii) Write short notes on the following **(Any Two)**

(a) Analytical procedure in an Internal Audit
(b) Capacity Utilization Analysis
(c) Utilities and Energy Efficiency Analysis.

[5+5+5x2]

Question 6

(i) What are the Characteristics of a good Performance Appraisal Report?

(ii) Give a brief note on-

(a) Quality Assurance in Internal Audit
(b) Planning an Internal Audit
(c) Working Capacity and Inventory Management Analysis.

[5+5x3]

P20 – Financial Analysis and Business Valuation

Test Paper—IV/20/FABV/2012/T-1

Time Allowed-3hours **Full Marks-100**

Section A – Financial Analysis [50 marks]
(Answer all the questions)

Question 1

(a) What is Financial Statement?

(b) "Financial statement is essentially interim report." — Analyze it form the viewpoint of limitations of Financial Statement Analysis. **[2+3]**

Question 2

	Firm P (₹)	Firm Q (₹)	Firm R (₹)
Debt Capital	5,00,000	1,00,000	3,00,000
Equity Share Capital	1,00,000	5,00,000	3,00,000
Total Capital	6,00,000	6,00,000	6,00,000

Find out the Gear Ratio and also make a suitable analysis based on this ratio. **[7]**

Question 3

(a) The information is available from Zed Co.'s Balance Sheet at the year ended on 31.03.2013 as follows:

	₹
Deferred taxes	86,000
Investment in Ayva Co., at fair value	1,40,000
Retained earnings	5,75,000
Preference share capital, ₹10 par value	2,00,000
Equity share capital, ₹10 par value	6,50,000
Accumulated other comprehensive income	85,000

The investment in Ayva Co. had an original cost of ₹1,60,000. Assuming the investment in Ayva is classified as available-for-sale, Zed's total owners equity at the year-end is closet to:

(i) ₹15,10,000
(ii) ₹15,30,000
(iii) ₹14,90,000
(iv) ₹14,24,000.

(b) Write about 'structures notes' with emphasis may be given on 'reverse inquiry'.

[4+4]

Question 4

(a) How to calculate Free Cash Flow?

(b) A company finds on 18th April, 2013 that it is short of funds with which to implement its programme of expansion. On 1st April, 2012 it had a credit balance of ₹1,80,000. From the following information, prepare a statement for the Board of Directors to show how the overdraft of ₹68,750 as on 31st March, 2013 has arisen:

Figures as per Balance sheet
(As on 31st March)

Particulars	2011-12	2012-13

	₹	₹
Fixed assets	7,50,000	11,20,000
Stock and stores	1,90,000	3,30,000
Debtors	3,80,000	3,35,000
Bank Balance	1,80,000 (cr.)	68,750(O/D)
Trade creditors	2,70,000	3,50,000
Share capital (₹100 each)	2,50,000	3,00,000
Bills receivable	87,500	95,000

The profit for the year ended 31st March, 2013 before charging depreciation and taxation amount to ₹2,40,000. 5,000 shares were issued on 1st April, 2013 at a premium of ₹5 per share ₹1,37,500 were paid in June, 2012 by way of income tax. Dividend was paid as follows:
2011-12 (final) on the capital on 31.03.2012 at 10 per cent less tax.
2012-13 (interim) 5 per cent free of tax.

[2+8]

Question 5

(a) Describe Equity Multiplier in regards to Du Pont Analysis.

(b) Given the following information for ABC Company at the end of 2012. Determine balances for the income statements and the balance sheet and also prepare Du Pont Control Chart.

Particulars	₹
Net sales	1,00,000
Debt- assets ratio	0.6
Debtor's turnover ratio based on net sales	2
Net profit margin	5%
Gross profit margin	25%
Inventory turnover ratio	1.25
Return on Total resources	2%
Fixed assets turnover ratio (on sales)	0.8

Particulars of Income statement for the year ending on 31st march 2012.

Sales	₹1,00,000	Earnings before tax	₹………..
Cost of goods sold	________	Taxes @ 50%	…………..
Gross profit	________		___________
Other expenses		Earnings after tax	___________

Balance sheet as on 31st March 2012.

Liabilities	**₹**	**Assets**	**₹**
Equity	…………..	Net fixed assets	…………..
Long-term debt	……….	Inventory	…………..
Short- term debt	50,000	Debtors	…………..
		Cash	……………
	_______		________
Total	________	Total	_________

[2+8]

Question 6

(a) How pension liability is calculated in Balance Sheet?

(b) Analyze the price-earnings ratio for a high growth firm with the help of Dividend Discount Model.

[4+6]

Section B – Business Valuation [50 marks]

Question 7

(a) Explain the term 'fair market value'. State the assumptions on which it is based.

(b) Hindustan Lever Ltd. is run and managed by an efficient team that insists on reinvesting 60% of its earnings in projects that provide an ROE (Return of Equity) of 10%, despite the fact that the firm's capitalization rate (K) is 15%. The firm's current year's earnings is ₹ 10 per share.

i. At what price will the stock of HLL sell?
ii. What is the present value of growth opportunities?
iii. Why should such a firm be a takeover target?

(c) The Balance Sheet of DST Ltd. as on 31st March, 2013 is as under:

(All figures are in lacs)

Liabilities	**₹**	**Assets**	**₹**
Equity Shares ₹ 10 each	3,000	Goodwill	744
Reserves (including provision for taxation of ₹ 300 lacs)	1,000	Premises and Land at cost	400
		Plant and Machinery	3,000
5% Debentures	2,000	Motor Vehicles (purchased on 1.10.12)	40
Secured Loans	200		
Sundry Creditors	300	Raw materials at cost	920
Profit & Loss A/c		Work-in-progress at cost	130
Balance from previous B/S 32		Finished Goods at cost	180
Profit for the year (After taxation) 1,100		Book Debts	400
	1,132	Investment (meant for replacement of Plant Machinery)	1,600
		Cash at Bank and Cash in hand	192
		Discount on Debentures	10
		Underwriting Commission	16
	7,632		7,632

The resale value of Premises and Land is ₹ 1,200 lacs and that of Plant and Machinery is ₹ 2,400 lacs. Depreciation @ 20% is applicable to Motor Vehicles. Applicable depreciation on Premises and Land is 2%, and that on Plant and Machinery is 10%. Market value of the Investments is ₹ 1,500 lacs. 10% of book debts are bad. In a similar company the market value of equity shares of the same denomination is ₹ 25 per share and in such company dividend is consistently paid during last 5 years @ 20%. Contrary to this, DST Ltd. is having a marked upward or downward trend in the case of dividend payment.

Past 5 years' profits of the company were as under:

2007-08	₹ 67 lacs
2008-09	(-) ₹ 1,305 lacs (loss)
2009-10	₹ 469 lacs

2010-11	₹ 546 lacs
2011-12	₹ 405 lacs

The unusual negative profitability of the company during 2008-09 was due to the lock out in the major manufacturing unit of the company which happened in the beginning of the second quarter of the year 2007-08 and continued till the last quarter of 2008-09.

Value the Goodwill of the Company on the basis of 4 years' purchase of the Super Profit. (Necessary assumption for adjustment of the Company's inconsistency in regard to the dividend payment may be made by the examinee).

[3+(2+2+3)+10=20]

Question 8

(a) What drives M & A activity? What are its key facilitators in India? What are its benefits?

(b) What are the possible causes of Horizontal and Vertical Mergers? What factors are considered for selecting a target in a business acquisition strategy?

(c) The summarized Balance Sheet of R Co. Ltd as on December, 2012 is given below:

Liabilities	**₹**	**Assets**	**₹**
Equity Share capital	20,00,000	Fixed assets	19,00,000
(2,00,000 @₹10 each)		Investments	1,00,000
13% Pref. share capital	1,00,000	Current assets:	
Retained earnings	4,00,000	Inventories 500000	
12% Debentures	3,00,000	Debtors 400000	
Current Liabilities	2,00,000	Bank 100000	10,00,000
	30,00,000		30,00,000

Negotiations for takeover of R Ltd. result in its acquisition by A Ltd. The purchase consideration consists of (i) ₹ 330000, 13% debentures of A Ltd. for redeeming the 12% debentures of R Ltd., (ii) ₹ 1,00,000, 12% convertible preference shares in A Ltd. for the payment of preference share capital of R Ltd. (iii) 1,50,000 equity shares of A Ltd. to be issued at its current market price of ₹ 15 (iv) A Ltd. would meet dissolution expenses of ₹ 30,000.

The break-up figures of eventual disposition by A Ltd. of un-required assets and liabilities of R Ltd.are:

Investments	₹ 1,25,000
Debtors	₹ 3,50,000
Inventories	₹ 4,25,000
Payment of Current Liabilities	₹ 1,90,000.

The project is expected to generate yearly operating CFAT of ₹7,00,000 for 6years. It is estimated that fixed assets of R Ltd. would fetch ₹ 3,00,000 at the end of 6th year.

The firm's cost of capital is 15%. Comment on the financial prudence of merger decision of A Ltd. (PV at 15% rate of discount is 1st year 0.870; in 2nd year 0.756; in 3rd year 0.658; in 4th year, 0.572; in 5th year 0.496; and 6th year 0.432.) **[4+4+7=15]**

Question 9
(a) A firm had paid dividend at ₹ 2 per share last year. The estimated growth of the dividends from the company is estimated to be 5% p.a. Determine the estimated market price of the equity share if the estimated growth rate of dividends—

(i) rises to 8% and
(ii) falls to 3%.

Also, find out the present market price of the share given that the required rate of return of the equity investors is 15.5%.

(b) Simplex Ltd. is trying to estimate its debt ratio. It has 1 million equity shares outstanding, trading at ₹ 50 per share. Simplex has ₹ 250 million in straight debt outstanding (with a market interest rate of 9%). It has two other securities outstanding:

(i) 10,000 convertible bonds, with a coupon rate of 6% and 10 years to maturity.
(ii) 2,00,000 warrants outstanding, conferring on its holders the right to buy stock in the Simplex Ltd. At ₹ 65 per share

These warrants are trading at ₹ 12 each. You are required to calculate the debt ratio in market value terms.

(c) What are the risk factors in valuation of intellectual property fixed assets?

(d) Distinguish between Intrinsic Value and Time Value of an 'option' with suitable examples.

[3+3+5+4=15]

OR

Question 10
(a) A company with a turnover of ₹ 250 crores and an annual advertising budget of ₹ 2 crore had taken up the marketing of a new product. It was estimated that the company would have a turnover of ₹ 25 crores from the new product. The company had debited to its Profit and Loss account the total expenditure of ₹ 2 crore incurred on extensive special initial advertisement campaign for the new product. Is the procedure adopted by the company correct?

(b) A Pharma Company spent ₹ 33 lakhs during the accounting year ended 31st March, 2012 on a research project to develop a life saving drug. Experts are of the view that it may take four years to establish whether the drug will be effective or not and even if found effective it may take two to three more years to produce the medicine, which can be marketed. The company wants to treat the expenditure as deferred revenue expenditure.

(c) The following is the Balance Sheet of N Ltd. as on 31st March, 2011:

Balance Sheet

Liabilities	₹	Assets	₹
4,00,000 Equity shares of ₹10 each fully paid	40,00,000	Goodwill	4,00,000
13.5% Redeemable preference shares of ₹100 each fully paid	20,00,000	Building	24,00,000
General Reserve	16,00,000	Machinery	22,00,000

Profit and Loss Account	3,20,000	Furniture	10,00,000
Bank Loan (Secured against fixed assets)	12,00,000	Vehicles	18,00,000
Bills Payable	6,00,000	Investments	16,00,000
Creditors	31,00,000	Stock	11,00,000
		Debtors	18,00,000
		Bank Balance	3,20,000
		Preliminary Expenses	2.00,000
	1,28,20,000		1,28,20,000

Further information:

(i) Return on capital employed is 20% in similar businesses.

(ii) Fixed assets are worth 30% more than book value. Stock is overvalued by ₹ 1,00,000, Debtors are to be reduced by ₹20,000. Trade investments, which constitute 10% of the total investments, are to be valued at 10% below cost.

(iii) Trade investments were purchased on 1.4.2010. 50% of non-Trade Investments were purchased on 1.4.2009 and the rest on 1.4.2008. Non-Trade Investments yielded 15% return on cost.

(iv) In 2008-2009 new machinery costing ₹2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.

(v) In 2009-2010 furniture with a book value of ₹ 1,00,000 was sold for ₹60,000.

(vi) For calculating goodwill two years purchase of super profits based on simple average profits of last four years are to be considered. Profits of last four years are as under: 2007-2008 ₹16,00,000, -2008-2009 ₹18,00.000, 2009-2010 ₹ 21,00,000, 2010-2011 ₹22,00,000.

(vii) Additional depreciation provision at the rate of 10% on the additional value of Plant and Machinery alone may be considered for arriving at average profit.

Find out the intrinsic value of the equity share. Income-tax and Dividend tax are not to be considered. **[3+3+9=15]**

Test Paper—IV/20/FABV/2012/T-2

Time Allowed-3hours **Full Marks-100**

Section A – Financial Analysis [50 marks]

(Answer all the questions)

Question 1

(a) Compute the trend ratios from the following data and comment.

Year	Sales (₹)	Inventories (₹)	Receivables (₹)
2008	3,25,000	1,25,000	75,000
2009	3,50,000	1,75,000	1,00,000
2010	3,75,000	2,25,000	1,25,000
2011	3,85,000	2,75,000	1,50,000
2012	4,00,000	3,15,000	1,75,000

(b) What types of attributes are necessary for a model to become good?

[4+3]

Question 2

(a) "Under dirty-surplus accounting the income in the income statement is not 'clean', it is not complete." — Describe Dirty-Surplus Accounting in this context.

(b) How to reformulate the statement of owners' equity?

[5+5]

Question 3

(a) From the following informations available, compute the value of Z using Altman's model:

Balance Sheet (Extracts)

Liabilities	₹	Assets	₹
Share Capital (@ ₹100 each)	1,50,000	Fixed Assets	5,20,000
Reserves & Surplus	1,10,000	Book Debts	70,000
10% Debentures	4,00,000	Inventory	1,80,000
Sundry Creditors	80,000	Loans & Advances	10,000
Outstanding Expenses	60,000	Cash at Bank	20,000
	8,00,000		8,00,000

Additional Information

i. Market value per share ₹ 16.50.

ii. Operating Profit (20% on sales) ₹ 1,40,000.

(b) Ananda purchased at par a bond with a face value of ₹1,000. The bond had five years to maturity and a 10 per cent coupon rate. The bond was called two years later for a price of ₹1,200, after making its second annual interest payment. Ananda then reinvested the proceeds in a bond selling at its face value of ₹1,000, with three years to maturity and a 7per cent coupon rate. What was Ananda's actual YTM over the five- year period?

(c) Following figures have been extracted from the records of a company:

Year	2011	2012
Sales (₹) Units Sold	4,20,000 30,000	9,60,000 24,000

Account for changes in sales value due to changes in sales quantity, selling price and both.

[5+2+3]

Question 4

(a) "The closer the amount of net earnings is to the amount of cash flow in the short run, the higher the perception of the quality of earnings." — Analyze the line on Quality of Earnings in the context of Cash Flows.

(b) STB is preparing its consolidated cash flow for the year ended 31st October 2012. Its consolidated opening balance at net book value for property, plant and equipment was ₹1,96,000. during the year the STB group disposed of plant for proceeds of ₹8,500 that had cost ₹62,000 several years ago and which was fully written down at 1st November 2011. There were no other disposals. The depreciation charge for the year ended 31st October 2012 was ₹24,000. The consolidated closing book value for property, plant and equipment was ₹2,54,000.

What was the cash outflow in respect of purchases of property, plant and equipment for inclusion in the consolidated cash flow statement of STB group for the year ended 31 october 2012?

(i) ₹34,000
(ii) ₹44,500
(iii) ₹82,000
(iv) ₹1,15,000.

[4+3]

Question 5

(a) How does operating liabilities lever up the return on net operating assets?

(b) A firm has sales of ₹10,00,000, variable cost of ₹7,00,000 and the fixed cost of ₹2,00,000 and debt of ₹5,00,000 at 10% rate of interest. What are the operating and financial leverage leverages? If the firm wants to double its Earnings before interest and tax (EBIT), how much of a rise in sales would be needed on a percentage basis?

[3+5]

Question 6

(a) Write down the formula which calculates the change in residual earnings.

(b) From the following information of M/S Tista Ltd., prepare an analysis of growth. All the Balance Sheet figures are averaged for the year. The required rate of return is 9.5%.

	2012 (₹ in million)	2011 (₹ in million)
Net financial obligations Net operating assets	545 8,030	730 9,258
Shareholders' Equity	7,485	8,528
Sales Operating income	10,040 1,236	12,474 875

Return on equity (ROE) Return on net operating assets (RNOA) Profit margin (PM) Asset turnover (ATO) Financial leverage (FLFV)	16.51% 15.39% 12.31% 1.25 0.02	10.15% 9.45% 7.01% 1.35 0.07

[2+6]

Section B – Business Valuation [50 marks]

Question 7

(a)Under the Discounting Cash Flow Method, companies are valued by discounting free cash flows. What do you understand by free cash flows?

(b)Discuss the different methods of Brand Valuation. Explain cost-based approach of Brand Valuation. In valuing, a firm should you use the marginal or effective tax rate?

[2+8=10]

Question 8

(a) Why might discounted cash flow valuation be difficult to do for the following types of firms viz; (i) Private firms, (ii) Firms with patent or product options (iii) Cyclical firms during recession (iv) Firms in trouble (v) Firms in process of restructuring (vi) Firms with unutilized assets.

(b) Why do Companies want to measure Intellectual Capital? List the popular approaches to IC measurement.

(c) From the books of BCA Ltd. following information is available. Find the value of its equity shares based on ROCE (return on capital employed) method.

₹ in lacs

Year	Capital employed	Profit
2008	40	6
2009	52	10
2010	66	12
2011	70	16
2012	82	22

The expected rate of return in market is 15%.

[6+8+6 = 20]

Question 9

(a) Explain the various methods of payment in case of mergers and amalgamations.

(b) Who are the participants in the Merger and Acquisition Process?

(c)(i) Why do M & A take place? (ii) Why do they fail?

(d) XY Pvt. Ltd., a retail florist, is for sale at asking price of ₹31,00,000. You have been contacted by a potential buyer who has asked you to give him opinion as to whether the asking price is reasonable. The potential buyer has only limited information about XY Pvt. Ltd He does not know that annual gross sales of XY Pvt. Ltd is about ₹ 4100,000 and that last year's tax return reported an annual profit of ₹ 420,000 before tax.

You have collected the following information from financial details of several retail florists that were up for sale in the past:

TABLE I

	Price- to- sale(P/S) Ratio	Price-to-earnings(P/E)
Number of firms	38.00	33.00
Mean Ratio	0.55	3.29
Coefficient of Variation	0.65	1.52
Maximum Ratio	2.35	6.29

TABLE II Top 10 Players (in descending P/S order)

Firm	P/S Ratio	P/E Multiple
1	2.35	5.65
2	1.76	6.29
3	1.32	5.31
4	1.17	4.60
5	1.09	3.95
6	1.01	3.25
7	0.96	3.10
8	0.85	2.96
9	0.72	2.90
10	0.68	2.75

Offer your opinion on reasonableness of the asking price.

[4+4+5+7 = 20]

OR

Question 10

(a)) List defensive strategies available to a company in case of hostile takeover.

(b) From the following data calculate the cost of merger:

i) When the merger is financed by cash ii) when the merger is financed by stock

Particulars	Firm A	Firm B
Market price per share	60	15
(₹) Number of shares		
Market value of firm (₹)	1,00,000	50,000

Firm A intends to pay ₹ 10,00,000 cash for B if B's market price reflects only its value as a separate entity.

(c) The directors of Hi Value Fund are keen on acquiring the business of G Ltd. They have approached you given your valuation expertise for mergers and acquisitions for help. G Ltd. has an invested capital of ₹ 50 million. Its return on invested capital (ROIC) is 12% and its weighted average cost of capital (WACC) is 11%. The expected growth rate in G Ltd.'s invested capital will be 20% for the first three years, 12% for the following two years and 8% thereafter forever. The forecast of G Ltd's free cash flows is given below:

(₹ in Million)

Year	1	2	3	4	5	6	7
Invested Capital	50	60	72	86.40	96.77	108.38	117.05
Net operating profit less adjusted tax	6	7.20	8.64	10.37	11.61	13.00	14.05
Net investment	10	12.00	14.40	10.37	11.61	8.67	9.36
Free cash flow	(-)4.00	(-)4.80	(-)5.76	-	-	4.33	4.69
Cost of Capital (%)	11	11	11	11	11	11	11
Capital charge	5.50	6.60	7.92	9.50	10.64	11.92	12.88
Economic Profit	0.50	0.60	0.72	0.87	0.97	1.08	1.17
Growth rate (%)	20	20	20	12	12	8	8

Value G Ltd. under (i) Discounted cash flow method and (ii) present value of economic profit method. Can the consideration paid for the shares exceed the valuation, if so, under what circumstances? **[4+6+10 = 20]**