Test Series: March. 2016

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - II

PAPER - 5: ADVANCED ACCOUNTING

Question No. 1 is compulsory.

Answer any five questions from the remaining six questions.

Wherever necessary suitable assumptions may be made and disclosed by way of a note.

Working Notes should form part of the answer.

(Time allowed: Three hours)

(Maximum marks: 100)

- 1. (a) A Company follows April to March as its financial year. The Company recognizes cheques dated 31st March or before, received from customers after balance sheet date, but before approval of financial statement by debiting 'Cheques in hand account' and crediting 'Debtors account'. The 'cheques in hand' is shown in the Balance Sheet as an item of cash and cash equivalents. All cheques in hand are presented to bank in the month of April and are also realised in the same month in normal course after deposit in the bank. State with reasons, whether the collection of cheques bearing date 31st March or before, but received after Balance Sheet date is an adjusting event and how this fact is to be disclosed by the company?
 - (b) Santosh Ltd. has received a grant of Rs. 8 crores from the Government for setting up a factory in a backward area. Out of this grant, the company distributed Rs. 2 crores as dividend. Also, Santosh Ltd. received land free of cost from the State Government but it has not recorded it at all in the books as no money has been spent. In the light of AS 12 examine, whether the treatment of both the grants is correct.
 - (c) On 1st April, 2015, Amazing Construction Ltd. obtained a loan of Rs. 32 crores to be utilized as under:
 - Construction of sealink across two cities:

(work was held up totally for a month during the year due : Rs. 25 crores

to high water levels)

: Rs. 3 crores (ii) Purchase of equipments and machineries : Rs. 2 crores (iii) Working capital (iv) Purchase of vehicles : Rs. 50,00,000 (v) Advance for tools/cranes etc. : Rs. 50,00,000

(vi) Purchase of technical know-how Rs. 1 crores

(vii) Total interest charged by the bank for the year ending : Rs. 80,00,000

31st March, 2016

Show the treatment of interest by Amazing Construction Ltd.

(d) An airline is required by law to overhaul its aircraft once in every five years. The pacific Airlines which operate aircrafts does not provide any provision as required by law in its final accounts. Discuss with reference to relevant Accounting Standard 29.

 $(4 \times 5 = 20 \text{ Marks})$

2. The following is the Balance Sheet of M/s. P and Q as on 31st March, 2015:

Liabilities	Rs.	Assets	Rs.
Capital Accounts:		Machinery	54,000
Р	50,000	Furniture	5,000
Q	30,000	Investment	50,000
Reserves	20,000	Stock	20,000
Loan Account of Q	15,000	Debtors	21,000
Creditors	40,000	Cash	5,000
	1,55,000		1,55,000

It was agreed that Mr. R is to be admitted for a fourth share in the future profits from 1st April, 2015. He is required to contribute cash towards goodwill and Rs. 15,000 towards capital.

The following further information is furnished:

- (a) P & Q share the profits in the ratio 3:2.
- (b) P was receiving salary of Rs. 750 p.m. from the very inception of the firm in 2008 in addition to share of profit.
- (c) The future profit ratio between P, Q & R will be 2:1:1. P will not get any salary after the admission of R.
- (d) It was agreed that the value of goodwill of the firm shall appear in the books of the firm. The goodwill of the firm shall be determined on the basis of 3 years' purchase of the average profits from business of the last 5 years. The particulars of the profits are as under:

Year ended	Profit/(Loss)
31st March, 2011	25,000
31st March, 2012	12,500
31st March, 2013	(2,500)
31st March, 2014	35,000
31st March, 2015	30,000

The above Profits and Losses are after charging the Salary of P. The Profit of the year ended 31st March, 2011 included an extraneous profit of Rs. 40,000 and the loss for the year ended 31st March, 2013 was on account of loss by strike to the extent of Rs. 20,000.

- (e) The cash trading profit for the year ended 31st March, 2016 was Rs. 50,000 before depreciation.
- (f) The partners had drawn each Rs. 1,000 p.m. as drawings.
- (g) The value of other assets and liabilities as on 31st March, 2016 were as under:

	Rs.
Machinery (before depreciation)	60,000
Furniture (before depreciation)	10,000
Investment	50,000
Stock	15,000
Debtors	30,000
Creditors	20,000

- (h) Provide depreciation @ 10% on Machinery and @ 5% on Furniture on the Closing Balance and interest is accumulated @ 6% on Q's loan. The loan alongwith interest would be repaid within next 12 months.
- (i) Investments are held from inception of the firm and interest is received @ 10% p.a.
- (j) The partners applied for conversion of the firm into a Private Limited Company. Certificate was received on 1st April, 2016. They decided to convert Capital A/cs of the partners into share capital in the ratio of 2:1:1 on the basis of a total Capital as on 31st March, 2016. If necessary, partners have to subscribe to fresh capital or withdraw.

Prepare the Profit and Loss Account of the firm for the year ended 31st March, 2016 and the Balance Sheet of the Company on 1st April, 2016. (16 Marks)

3. (a) A company had 16,000, 12% debentures of Rs. 100 each outstanding as on 1st April, 2015, redeemable on 31st March, 2016. On that day, sinking fund was Rs. 14,98,000 represented by 2,000 own debentures purchased at the average price of Rs. 99 and 9% stocks face value of Rs. 13,20,000. The annual instalment was Rs. 56,800.

On 31st March, 2016 the investments were realized at Rs. 98 and the debentures were redeemed. You are required to write up the following accounts for the year ending 31st March 2016:

- (1) 12% Debentures account
- (2) Debenture redemption sinking fund account.

- (b) X Co. Ltd. has its share capital divided into equity shares of Rs. 10 each. On 1.1.2015 it granted 20,000 employees' stock option at Rs. 50 per share, when the market price was Rs. 120 per share. The options were to be exercised between 15th March, 2016 and 31st March, 2016. The employees exercised their options for 16,000 shares only and the remaining options lapsed. The company closes its books on 31st March every year. Show Journal entries (with narration) as would appear in the books of the company up to 31st March, 2016. (8 + 8 = 16 Marks)
- 4. From the following balances extracted from the books of Perfect General Insurance Company Limited as on 31.3.2016 you are required to prepare Revenue Accounts in respect of Fire and marine Insurance business for the year ended 31.3.2016 to and a Profit and Loss Account for the same period:

	Rs.		Rs.
Directors' Fees	80,000	Interest received	19,000
Dividend received	1,00,000	Fixed Assets (1.4.2015)	90,000
Provision for Taxation		Income-tax paid during	
(as on 1.4. 2015)	85,000	the year	60,000

	Fire	Marine
	Rs.	Rs.
Outstanding Claims on 1.4. 2015	28,000	7,000
Claims paid	1,00,000	80,000
Reserve for Unexpired Risk on 1.4.2015	2,00,000	1,40,000
Premiums Received	4,50,000	3,30,000
Agent's Commission	40,000	20,000
Expenses of Management	60,000	45,000
Re-insurance Premium (Dr.)	25,000	15,000

The following additional points are also to be taken into account:

- (a) Depreciation on Fixed Assets to be provided at 10% p.a.
- (b) Interest accrued on investments Rs. 10,000.
- (c) Closing provision for taxation on 31.3. 2016 to be maintained at Rs. 1,24,138.
- (d) Claims outstanding on 31.3.2016 were Fire Insurance Rs. 10,000; Marine Insurance Rs. 15,000.
- (e) Premium outstanding on 31.3.2016 were Fire Insurance Rs. 30,000; Marine Insurance Rs. 20,000.

- (f) Reserve for unexpired risk to be maintained at 50% and 100% of net premiums in respect of Fire and Marine Insurance respectively.
- (g) Expenses of management due on 31.3.2016 were Rs. 10,000 for Fire Insurance and Rs. 5,000 in respect of marine Insurance. (16 Marks)
- 5. (a) Siva Ltd. has two departments X and Y. From the following particulars prepare departmental trading accounts and general profits and loss account for the year ending 31st March, 2016:

	Department X	Department Y
	Rs.	Rs.
Opening stock (at cost)	80,000	48,000
Purchases	3,68,000	2,72,000
Carriage inward	8,000	8,000
Wages	48,000	32,000
Sales	5,60,000	4,48,000
Purchased goods transferred		
By department Y to X	40,000	-
By department X to Y	-	32,000
Finished goods transferred		
By department Y to X	1,40,000	-
By department X to Y	-	1,60,000
Return of finished goods		
By department Y to X	40,000	-
By department X to Y	-	28,000
Closing stock		
Purchased goods	18,000	24,000
Finished goods	96,000	56,000

Purchased goods have been transferred mutually at their respective departmental purchase cost and finished goods at departmental market price and that 25% of the closing finished stock with each department represents finished goods received from the other department.

(b) Beta, having head office at Mumbai has a branch at Nagpur. The head office does wholesale trade only at cost plus 80%. The goods are sent to branch at the wholesale price viz., cost plus 80%. The branch at Nagpur is wholly engaged in retail trade and the goods are sold at cost to H.O. plus 100%. Following details are furnished for the year ended 31st March, 2016:

	Head Office	Branch
	(Rs.)	(Rs.)
Opening stock (as on 1.4.2015)	2,25,000	-
Purchases	25,50,000	-
Goods sent to branch (Cost to H.O. plus 80%)	9,54,000	-
Sales	27,81,000	9,50,000
Office expenses	90,000	8,500
Selling expenses	72,000	6,300
Staff salary	65,000	12,000

You are required to prepare Trading and Profit and Loss Account of the head office and branch for the year ended 31^{st} March, 2016. (8 + 8 = 16 Marks)

6. The summarized Balance Sheet of X Ltd. as at 31st March, 2014 was as follows:

	Particulars	Amount Rs.
I	Equity and Liabilities	
1	Shareholders Fund	
	Share Capital	
	40,000 equity shares of Rs. 100 each fully paid	40,00,000
	20,000, 10% preference shares of Rs.100 each fully paid	20,00,000
	Reserve & Surplus	
	(a) Securities Premium Account	1,50,000
	(b) Profit & Loss Account	(23,00,000)
2.	Non Current Liabilities	
	Long Term Borrowings 7% Debentures of Rs. 100 each	4,00,000
3.	Current Liabilities	
	Other Current Liabilities	
	(a) Creditors	10,00,000

	(b) Loan from Director		2,00,000
	Total Liabilities		<u>54,50,000</u>
II	Assets		
1	Non Current Assets		
	Fixed Assets		
	(a) Land & Building	20,00,000	
	(b) Plant & Machinery	12,00,000	32,00,000
	Intangible Assets		
	Goodwill		4,00,000
2.	Current Assets		
	(a) Debtors	12,00,000	
	(b) Stock	5,00,000	
	(c) Cash at Bank	<u>1,50,000</u>	<u>18,50,000</u>
	Total Assets		<u>54,50,000</u>

No Dividend on Preference Shares has been paid for last 5 Years.

The following scheme of reorganisation was duly approved by the Court:

- (i) Each equity share to be reduced to Rs. 25.
- (ii) Each existing Preference Share to be reduced to Rs. 75 and then exchanged for one new 13% Preference Share of Rs. 50 each and one Equity Share of Rs. 25 each.
- (iii) Preference Shareholders have forgone their right for dividend for four years. One year's dividend at the old rate is however, payable to them in fully paid equity shares of Rs. 25.
- (iv) The Debenture Holders be given the option to either accept 90% of their claims in cash or to convert their claims in full into new 13 % Preference Shares of Rs. 50 each issued at par. One-fourth (in value) of the Debenture Holders accepted Preference Shares for their claims. The rest were paid in cash.
- (v) Contingent Liability of Rs. 2,00,000 is payable which has been created by wrong action of one Director. He has agreed to compensate this loss out of the loan given by the Director to the Company.

- (vi) Goodwill does not have any value in the present. Decrease the value of Plant & Machinery, Stock and Debtors by Rs. 3,00,000; Rs. 1,00,000 and Rs. 2,00,000 respectively. Increase the value of Land & Building to Rs. 25,00,000.
- (vii) 50,000 new Equity Shares of Rs. 25 each are to be issued at par payable in full on application. The issue was underwritten for a commission of 4%. Shares were fully taken up.
- (viii) Total expenses incurred by the Company in connection with the Scheme excluding underwriting Commission amounted to Rs. 20,000.

Pass necessary Journal Entries to record the above transactions.

(16 Marks)

- 7. Answer any **four** of the following:
 - (a) AB Limited was incorporated on 1st January, 2015 and it issued a prospectus inviting applications for 40,000 equity shares of Rs. 10 each. The whole issue was fully underwritten by A, B and C as follows:

A - 20,000 Shares, B - 12,000 Shares, C - 8,000 Shares

Applications were received for 32,000 shares, of which marked applications were as follows:

A - 16,000 Shares, B - 5,700 Shares, C - 8,300 Shares

You are required to find out the liabilities of individual underwriters.

(b) Calculate the diluted earnings per share from the following information:

Net profit for the current year

Rs. 85,50,000

Number of equity shares outstanding

20,00,000

Number of 8% convertible debentures of Rs. 100 each 1,00,000

Each debenture is convertible into 10 equity shares.

Interest expenses for the current year

Rs.6,00,000

Tax relating to interest expenses

30%

(c) From the following information find out the amount of provisions to be shown in the Profit and Loss Account of a Commercial Bank:

Assets	(Rs. in lakhs)
Standard	4,000
Sub-standard	2,000
Doubtful upto one year	900
Doubtful upto three years	400
Doubtful more than three years	300

Loss Assets 500

- (d) "One of the characteristics of financial statements is neutrality"- Do you agree with this statement?
- (e) "In the following list of shares issued, for the purpose of calculation of weighted average number of shares, from which date weight is to be considered:
 - (i) Equity Shares issued in exchange of cash,
 - (ii) Equity Shares issued as a result of conversion of a debt instrument,
 - (iii) Equity Shares issued in exchange for the settlement of a liability of the enterprise,
 - (iv) Equity Shares issued for rendering of services to the enterprise,
 - (v) Equity Shares issued in lieu of interest and/or principal of an other financial instrument,
 - (vi) Equity Shares issued as consideration for the acquisition of an asset other than in cash.

Also define Potential Equity Share.

 $(4 \times 4 = 16 \text{ Marks})$

Test Series: March, 2016

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - I

PAPER – 5: ADVANCED ACCOUNTING SUGGESTED ANSWERS/HINTS

- 1. (a) Even if the cheques bear the date 31st March or before, the cheques received after 31st March do not represent any condition existing on the balance sheet date i.e. 31st March. Thus, the collection of cheques after balance sheet date is not an adjusting event. Cheques that are received after the balance sheet date should be accounted for in the period in which they are received even though the same may be dated 31st March or before as per AS 4 "Contingencies and Events Occurring after the Balance Sheet Date". Moreover, the collection of cheques after balance sheet date does not represent any material change affecting financial position of the enterprise on the balance sheet date, so no disclosure is necessary.
 - (b) As per AS 12 'Accounting for Government Grants', when government grant is received for a specific purpose, it should be utilized for the same. So the grant received for setting up a factory is not available for distribution of dividend. In the second case, even if the company has not spent money for the acquisition of land, land should be recorded in the books of accounts at a nominal value. The treatment of both the elements in the treatment of the grant is incorrect as per AS 12.
 - (c) According to AS 16 'Borrowing costs', qualifying asset is an asset that necessarily takes substantial period of time to get ready for its intended use. As per the standard, borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalised as part of the cost of that asset. Other borrowing costs should be recognised as an expense in the period in which they are incurred. The treatment of interest by Amazing Construction Ltd. can be shown as:

	Qualifying Asset	Interest to be capitalized	Interest to be charged to Profit & Loss A/c	
		Rs.	Rs.	
Construction consea-link	f Yes	62,50,000		[80,00,000*(25/32)]
Purchase continued and machineries			7,50,000	[80,00,000*(3/32)]

Working capital	No		5,00,000	[80,00,000*(2/32)]
Purchase of vehicles	No		1,25,000	[80,00,000*(.5/32)]
Advance for tools, cranes etc.	No.		1,25,000	[80,00,000*(.5/32)]
Purchase of technical know-how	No		2,50,000	[80,00,000*(1/32)]
Total		62,50,000	<u>17,50,000</u>	

(d) A provision should be recognized only when an enterprise has a present obligation arising from a past event or obligation. In the given case, there is no present obligation but a future one, therefore no provision is recognized as per AS 29.

The cost of overhauling aircraft is not recognized as a provision because it is a future obligation and the incurring of the expenditure depends on the company's decision to continue operating the aircrafts. Even a legal requirement to overhaul does not require the company to make a provision for the cost of overhaul because there is no present obligation to overhaul the aircrafts. Further, the enterprise can avoid the future expenditure by its future action, for example by selling the aircraft. However, an obligation might arise to pay fines or penalties under the legislation after completion of five years. Assessment of probability of incurring fines and penalties depends upon the provisions of the legislation and the stringency of the enforcement regime. A provision should be recognized for the best estimate of any fines and penalties if airline continues to operate aircrafts for more than five years.

M/s P, Q and R
 Profit and Loss Account for the year ending on 31st March, 2016

	Rs.		Rs.
To Depreciation on Machinery	6,000	By Trading Profit	50,000
To Depreciation on furniture	500	By Interest on Investment	5,000
To Interest on Q's loan	900		
To Net Profit to :			
P's Capital A/c 23,800			
Q's Capital A/c 11,900			
R's Capital A/c 11,900	47,600		
	55,000		55,000

Balance Sheet of the PQR Pvt. Ltd. as on 1st April, 2016

			Notes No.	Rs.
I	Equity and Liabilities			
	Shareholders' funds			
	Share capital			1,41,600
	Current liabilities			
	Short term borrowings		1	15,900
	Trade payables			20,000
		Total		<u>1,77,500</u>
II	Assets			
	Non-current assets			
	Fixed assets			
	Tangible assets		2	63,500
	Non-current investments			50,000
	Current assets			
	Inventories			15,000
	Trade receivables			30,000
	Cash and cash equivalents			<u> 19,000</u>
		Total		<u>1,77,500</u>

Notes to Accounts

			Rs.
1.	Short term borrowings		
	Loan from Q		15,900
2.	Tangible assets		
	Machinery	54,000	
	Furniture	9,500	63,500

Working Notes:

1. Calculation of goodwill

	2010-11	2011-12	2012-13	2013-14	2014-15
	Rs.	Rs.	Rs.	Rs.	Rs.
Profits/(Loss)	25,000	12,500	(2,500)	35,000	30,000
Adjustment for extraneous profit of 2010-11 and					
abnormal loss of 2012-13	(40,000)	-	20,000	_	_
	(15,000)	12,500	17,500	35,000	30,000

ı					i
Add: Salary of P (750 x12)	9,000	9,000	9,000	9,000	9,000
	(6,000)	21,500	26,500	44,000	39,000
Less: Interest on non-					
trading investment*	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
	(11,000)	16,500	21,500	39,000	34,000
Total Profit from 2011-12 to 2014-15					1,11,000
Less: Loss for 2010-11					(11,000)
					1,00,000
Average Profit					20,000
Goodwill equal to 3 years'					60,000
purchase					
Contribution from R for 1/4					15,000
share					

^{*} Investments are assumed to be non-trading investments.

2. Calculation of sacrificing ratio of Partners P and Q on admission of R

	Old share	New share	Sacrificing share	Gaining share
Р	3/5	1/2	$\frac{3}{5} - \frac{1}{2} = \frac{6 - 5}{10} = \frac{1}{10}$	
Q	2/5	1/4	$\frac{2}{5} - \frac{1}{4} = \frac{8 - 5}{20} = \frac{3}{20}$	
R		1/4		1/4

Goodwill adjustment entry* through Partners' capital accounts (in their sacrificing ratio of 2:3)

		Rs.	Rs.
R's capital A/c	Dr.	15,000	
To P's capital A/c			6,000
To Q' s capital A/c			9,000
(R's share in goodwill adjusted through P and Q)			

^{*}As per AS 26 "Intangible Assets", only purchased goodwill should appear in the books. Therefore, goodwill though required to be shown in the books as per the requirement of the question, has been adjusted through capital accounts of the partners in line with the provisions of AS 26.

4. Partners' Capital Accounts

	Р	Q	R		Р	Q	R
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Drawings (1,000 x 12)	12,000	12,000	12,000	By Balance b/d	50,000	30,000	_
To P			6,000	By General Reserve	12,000	8,000	_
To Q			9,000	By R	6,000	9,000	_
To Balance c/d	79,800	46,900	14,900	By Bank (15,000 + 15,000)	_	_	30,000
				By Profit & Loss A/c	23,800	11,900	11,900
	91,800	58,900	41,900		91,800	58,900	41,900

5. Balance Sheet of the firm as on 31st March, 2016

Liabilities		Rs.	Assets	Rs.	Rs.
P's Capital	79,800		Machinery	60,000	
Q's Capital	46,900		Less: Depreciation	(<u>6,000)</u>	54,000
R's Capital	<u>14,900</u>	1,41,600	Furniture	10,000	
			Less: Depreciation	<u>(500</u>)	9,500
Q's Loan	15,000		Investments		50,000
Add: Interest d	ue <u>900</u>	15,900	Stock-in-trade		15,000
Creditors		20,000	Debtors		30,000
			Cash (W.N.6)		19,000
		1,77,500			1,77,500

6. Cash balance as on 31.3.2016

	Rs.	Rs.
Cash trading profit		50,000
Add: Investment Interest		5,000
Add: Decrease in Stock Balance		<u>5,000</u>
		60,000
Less: Increase in Debtors	9,000	
Less: Decrease in Creditors	<u>20,000</u>	<u>(29,000)</u>
		31,000
Add: Opening cash balance	5,000	
Add: Cash brought in by R	<u>30,000</u>	<u>35,000</u>
		66,000

Less: Drawings (12,000 +12,000 +12,000)	36,000	
Less: Additions to Machine (60,000 - 54,000)	6,000	
Furniture (10,000 - 5,000)	<u>5,000</u>	<u>(47,000)</u>
Closing cash balance		<u> 19,000</u>

7. Distribution of shares - Conversion into Company

		Rs.
Capital:	Р	79,800
	Q	46,900
	R	14,900
Share Capital		<u>1,41,600</u>
Distribution of shares :	P (1/2)	70,800
	Q (1/4)	35,400
	R (1/4)	35,400

P and Q should withdraw capital of Rs. 9,000 (Rs. 79,800 – Rs. 70,800) and Rs.11,500 (Rs. 46,900 – Rs. 35,400) respectively and R should subscribe shares of Rs. 20,500 (Rs.35,400 – Rs. 14,900).

3. (a)

12% Debentures Account

Date	Particulars	Rs.	Date	Particulars	Rs.
31st March, 2016	To Own debentures	2,00,000	1 st April, 2015	By Balance b/d	16,00,000
	To Bank A/c	14,00,000 16,00,000			<u>16,00,000</u>

Debenture Redemption Sinking Fund Account

Date	Particulars	Rs.	Date	Particulars	Rs.
31st March, 2016	To 9% Stock A/c (loss) (W.N.5)	6,400	1 st April, 2015	By Balance b/d	14,98,000
	To General reserve		31 st March, 2016	By Profit and loss A/c	
	(Bal.fig.)	16,93,200			56,800
				By Interest on sinking fund A/c (W.N.3)	1,42,800

		By Own debentures A/c (W.N.4)	2,000
	16,99,600		16,99,600

Working Notes:

1. Amount of stock as on 1st April, 2015

	Rs.
Sinking fund balance as on 1st April, 2015	14,98,000
Less: Own debentures	(1,98,000)
	<u>13,00,000</u>

2. Sales value of 9% stock

= Face value / Rs. per stock

= Rs. 13,20,000 / Rs. 100 = 13,200 stock

Sales value = 13,200 stock x Rs. 98 per stock

= Rs. 12,93,600

3. Interest credited to Sinking Fund

(i) Interest on 9% stock (Rs. 13,20,000 x 9%)

Rs. 1,18,800

(ii) Interest on own debentures

(2,000 Debentures x Rs. 100 x 12%)

Rs. <u>24,000</u>

Rs. <u>1,42,800</u>

4. Own Debentures Account

		Rs.			Rs.
1 st April, 2015	To Balance b/d	1,98,000	31st March, 2016	By 12% Debentures A/c	2,00,000
31st March,	To Sinking fund				
2016	A/c	2,000			
		2,00,000			2,00,000

5. 9% Stock Account

	Rs.		Rs.
 To Balance b/d (Face value Rs. 13,20,000) (W.N.1)		 By Bank account (W.N.2)	12,93,600

		By S fund	Sinking (loss	
		on sal	es)	6,400
	13,00,000			<u>13,00,000</u>

(b) In the books of X Ltd. Journal Entries

			Rs.	Rs.
15.03.16	Bank A/c	Dr.	8,00,000	
to 31.3.16	Employee compensation expense A/c	Dr.	11,20,000	
	To Equity share capital A/c			1,60,000
	To Securities premium A/c			17,60,000
	(Being shares issued to the employees against the options vested to them in pursuance of Employee Stock Option Plan)			
31.3.16	Profit and Loss A/c	Dr.	11,20,000	
	To Employee compensation expenses A/c			11,20,000
	(Being transfer of employee compensation transfer to Profit and Loss Account)			

Working Notes:

- No entry is passed when Stock Options are granted to employees. Hence, no entry will be passed on 1st April 2015;
- 2. Market Price = Rs. 120 per share where as stock option price = Rs. 50, Hence, the difference Rs. 120 Rs. 50 = Rs. 70 per share is equivalent to employee cost or employee compensation expense and will be charged to P/L Account as such for the number of options exercised i.e. 16,000 shares.

4. Form B – RA (Prescribed by IRDA) Perfect General Insurance Co. Ltd Revenue Account for the year ended 31st March, 2016 Fire and Marine Insurance Businesses

	Schedule	Fire Current Year	Marine Current Year
		Rs.	Rs.
Premiums earned (net)	1	4,27,500	1,40,000

Profit / (Loss) on sale / redemption of investments Others (to be specified) Interest, Dividends and Rent – Gross		_ _	_ _
Total (A)		<u>4,27,500</u>	<u>1,40,000</u>
Claims incurred (net)	2	82,000	88,000
Commission	3	40,000	20,000
Operating expenses related to Insurance business	4	70,000	50,000
Premium Deficiency			
Total (B)		<u>1,92,000</u>	<u>1,58,000</u>
Profit from Fire / Marine Insurance business (A-B)		2,35,500	(18,000)

Schedules forming part of Revenue Account

Schedule -1

Premiums earned (net)	Fire Current Year	Marine Current Year
	Rs.	Rs.
Premiums from direct business written	4,80,000	3,50,000
Less: Premium on reinsurance ceded	(25,000)	(15,000)
Total Premium earned	4,55,000	3,35,000
Less: Change in provision for unexpired risk	(27,500)	<u>(1,95,000)</u>
	<u>4,27,500</u>	1,40,000
Schedule – 2		
Claims incurred (net) (W.N. 1)	82,000	88,000
Schedule – 3		
Agents Commission	40,000	20,000
Schedule – 4		
Operating expenses related to insurance business		
Expenses of Management (W.N. 2)	70,000	50,000

Form B-PL

Perfect General Insurance Co. Ltd.

Profit and Loss Account for the year ended 31st March, 2016

Particulars	Schedule	Current Year	Previous Year
		Rs.	Rs.
Operating Profit/(Loss)			
(a) Fire Insurance		2,35,500	
(b) Marine Insurance		(18,000)	
(c) Miscellaneous Insurance		_	
Income From Investments			
Interest, Dividend & Rent-Gross		1,29,000*	
Other Income (To be specified)			
Total (A)		3,46,500	
Provisions (Other than taxation)		_	
Depreciation		9,000	
Other Expenses -Director's Fee		<u>80,000</u>	
Total (B)		<u>89,000</u>	
Profit Before Tax		2,57,500	
Provision for Taxation		<u>99,138</u>	
Profit After Tax		<u>1,58,362</u>	

Working Notes:

		Fire	Marine
		Rs.	Rs.
1.	Claims under policies less reinsurance		
	Claims paid during the year	1,00,000	80,000
	Add: Outstanding on 31st March, 2016	10,000	<u>15,000</u>
		1,10,000	95,000
	Less: Outstanding on 1st April, 2015	(28,000)	(7,000)
		82,000	88,000

 $^{^{*}}$ Interest and dividend in this case can't be bifurcated between fire and marine, thus taken to profit and loss account.

2.	Expenses of management		
	Expenses paid during the year	60,000	45,000
	Add: Outstanding on 31st March, 2016	<u>10,000</u>	<u>5,000</u>
		<u>70,000</u>	<u>50,000</u>
3.	Premiums less reinsurance		
	Premiums received during the year	4,50,000	3,30,000
	Add: Outstanding on 31st March, 2016	30,000	20,000
		4,80,000	3,50,000
	Less : Reinsurance premiums	(25,000)	(15,000)
		<u>4,55,000</u>	<u>3,35,000</u>

4. Reserve for unexpired risks is 50% of net premium for fire insurance and 100% of net premium for marine insurance. Reserve for unexpired risks for fire insurance = Rs. 4,55,000 X 50% = Rs. 2,27,500. Opening Balance in reserves for unexpired risk for fire insurance was Rs. 2,00,000. Hence, additional transfer to reserve for fire insurance in the year will be Rs. 27,500. On similar basis of calculation, the additional transfer to reserve for marine insurance will be Rs. 1,95,000

5. Provision for taxation account

		Rs.			Rs.
31.3.2016	To Bank A/c		1.4.2015	By Balance b/d	85,000
	(taxes paid)	60,000	31.3.2016	By P & L A/c (Bal Fig)	99,138
31.3.2016	To Balance c/d	1,24,138			
		1,84,138			1,84,138

5. (a) Departmental Trading Account in the books of Siva Ltd. for the year ended 31st March 2016

Particulars	Department	Department	Particulars	Department	Department
	X	Υ		X	Υ
	Rs.	Rs.		Rs.	Rs.
To Opening stock	80,000	48,000	By Sales	5,60,000	4,48,000
To Purchases	3,68,000	2,72,000	By Transfers:		
To Carriage inward	8,000	8,000	Purchased goods	32,000	40,000

To Wages	48,000	32,000	Finished goods	1,20,000*	1,12,000*
To Transfers:			By Closing stock:		
Purchased goods	40,000	32,000	Purchased goods	18,000	24,000
Finished goods	1,12,000	1,20,000	Finished goods	96,000	56,000
To Gross profit c/d	<u>1,70,000</u>	<u>1,68,000</u>			
	8,26,000	6,80,000		8,26,000	6,80,000

Profit and Loss A/c for the year ended 31st March, 2016

Particulars	Rs.	Particulars	Rs.
To Provision for unrealized profit included in closing stock		By Gross profit b/d	
Department X (W.N. 3)	7,200	Department X	1,70,000
Department Y (W.N. 3)	3,500	Department Y	1,68,000
To Net profit	3,27,300		
	3,38,000		3,38,000

Working Notes:

1. Calculation of rates of gross profit margin on sales

	Department X	Department Y
	Rs.	Rs.
Sales	5,60,000	4,48,000
Add: Transfer of finished goods	<u>1,60,000</u>	<u>1,40,000</u>
	7,20,000	5,88,000
Less: Return of finished goods	(40,000)	(28,000)
	<u>6,80,000</u>	<u>5,60,000</u>
Gross Profit	1,70,000	1,68,000
Gross profit margin =	$\frac{1,70,000}{6,80,000} \times 100 = 25\%$	$\frac{1,68,000}{5,60,000} \times 100 = 30\%$

^{*} Net transfers of finished goods by

Department X to Y = Rs. 1,60,000 - Rs. 40,000 = Rs. 1,20,000

Department Y to X = Rs. 1,40,000 - Rs. 28,000 = Rs. 1,12,000

2. Finished goods from other department included in the closing stock

	Department X	Department Y
	Rs.	Rs.
Stock of finished goods	96,000	56,000
Stock related to other department		
(25% of finished goods)	24,000	14,000

3. Unrealized profit included in the closing stock

Department X = 30% of Rs. 24,000 = Rs. 7,200

Department Y = 25% of Rs. 14,000 = Rs. 3,500

(b) Trading and Profit and Loss A/c For the year ended 31st March 2016

	Head office	Branch			Head office	Branch
	Rs.	Rs.			Rs.	Rs.
To Opening stock	2,25,000	-	Ву	Sales	27,81,000	9,50,000
To Purchases	25,50,000	-	Ву	Goods sent to branch	9,54,000	-
To Goods received from head office	-	9,54,000	Ву	Closing stock (W.N.1 & 2)	7,00,000	99,000
To Gross profit c/d	<u>16,60,000</u>	<u>95,000</u>				
	44,35,000	10,49,000			44,35,000	10,49,000
To Office expenses	90,000	8,500	Ву	Gross profit b/d	16,60,000	95,000
To Selling expenses	72,000	6,300				
To Staff salaries	65,000	12,000				
To Branch Stock Reserve (W.N.3)	44,000	-				
To Net Profit	13,89,000	<u>68,200</u>				
	<u>16,60,000</u>	<u>95,000</u>			<u>16,60,000</u>	<u>95,000</u>

Working Notes:

(1)	Calculation of closing stock of head office:	Rs.
	Opening Stock of head office	2,25,000
	Goods purchased by head office	25,50,000
		27,75,000
	Less: Cost of goods sold [37,35,000* x 100/180]	(20,75,000)
		7,00,000
(2)	Calculation of closing stock of branch:	Rs.
	Goods received from head office [At invoice value]	9,54,000
	Less: Invoice value of goods sold [9,50,000 x 180/200]	(8,55,000)
		99,000
(3)	Calculation of unrealized profit in branch stock:	
	Branch stock Rs. 99,000	
	Profit included 80% of cost	
	Hence, unrealized profit would be = Rs. 99,000 x 80/180 =	Rs. 44,000

6. In the books of X Ltd. Journal Entries

Particulars		Amount (Rs.)	Amount (Rs.)
Equity Share Capital (Rs. 100) A/c	Dr.	40,00,000	
To Equity Share Capital (Rs. 25) A/c			10,00,000
To Capital Reduction A/c			30,00,000
(Being Equity Shares of Rs. 100 each reduced to Rs. 25 each and balance transferred to Capital Reduction A/c)			
10% Preference Share Capital (Rs. 100) A/c	Dr.	20,00,000	
To 10% Preference Share Capital (Rs. 75) A/c			15,00,000
To Capital Reduction A/c			5,00,000
(Being Preference Shares of Rs. 100 each reduced to Rs. 75 each and balance transferred to Capital Reduction A/c)			

^{*} Rs. 27,81,000 + Rs. 9,54,000

10% Preference Share Capital (Rs. 75) A/c	Dr.	15,00,000	
To 13% Preference Share Capital (Rs. 50) A/c			10,00,000
To Equity Share Capital A/c			5,00,000
(Being one new 13% Preference Share of Rs. 50 each and one Equity Share of Rs. 25 each issued against 10% Preference Share of Rs. 75 each)			
Capital Reduction A/c	Dr.	2,00,000	
To Preference Share Dividend Payable A/c			2,00,000
(Being arrear of Preference Share Dividend payable for one year)			
Preference Share Dividend Payable A/c	Dr.	2,00,000	
To Equity Share Capital A/c (Rs. 25)	Dr.		2,00,000
(Being Equity Shares of Rs. 25 each issued for arrears of Preference Share Dividend)			
7% Debenture A/c	Dr.	4,00,000	
To Debenture Holders A/c			4,00,000
(Being balance of 7% Debentures transferred to Debenture Holders A/c)			
Debenture Holders A/c	Dr.	4,00,000	
To 13% Preference Share Capital A/c			1,00,000
To Bank A/c			2,70,000
To Capital Reduction A/c			30,000
(Being 25% of Debenture Holders opted to take 13% Preference Shares at par and remaining took 90% cash payment for their claims)			
Loan from Director	Dr.	2,00,000	
To Provision for Contingent Liability A/c			2,00,000
(Being contingent liability of Rs. 2,00,000 is payable and adjusted against loan from Director A/c)			
Bank A/c	Dr.	12,50,000	
To Equity Share Application & Allotment A/c			12,50,000
(Being application money received on 50,000 Equity Shares @ Rs. 25 each)			
Equity Share Application & Allotment A/c	Dr.	12,50,000	
To Equity Share Capital A/c			12,50,000

(Being application money transferred to Capital A/c on allotment)			
Underwriting Commission A/c	Dr.	50,000	
To Bank A/c			50,000
(Being underwriting commission paid)			
Land & Building A/c	Dr.	5,00,000	
To Capital Reduction A/c			5,00,000
(Being value of land & Building appreciated)			
Expenses on Reconstruction A/c	Dr.	20,000	
To Bank A/c			20,000
(Being payment of expenses on reconstruction)			
Capital Reduction A/c	Dr.	38,30,000	
To Goodwill A/c			4,00,000
To Plant & Machinery A/c			3,00,000
To Stock A/c			1,00,000
To Debtors A/c			2,00,000
To Profit & Loss A/c			23,00,000
To Expenses on Reconstruction A/c			20,000
To Underwriting Commission A/c			50,000
To Capital Reserve A/c			4,60,000
(Being various losses written off and balance of Capital Reduction A/c transferred to Capital Reserve A/c)			

7. (a) Statement of Net Liability of Underwriters (Number of Shares)

	Gross Liability	Marked applications	Unmarked applications in the ratio of	Total (2) + (3)	Credit for C's Surplus (10:6)	Total (4) + (5)	Net Liability (1) - (6)
	(1)	(2)	gross liability (3)	(4)	(5)	(6)	(7)
Α	20,000	16,000	1,000	17,000	438	17,438	2,562
В	12,000	5,700	600	6,300	262	6,562	5,438
С	8,000	8,300	400	8,700	(700)	8,000	-
	40,000	30,000	2,000	32,000	-	32,000	8,000

Note: The applications are for 32,000 shares out of which those for 30,000 are marked. Hence unmarked applications are for 2,000 shares

(b) Adjusted net profit for the current year

	Rs.
Net profit for the current year (assumed to be after tax)	85,50,000
Add: Interest expense for the current year	6,00,000
Less: Tax relating to interest expense (30% of Rs. 6,00,000)	(1,80,000)
Adjusted net profit for the current year	<u>89,70,000</u>

Weighted average number of equity shares

Number of equity shares resulting from conversion of debentures

$$=\frac{1,00,000\times100}{10}$$
 = 10,00,000 Equity shares

Weighted average number of equity shares used to compute diluted earnings per share

=
$$[(20,00,000 \times 12) + (10,00,000 \times 9^{**})]/12 = 27,50,000 \text{ shares}$$

Diluted earnings per share =
$$\frac{89,70,000}{27,50,000 \text{ shares}}$$
 = Rs. 3.26 per share

(c) Computation of provision in the Profit & Loss Account of the Commercial Bank:

Assets	Amount	% of	Provision
	(Rs. in lakhs)	Provision	(Rs. in lakhs)
Standard	4,000	0.40	16
Sub-standard*	2,000	15	300
Doubtful upto one year*	900	25	225
Doubtful upto three years*	400	40	160
Doubtful more than three years*	300	100	300
Loss	500	100	<u>500</u>
			<u>1,501</u>

^{*} Sub-standard and doubtful assets are assumed as fully secured as it is logical for a commercial bank to cover itself by adequate security in the making of loans and advances in the ordinary course of business.

^{**} Interest on debentures for full year amounts to Rs. 8,00,000 (i.e. 8% of Rs. 1,00,00,000). However, interest expense amounting Rs. 6,00,000 has been given in the question. It may be concluded that debentures have been issued during the year and interest has been provided for 9 months.

- (d) Yes, one of the characteristics of financial statements is neutrality. To be reliable, the information contained in financial statement must be neutral, that is free from bias. Financial Statements are not neutral if by the selection or presentation of information, the focus of analysis could shift from one area of business to another thereby arriving at a totally different conclusion on the business results. For example if the assets of a company primarily consist of debtors and insurance claims and the financial statements do not specify that the insurance claims have been lying unrealized for a number of years or that a few key debtors have not given balance confirmation certificates, an erroneous conclusion may be drawn on the liquidity of the company. Financial statements are said to depict the true and fair view of the business of the organization by virtue of neutrality.
- (e) The following dates should be considered for consideration of weights for the purpose of calculation of weighted average number of shares in the given situations:
 - (i) Date of Cash receivable
 - (ii) Date of conversion
 - (iii) Date on which settlement becomes effective
 - (iv) When the services are rendered
 - (v) Date when interest ceases to accrue
 - (vi) Date on which the acquisition is recognised.

A Potential Equity Share is a financial instrument or other contract that entitles, or may entitle its holder to equity shares.

Test Series: March, 2016

MOCK TEST PAPER – 2 INTERMEDIATE (IPC) GROUP – II PAPER – 6: AUDITING AND ASSURANCE

Question No. 1 is compulsory.

Attempt any five questions from the Rest.

Time Allowed - 3 Hours

Maximum Marks - 100

- Discuss the following:
 - (a) Matters indicating auditor about non-compliance of laws & regulations by management. (5 Marks)
 - (b) "Disclosure of significant accounting policies followed is necessary if the view presented is to be properly appreciated." (5 Marks)
 - (c) Guidance Notes issued by the ICAI are mandatory in nature. (5 Marks)
 - (d) "Inquiry is one of the audit procedures to obtain audit evidence." (5 Marks)
- 2. State with reason (in short) whether the following statements are correct or incorrect (Answer any **eight**):
 - (i) When the auditor concludes that misstatements are material, but not pervasive, to the financial statements, he should express disclaimer of opinion.
 - (ii) A company shall disclose by way of notes additional information regarding aggregate expenditure and income for an item which exceeds Rs. 1,00,000.
 - (iii) Where at any AGM, no auditor is appointed or re-appointed, the existing auditor shall continue to be the auditor of the company.
 - (iv) The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting one resulting from error.
 - (v) As per SA 570, the objective of the Auditor is to obtain sufficient appropriate audit evidence about the appropriateness of management's use of consistency assumption in the preparation and presentation of the financial statements.
 - (vi) A company can issue its sweat equity shares at discounted price.
 - (vii) 'Errors of commission' is where a transaction has been omitted either wholly or partially.
 - (viii) Section 138 of the Companies Act, 2013 deals with the provisions relating to cost audit.

- (ix) The overall objective of audit does not change in Computer Information System (CIS) environment.
- (x) A company having average net profit during the three immediately preceding financial years of Rs. 100 lakh can make a political contribution of Rs. 5 lakh.

 $(2 \times 8 = 16 \text{ Marks})$

- 3. How will you vouch/verify the following:
 - (a) Sale of Scrap
 - (b) Advertisement Expenses
 - (c) Assets acquired on Lease
 - (d) Investment in Shares and Debentures of Subsidiary.

 $(4 \times 4 = 16 \text{ Marks})$

- 4. Discuss with reference to SAs:
 - (a) What auditor shall do after the identification of significant related party transactions outside the entity's normal course of business? (4 Marks)
 - (b) What are the factors that may influence the degree of estimation uncertainty associated with an accounting estimate? (6 Marks)
 - (c) What are the factors that may influence the auditor's decision on whether to use an auditor's expert, when management has used a management's expert in preparing the financial statements?

 (6 Marks)
- 5. (a) Internal Control System can provide only reasonable but not absolute assurance that its objective relating to prevention and detection of errors/frauds, safeguarding of assets etc., are achieved. Briefly explain the inherent limitations that the system suffers.

 (6 Marks)
 - (b) The auditor of X Ltd. did not report on the matters specified under sub-section (1) of section 143 of the Companies Act, 2013, as he was satisfied that no comment is required. However, the management of the company wanted the auditor to disclose the findings of enquiry thinking that it would provide a good impression on the stakeholders. Now, agreeing with the thought of the management, the auditor is thinking to disclose his findings of enquiry. Comment. (4 Marks)
 - (c) Mention any eight special steps involved in conducting the audit of an Educational Institution? (6 Marks)
- 6. (a) As an auditor what are the essential points to be borne in mind while examining a voucher? (4 Marks)
 - (b) "Y Ltd. utilised its securities premium to declare 45% dividend." State the provisions related to application of securities premium account and comment on the statement given. (6 Marks)

- (c) "Audit of the accounts of stores and inventories has been developed as a part of expenditure audit with reference to the duties and responsibilities entrusted to C&AG." Discuss.

 (6 Marks)
- 7. Write short notes on any **four** of the following:
 - (a) Audit Note Book.
 - (b) Self-revealing Errors.
 - (c) Companies exempted from reporting under Companies (Auditor's Report) Order, 2015.
 - (d) Verification procedure for Splitting of one share of the face value of Rs. 10 into 10 shares of Re. 1 each.
 - (e) Assertions used by auditor to consider potential misstatements about presentation and disclosure at the period end. (4 \times 4 = 16 Marks)

Test Series: March, 2016

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - II

PAPER - 6: AUDITING AND ASSURANCE

SUGGESTED ANSWERS / HINTS

- 1. (a) Matters indicating Auditor about Non-Compliance with Laws and Regulations by Management: As per SA 250 on "Consideration of Laws and Regulation in an Audit of Financial Statements", the following are examples or matters indicating to the auditor about non-compliance with laws and regulations by management-
 - (i) Investigations by regulatory organisations and government departments or payment of fines or penalties.
 - (ii) Payments for unspecified services or loans to consultants, related parties, employees or government employees.
 - (iii) Sales commissions or agent's fees that appear excessive in relation to those ordinarily paid by the entity or in its industry or to the services actually received.
 - (iv) Purchasing at prices significantly above or below market price.
 - (v) Unusual payments in cash, purchases in the form of cashiers' cheques payable to bearer or transfers to numbered bank accounts.
 - (vi) Unusual payments towards legal and retainership fees.
 - (vii) Unusual transactions with companies registered in tax havens.
 - (viii) Payments for goods or services made other than to the country from which the goods or services originated.
 - (ix) Payments without proper exchange control documentation.
 - (x) Existence of an information system which fails, whether by design or by accident, to provide an adequate audit trail or sufficient evidence.
 - (xi) Unauthorised transactions or improperly recorded transactions.
 - (xii) Adverse media comment.
 - (b) Disclosure of Accounting Policies: The view presented in the financial statements of an enterprise of its state of affairs and of the profit or loss can be significantly affected by the accounting policies followed in the preparation and presentation of the financial statements.

The accounting policies followed vary from enterprise to enterprise. Disclosure of significant accounting policies followed is necessary if the view presented is to be

properly appreciated. The disclosure of some of the accounting policies followed in the preparation and presentation of the financial statements is required by some cases.

The purpose of AS 1 is to promote better understanding of financial statements by establishing through an accounting standard and the disclosure of significant accounting policies and the manner in which such accounting policies are disclosed in the financial statements.

Such disclosure would also facilitate a more meaningful comparison between financial statements of different enterprises.

To ensure proper understanding of financial statements, it is necessary that all significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed. Such disclosure should form part of the financial statements.

It would be helpful to the reader of financial statements if they are all disclosed at one place instead of being scattered over several statements, schedules and notes which form part of financial statements.

Any change in accounting policy, which has a material effect, should be disclosed. The amount by which any item is in the financial statement is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, wholly or in part, the fact should be indicated. If a change is made in the accounting policies, which has not material effect on the financial statements for the current period, which is reasonably expected to have material effect in latter periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted.

(c) Guidance Notes: 'Guidance Notes' are primarily designed to provide guidance to members on matters which may arise in the course of their professional work and on which they may desire assistance in resolving issues which may pose difficulty. Guidance Notes are recommendatory in nature. A member should ordinarily follow recommendations in a guidance note relating to an auditing matter except where he is satisfied that in the circumstances of the case, it may not be necessary to do so.

Similarly, while discharging his attest function, a member should examine whether the recommendations in a guidance note relating to an accounting matter have been followed or not. If the same have not been followed, the member should consider whether keeping in view the circumstances of the case, a disclosure in his report is necessary.

There are, however a few guidance notes in case of which the Council has specifically stated that they should be considered as mandatory on members while discharging their attest function.

(d) Inquiry – Audit Procedure to Obtain Audit Evidence: Inquiry consists of seeking information of knowledgeable persons, both financial and non- financial, within the entity or outside the entity. Inquiry is used extensively throughout the audit in addition to other audit procedures. Inquiries may range from formal written inquiries to informal oral inquiries. Evaluating responses to inquiries is an integral part of the inquiry process.

Responses to inquiries may provide the auditor with information not previously possessed or with corroborative audit evidence. Alternatively, responses might provide information that differs significantly from other information that the auditor has obtained, for example, information regarding the possibility of management override of controls. In some cases, responses to inquiries provide a basis for the auditor to modify or perform additional audit procedures.

Although corroboration of evidence obtained through inquiry is often of particular importance, in the case of inquiries about management intent, the information available to support management's intent may be limited. In these cases, understanding management's past history of carrying out its stated intentions, management's stated reasons for choosing a particular course of action, and management's ability to pursue a specific course of action may provide relevant information to corroborate the evidence obtained through inquiry. In respect of some matters, the auditor may consider it necessary to obtain written representations from management and, where appropriate, those charged with governance to confirm responses to oral inquiries.

- 2. (i) Incorrect: As per SA 705 "Modifications to the Opinion in the Independent Auditor's Report", the auditor shall express a qualified opinion when the auditor, having obtained sufficient appropriate audit evidence, concludes that misstatements, individually or in the aggregate, are material, but not pervasive, to the financial statements.
 - (ii) Incorrect: As per Schedule III to the Companies Act, 2013, a company shall disclose by way of notes additional information regarding aggregate expenditure and income for an item which exceeds 1% of the revenue from the operation or Rs. 1,00,000 whichever is higher.
 - (iii) Correct: As per section 139(10) of the Companies Act, 2013, where at any AGM, no auditor is appointed or re-appointed, the existing auditor shall continue to be the auditor of the company.
 - (iv) Correct: The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting one resulting from error. This is because fraud may involve sophisticated and carefully organized schemes designed to conceal it.
 - (v) Incorrect: As per the objectives given in SA 570 "Going Concern", the auditor is required to obtain sufficient appropriate audit evidence about the appropriateness of

- management's use of going concern assumption in the preparation and presentation of the financial statements.
- (vi) Correct: According to section 53 of the Companies Act, 2013, a company shall not issue shares at a discount. However, exception has been given in the case of an issue of sweat equity shares.
- (vii) Incorrect: When a transaction has been omitted either wholly or partially it is known as "Error of Omission" whereas "Error of Commission" is where a transaction has been mis-recorded either wholly or partially.
- (viii) Incorrect: Section 138 of the Companies Act, 2013 deals with the provisions relating to internal audit.
- (ix) Correct: Overall objective of audit does not change in Computer Information System (CIS) environment. But the use of computer changes the processing and storage, retrieval and communication of financial information.
- (x) Correct: As per section 182 of the Companies Act, 2013, a company, other than a government company, which has been in existence for three or more financial years can contribute to any political party an amount not exceeding 7½ % of average net profit during the three immediately preceding financial years which works out to Rs. 7.5 lakh in the given case. Therefore, contribution of Rs. 5 lakh is within the limit prescribed.

3. (a) Sale of Scrap:

- Review the internal control as regards generation, storage and disposal of scrap.
- (ii) Check whether the organization is maintaining reasonable record for generation of Scrap.
- (iii) Analyze the raw material used, production and generation pattern of scrap and compare the same with figures of earlier year.
- (iv) Check the rates at which scrap has been sold and compare the rate with previous year.
- (v) Vouch sales, with invoices raised, advertisement for tender, rate contract with scrap dealers.
- (vi) Ensure that there exists a proper control procedure to identify scrap and good units and they are not mixed up and sold as scrap.
- (vii) Make an overall assessment of the value of realization from scrap as to its reasonableness.

(b) Advertisement Expenses:

- (i) Verify the bill/invoice from advertising agency to ensure that rates charged for different types of advertisement are as per contract.
- (ii) See that advertisement relates to client's business.
- (iii) Inspect the receipt issued by the agency.
- (iv) Ascertain the nature of expenditure revenue deferred and see that it has been recorded properly.
- (v) Ascertain the period for which payment is made and see that pre-paid is carried forward to balance sheet.
- (vi) Compare the statement of account with the ledger account.
- (vii) See that all outstanding advertisement bills have been provided for.

(c) Assets Acquired on Lease:

- (i) Examine the terms and conditions of the lease deed.
- (ii) If a part of the leasehold property has been sublet, examine the tenant's agreement.
- (iii) Verify relevant document to check the cost of property.
 - (1) In case of acquisition of an asset is on operating lease, lease payment should be recognized as an expense in the Statement of Profit and Loss on a straight line basis over the lease term;
 - (2) In case of acquisition of an asset is on finance lease, ensure all the substantial risks and rewards to ownership are transferred, considering the indication as prescribed in AS-19, the lessee should recognize the lease as an asset and as a liability. Such recognition should be at an amount equal to the fair value of the leased assets at the inception of the lease. Ensure contingent rents are recognized as expense in the statement of profit & loss for the period in case of Finance lease.
- (iv) Ensure assets acquired under finance lease are segregated from the assets owned.
- (v) Ensure that the assets under lease have been properly disclosed as per requirement of Schedule III to the Companies Act, 2013.

(d) Investment in Shares and Debentures of Subsidiary:

(i) The auditor should obtain a complete schedule of all such investments held, showing particulars as regards the name of the subsidiary company, class of shares or debenture, date of purchase, number of units and denoting numbers, book value, dividend received etc.

- (ii) All the particulars entered in the schedule should be verified with the relevant account in the General Ledger.
- (iii) The auditor should, at the same time, examine all the investments by inspection of the securities, share scrips or certificates, debenture bonds, etc. If any of the securities are held by bankers, he should verify them with their certificate which should disclose the charge, if they are subject to any such charge.
- (iv) The provisions contained in Part I of Schedule III to the Companies Act, 2013 requires that the shares held in a subsidiary should be shown separately.
- (v) The shares or debentures of a subsidiary are valued at cost.
- (vi) If the subsidiary has suffered a loss, then a provision for the proportionate part of the loss should be made in the accounts of the holding company.
- **4. (a) Identification of Significant Related Party Transaction Outside Business:** As per SA 550 on "Related Parties", for identified significant related party transactions outside the entity's normal course of business, the auditor shall-
 - (i) Inspect the underlying contracts or agreements, if any, and evaluate whether:
 - (1) The business rationale (or lack thereof) of the transactions suggests that they may have been entered into to engage in fraudulent financial reporting or to conceal misappropriation of assets;
 - (2) The terms of the transactions are consistent with management's explanations; and
 - (3) The transactions have been appropriately accounted for and disclosed in accordance with the applicable financial reporting framework; and
 - (ii) Obtain audit evidence that the transactions have been appropriately authorized and approved.
 - (b) Factors Influencing Degree of Estimation Uncertainty: According to SA 540 "Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures", the degree of estimation uncertainty associated with an accounting estimate may be influenced by factors such as-
 - (i) The extent to which the accounting estimate depends on judgment.
 - (ii) The sensitivity of the accounting estimate to changes in assumptions.
 - (iii) The existence of recognised measurement techniques that may mitigate the estimation uncertainty (though the subjectivity of the assumptions used as inputs may nevertheless give rise to estimation uncertainty).
 - (iv) The length of the forecast period, and the relevance of data drawn from past events to forecast future events.

- (v) The availability of reliable data from external sources.
- (vi) The extent to which the accounting estimate is based on observable or unobservable inputs.
- (c) Factors Influencing Auditor's Decision on Whether to Use an Auditor's Expert when Management has used a Management's Expert: SA 620 "Using the Work of an Auditor's Expert" states that when management has used a management's expert in preparing the financial statements, the auditor's decision on whether to use an auditor's expert may be influenced by such factors as-
 - (i) The nature, scope and objectives of the management's expert's work.
 - (ii) Whether the management's expert is employed by the entity, or is a party engaged by it to provide relevant services.
 - (iii) The extent to which management can exercise control or influence over the work of the management's expert.
 - (iv) The management's expert's competence and capabilities.
 - (v) Whether the management's expert is subject to technical performance standards or other professional or industry requirements.
 - (vi) Any controls within the entity over the management's expert's work.
- 5. (a) Limitations of Internal Control system: Internal control system can provide only reasonable but not absolute assurance that its objective relating to prevention and detection of errors/frauds, safeguarding of assets etc., are achieved. This is because it suffers from some inherent limitations, such as:-
 - (i) Management's consideration that cost of an internal control does not exceeds the expected benefits.
 - (ii) Most controls do not tend to be directed at unusual transactions.
 - (iii) The potential of human error due to carelessness, misjudgment and misunderstanding of instructions.
 - (iv) The possibility that control may be circumvented through collusion with employees or outsiders.
 - (v) The possibility that a person responsible for exercising control may abuse that authority.
 - (vi) Compliance with procedures may deteriorate because the procedures becoming inadequate due to change in condition.
 - (vii) Manipulation by management with respect to transactions or estimates and judgements required in the preparation of financial statements.
 - (viii) Inherent limitations of Audit.

- (b) Comment on Matters Contained under Section 143(1) of the Companies Act, 2013: Section 143(1) of the Companies Act, 2013 deals with duties of an auditor requiring him to make an enquiry in respect of specified matters. The matters in respect of which the enquiry has to be made by the auditor are relating to loans and advances, transactions represented merely by book entries, investments sold at less than cost price, loans and advances shown as deposits, etc. Since the law requires the auditor to make an enquiry, the Institute opined that the auditor is not required to report on the matters specified in sub-section (1) unless he has any special comments to make on any of the items referred to therein. If the auditor is satisfied as a result of the enquiries, he has no further duty to report that he is so satisfied. Therefore, the auditor of X Ltd. is correct in non-reporting on the matters specified in section 143(1) of the Companies Act, 2013.
- (c) Audit of an Educational Institution: The special steps involved in the audit of an educational institution are the following-
 - (i) Examine the Trust Deed, or Regulations in the case of school or college and note all the provisions affecting accounts. In the case of a university, refer to the Act of Legislature and the Regulations framed thereunder.
 - (ii) Read through the minutes of the meetings of the Managing Committee or Governing Body, noting resolutions affecting accounts to see that these have been duly complied with, specially the decisions as regards the operation of bank accounts and sanctioning of expenditure.
 - (iii) Check names entered in the Students' Fee Register for each month or term, with the respective class registers, showing names of students on rolls and test amount of fees charged; and verify that there operates a system of internal check which ensures that demands against the students are properly raised.
 - (iv) Check fees received by comparing counterfoils of receipts granted with entries in the cash book and tracing the collections in the Fee Register to confirm that the revenue from this source has been duly accounted for.
 - (v) Total up the various columns of the Fees Register for each month or term to ascertain that fees paid in advance have been carried forward and the arrears that are irrecoverable have been written off under the sanction of an appropriate authority.
 - (vi) Check admission fees with admission slips signed by the head of the institution and confirm that the amount had been credited to a Capital Fund, unless the Managing Committee has taken a decision to the contrary.
 - (vii) See that free studentship and concessions have been granted by a person authorised to do so, having regard to the prescribed Rules.
 - (viii) Confirm that fines for late payment or absence, etc., have either been collected or remitted under proper authority.

- (ix) Confirm that hostel dues were recovered before students' accounts were closed and their deposits of caution money refunded.
- (x) Verify rental income from landed property with the rent rolls, etc.
- (xi) Vouch income from endowments and legacies, as well as interest and dividends from investment; also inspect the securities in respect of investments held.
- (xii) Verify any Government or local authority grant with the relevant papers of grant. If any expense has been disallowed for purposes of grant, ascertain the reasons and compliance thereof.
- (xiii) Report any old heavy arrears on account of fees, dormitory rents, etc, to the Managing Committee.
- (xiv) Confirm that caution money and other deposits paid by students on admission have been shown as liability in the balance sheet and not transferred to revenue.
- (xv) See that the investments representing endowment funds for prizes are kept separate and any income in excess of the prizes has been accumulated and invested along with the corpus.
- (xvi) Verify that the Provident Fund money of the staff has been invested in appropriate securities.
- (xvii) Vouch donations, if any, with the list published with the annual report. If some donations were meant for any specific purpose, see that the money was utilised for the purpose.
- (xviii) Vouch all capital expenditure in the usual way and verify the same with the sanction for the Committee as contained in the minute book.
- (xix) Vouch in the usual manner all establishment expenses and enquire into any unduly heavy expenditure under any head.
- (xx) See that increase in the salaries of the staff have been sanctioned and minuted by the Committee.
- (xxi) Ascertain that the system ordering inspection on receipt and issue of provisions, foodstuffs, clothing and other equipment is efficient and all bills are duly authorised and passed before payment.
- (xxii) Verify the inventories of furniture, stationery, clothing, provision and all equipment, etc. These should be checked by reference to Inventory Register and values applied to various items should be test checked.
- (xxiii)Confirm that the refund of taxes deducted from the income from investment (interest on securities, etc.) has been claimed and recovered since the institutions are generally exempted from the payment of income-tax.

- (xxiv)Verify the annual statements of accounts and while doing so see that separate statements of account have been prepared as regards Poor Boys Fund, Games Fund, Hostel and Provident Fund of Staff, etc.
- **6. (a) Examining a Voucher**: The essential points to be borne in mind while examining a voucher are-
 - (i) that the date of the voucher falls within the accounting period;
 - (ii) that the voucher is made out in the client's name;
 - (iii) that the voucher is duly authorised;
 - (iv) that the voucher comprised all the relevant documents which could be expected to have been received or brought into existence on the transactions having been entered into, i.e., the voucher is complete in all respects; and
 - (v) that the account in which the amount of the voucher is adjusted is the one that would clearly disclose the character of the receipts or payments posted thereto on its inclusion in the final accounts.

After the examination is over, each voucher should be either impressed with a rubber stamp or initialed so that it may not be presented again in support of another entry.

- (b) Utilisation of Securities Premium: Section 52 of the Companies Act, 2013 deals with creation of Securities Premium Account for premium received on issues of shares and its application thereon. Section 52(2) lays down that the securities premium account may be applied by the company-
 - in paying up unissued shares of the company to be issued to members of the company as fully paid bonus shares;
 - (ii) in writing off the preliminary expenses of the company;
 - (iii) in writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company:
 - (iv) in providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company; or
 - (v) for the purchase of its own shares or other securities under section 68.

Thus, it is clear from the above that securities premium can be utilised only for specific purposes. Further, section 123 of the Companies Act, 2013 also specifies the sources from which dividends can be paid and requires the same to be only paid out of current/past profits or any other free reserve.

Hence, declaration of dividends out of securities premium is not proper and, consequently, the auditor shall have to qualify the audit report.

(c) Audit of Stores and Inventories: Audit of the accounts of stores and inventories has been developed as a part of expenditure audit with reference to the duties and responsibilities entrusted to C&AG. Audit is conducted to ascertain whether the Regulations governing purchase, receipt and issue, custody, sale and inventory taking of stores are well devised and properly carried out. The aim is also to bring to the notice of the government any deficiencies in quantities of stores held or any defects in the system of control.

The audit of purchase of stores is conducted in the same manner as audit of expenditure, namely, that these are properly sanctioned, made economical and in accordance with the Rules for purchase laid down by the competent authority. The auditor has to ensure that the prices paid are reasonable and are in agreement with those shown in the contract for the supply of stores, and that the certificates of quality and quantity are furnished by the inspecting and receiving units. Cases of uneconomical purchase of stores and losses attributable to defective or inferior quality of stores are specifically brought by the audit.

Accounts of receipts, issues and balances are checked regarding accuracy, correctness and reasonableness of balances in inventories with particular reference to the specified norms for level of consumption of inventory holding. Any excess or idle inventory is specifically mentioned in the report and periodical verification of inventory is also conducted to ensure their existence. When priced accounts are maintained, the auditor should see that the prices charged are reasonable and have been reviewed from time to time. The valuation of the inventories is seen carefully so that the value accounts tally with the physical accounts and that adjustment of profits or losses due to revaluation, inventory taking or other causes is carried out.

7. (a) Audit Note Book: An audit note book is usually a bound book in which a large variety of matters observed during the course of audit are recorded. Audit note books form part of audit working papers and for each year a fresh audit note book is maintained. In case an auditor classifies his working paper into permanent and current, then audit note book shall form part of the current file. It is in any case a part of the permanent record of the auditor available for reference later on, if required.

The audit note book also provides a valuable help to the auditor in picking up the links of work when the concerned assistant is away or the work is stopped temporarily. It is also used for recording the various queries raised in the course of the work and their state of disposal. In respect of disposed queries, explanation obtained and evidence seen would be recorded in the said book, while queries remaining undisposed off would be noted for follow up.

(b) Self-Revealing Errors: These are such errors the existence of which becomes apparent in the process of compilation of accounts.

A few illustrations of such errors are given hereunder, showing how they become apparent-

(i)	Omission to post a part of a journal entry to the ledger.	Trial balance is thrown out of agreement.
(ii)	Wrong totaling of the Purchase Register.	Control Account (e.g., the Sundry Creditors Account) balances and the aggregate of the balances in the personal ledger will disagree.
(iii)	A failure to record in the cash book amounts paid into or withdrawn from the bank.	Bank reconciliation statement will show up error.
(iv)	A mistake in recording amount received from X in the account of Y.	Statements of account of parties will reveal mistake.

From the above, it is clear that certain apparent errors balance almost automatically by double entry accounting procedure and by following established practices that lie within the accounting system but not being generally considered to be a part of it, like bank reconciliation or sending monthly statements of account for confirmation.

- (c) Companies Exempted from Reporting under CARO, 2015: The Companies (Auditor's Report) Order, 2015 applies to every company including a foreign company. However, the Order specifically exempts the following class of companies-
 - (i) a banking company as defined in clause (c) of section 5 of the Banking Regulation Act, 1949;
 - (ii) an insurance company as defined under the Insurance Act. 1938:
 - (iii) a company licensed to operate under section 8 of the Companies Act;
 - (iv) a One Person Company as defined under clause (62) of section 2 of the Companies Act;
 - (v) a small company as defined under clause (85) of section 2 of the Companies Act; and
 - (vi) a private limited company with a paid up capital and reserves not more than Rs. 50 lakh and which does not have loan outstanding exceeding Rs. 25 lakh from any bank or financial institution and does not have a turnover exceeding Rs. 5 crore at any point of time during the financial year.
- (d) Verification procedure for Splitting of one share of the face value of Rs. 10 into 10 shares of Re. 1 each:
 - (i) Confirm that alteration was authorised by articles.
 - (ii) Verify the minutes of the Board meeting and ordinary resolution passed in the

- general meeting in which the approval of members is obtained.
- (iii) Verify also with reference to requisite Form required to be filed with the ROC.
- (iv) Verify that alteration had been effected in copies of Memorandum Articles, etc.
- (v) Verify that proper accounting entries have been passed. Register of members may also be checked to see that the necessary alteration have been effected therein.
- (e) Assertions used by Auditor to Consider Potential Misstatements about Presentation and Disclosure at the Period End: According to SA 315 "Identifying and Assessing the Risk of Material Misstatement through understanding the Entity and its Environment", the assertions used by the auditor to consider the different types of potential misstatements that may occur about presentation and disclosure at the period end are-
 - (i) Occurrence and rights and obligations disclosed events, transactions, and other matters have occurred and pertain to the entity.
 - (ii) Completeness all disclosures that should have been included in the financial statements have been included.
 - (iii) Classification and understandability financial information is appropriately presented and described, and disclosures are clearly expressed.
 - (iv) Accuracy and valuation financial and other information are disclosed fairly and at appropriate amounts.

MOCK TEST PAPER – 2

INTERMEDIATE (IPC): GROUP - II

PAPER - 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT SECTION – A: INFORMATION TECHNOLOGY

Question No. 1 is compulsory.

Attempt any **five** questions from the rest.

Time Allowed – 1½ Hours

Maximum Marks - 50

- Answer all the following questions in brief.
 - Entity in Data Flow Diagram (DFD)
 - (ii) Business Process Automation (BPA)
 - (iii) Primary Key
 - (iv) Cache Memory
 - (v) Communication Satellites
 - (vi) Secure Shell (SSH)
 - (vii) Operational-Level Systems
 - (viii) XBRL

2.

3.

- (ix) Plastic Cards
- (x) Management Support Software $(1 \times 10 = 10 \text{ Marks})$
 - (4 Marks)
- (a) Differentiate between Ring Network and Bus Network.
- (4 Marks)
- (b) Discuss the risks involved in e-Commerce. (a) How are "Information" and "Knowledge" linked to each other?
- (4 Marks)
- (b) Discuss "Executive Information Systems (EIS)" and its components.
- (4 Marks)
- 4. (a) Discuss some of the major benefits of Grid Computing.
- (4 Marks)
- (4 Marks)
- (b) Differentiate between Hardware Virtualization and Storage Virtualization. (a) Discuss in brief, the benefits and challenges of implementing Business Process 5.
 - Automation (BPA).

(4 Marks)

(b) Discuss different types of relationships in Entity-Relationship (E-R) Diagram.

(4 Marks)

(a) Discuss Cloud Computing architectural considerations, in brief. 6.

(4 Marks)

(b) Discuss Hierarchical Database Model, in brief.

(4 Marks)

- 7. Write short notes on any **four** of the following.
 - (a) PDCA Cycle of TQM
 - (b) System investigation phase under SDLC
 - (c) n-tier Architecture
 - (d) Planning Languages in DSS
 - (e) Responsibility of Certificate Authority (CA)

 $(4 \times 2 = 8 Marks)$

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - II

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT SECTION – B: STRATEGIC MANAGEMENT

Question No. 1 is compulsory.

Attempt any **five** questions from the rest.

Time Allowed – 1½ Hours

Maximum Marks - 50

- 1. (a) Premise control is a tool for systematic and continuous monitoring of the environment. Discuss. (3 Marks)
 - (b) Is it possible to simultaneously adopt both low-cost and differentiation strategies? Explain with help of an example. (3 Marks)
 - (c) Do non-profit making organizations require strategies?

(3 Marks)

- (d) The starting point in strategic management model is developing a strategic vision and mission. Explain. (3 Marks)
- (e) BCG growth share matrix classifies businesses on two dimensional scales. Explain.

(3 Marks)

- 2. (a) State with reasons which of the following statements is correct/incorrect:
 - (i) A corporate culture is always identical in all the business organisations.
 - (ii) Divesting a major product line or market in an organization can be termed as retrenchment strategy. (2 \times 2 = 4 Marks)
 - (b) Explain the meaning of the following concepts:
 - (i) Synchro Marketing
 - (ii) Strategic change
 - (iii) Product development

 $(3 \times 1 = 3 Marks)$

- 3. Write short notes on the following:
 - (a) Global strategy

(2 Marks)

(b) Strategic Business Unit (SBU)

(2 Marks)

(c) Components of marketing mix

(3 Marks)

4. Why is it necessary to do a SWOT analysis before selecting a particular strategy for a business organization? (7 Marks)

- 5. What do you understand by 'Strategy'? Explain the four generic strategies as discussed by Glueck and Jauch. (7 Marks)
- 6. Distinguish between DMAIC and DMADV Methodologies of Six Sigma. (7 Marks)
- 7. Explain how technological factors present an opportunity as well as threat to a particular business organization. (7 Marks)

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - II

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT SECTION – A: INFORMATION TECHNOLOGY

SUGGESTED ANSWERS/HINTS

- 1. (i) Entity in Data Flow Diagram (DFD): An entity is the source or destination of data. The source in a DFD represents these entities that are outside the context of the system. Entities either provide data to the system (referred to as a source) or receive data from it (referred to as a sink). Entities are often represented as rectangles (a diagonal line across the right-hand corner means that this entity is represented somewhere else in the DFD). Entities are also referred to as agents, terminators, or source/sink.
 - (ii) Business Process Automation (BPA): It is a strategy that is used to optimize and streamline the essential business processes, using the latest technology to automate the functions involved in carrying them out. BPA allows the organizations to extract maximum benefit by using the available resources to their best advantage, while keeping the operational cost as low as possible. Doing so helps the enterprise to generate greater profits and achieve a level of stability that would be hard to realize without the use of automation.
 - (iii) **Primary Key:** A key that can be used to uniquely identify a row in a table is called a Primary Key. Keys are commonly used to join or combine data from two or more tables. For example, an *Employee* table may contain a column named *Location* which contains a value that matches the key of a *Location* table. Keys are also critical in the creation of indexes, which facilitate fast retrieval of data from large tables.
 - (iv) Cache Memory: Cache memory is used in order to bridge the huge speed difference between Registers and Primary Memory. Cache (pronounced as cash) is a smaller, faster memory, which stores copies of the data from the most frequently used main memory locations so that Processor/Registers can access it more rapidly than main memory. It is the property of locality of reference, which allows improving substantially the effective memory access time in a computer system.
 - (v) Communication Satellites: Communication satellites use the atmosphere as the medium through which signals are transmitted. A satellite is some solar-powered electronic device that receives, amplifies, and retransmits signals; the satellite acts as a relay station between satellite transmissions stations on the ground (earth stations). They are used extensively for high-volume as well as long-distance

communication of both data and voice. It is cost-effective method for moving large quantities of data over long distances. However, satellites are very expensive to develop and place in orbit and have an age limit of 7-10 years. Signals weaken over long distances; weather conditions and solar activity can also cause noise interference. Anyone can listen in on satellite signals, so sensitive data must be sent in a secret, or encrypted, form.

- (vi) Secure Shell (SSH): Secure Shell is a program to log into another computer over a network, to execute commands in a remote machine, and to move files from one machine to another. It provides strong authentication and secure communications over insecure channels. SSH protects a network from attacks such as IP spoofing, IP source routing, and Domain Name System (DNS) spoofs. An attacker cannot play back the traffic or hijack the connection when encryption is enabled. During ssh login, the entire login session, including transmission of password, is encrypted; therefore it is almost impossible for an outsider to collect passwords.
- (vii) Operational-Level Systems: These systems support operational managers by tracking down elementary activities that can include tracking customer orders, invoice tracking, etc. Operational-level systems ensure that business procedures are followed.
- (viii) XBRL: XBRL (eXtensible Business Reporting Language XBRL) is an international standards-based business reporting language developed by accountants for financial reporting.
- (ix) Plastic Cards: Plastic Cards are used to store information required in an authentication process. These cards that are used to identify a user need to go through procedural controls like application for a card, preparation of the card, issue of the card, use of the card and return of the card or card termination phases.
- (x) Management Support Software: These are applications catering to decision-making needs of the management. They may be further classified based on the level of management using them. For example, Management Information System are generally used by middle level manager's for their decision making needs, on the other hand Decision Support Systems are used by top management for their information requirements.
- 2. (a) Ring Network: A ring network is much like a bus network, except the length of wire, cable, or optical fibre connects to form a loop. Local computer processors are tied together sequentially in a ring with each device being connected to two other devices. A ring network has a decentralized approach wherein when one computer needs data from another computer, the data is passed along the ring. It is considered more reliable and less costly than star networks because if one computer fails, the other computers in the ring can continue to process their own work and communicate with each other. Ring networks are relatively expensive and difficult to install. Failure of one computer on the network can affect the whole

network. Adding or removing computers can disrupt the network.

Bus Network: In a bus network, a single length of wire, cable, or optical fibre connects a number of computers. All communications travel along this cable, which is called a bus. Bus networks have a decentralized approach. There is no host computer or file server, which makes bus network reliable as well as easy to use and understand. If one of the microcomputers fails, it will not affect the entire network. It is less expensive and is easy to extend. A repeater can also be used to extend a bus configuration. However, heavy network traffic can slow a bus considerably since any computer can transmit at any time. The bus configuration can be difficult to troubleshoot. A cable break or malfunctioning computer can be difficult to find and can cause the whole network to stop functioning.

- **(b) Risks involved in e-Commerce:** The risks associated with e-Commerce are multifaceted and are given below:
 - ◆ **Problem of anonymity:** There is need to identify and authenticate users in the virtual global market where anyone can sell to or buy from anyone, anything from anywhere.
 - Repudiation of contract: There is possibility that the electronic transaction in the form of contract, sale order or purchase by the trading partner or customer may be denied.
 - ♦ Lack of authenticity of transactions: The electronic documents that are produced in the course of an e-Commerce transaction may not be authentic and reliable.
 - ◆ Data Loss or theft or duplication: The data transmitted over the Internet may be lost, duplicated, tampered with or replayed.
 - Attack from hackers: Web servers used for e-Commerce may be vulnerable to hackers.
 - ◆ Denial of Service: Service to customers may be denied due to non-availability of system as it may be affected by viruses, e-mail bombs and floods.
 - Non-recognition of electronic transactions: e-Commerce transactions, as electronic records and digital signatures may not be recognized as evidence in courts of law.
 - ◆ Lack of audit trails: Audit trails in e-Commerce system may be lacking and the logs may be incomplete, too voluminous or easily tampered with.
 - ◆ Problem of piracy: Intellectual property may not be adequately protected when such property is transacted through e-Commerce.
- 3. (a) Information is an important resource to an organization and touches all human action. It represents an organization's tangible and intangible resources and all transactions relating to those resources. Information influences the way an

organization operates. The right information, if it is delivered to the right person, in the right fashion, and at the right time, can improve and ensure organizational effectiveness and efficiency. The information system is the mechanism used to manage and control the information resource.

Knowledge is power. Knowledge is derived from information. Knowledge represents information with a potential use retained for reference in future decision situations. Information is necessarily subjective. Information must always be set in the context of its recipient. The same data may be interpreted differently by different people, depending on their existing knowledge. For example, Rs. 3,450/- is data, my bank account has a balance of Rs. 3,450/- is information and if my balance falls below Rs. 2,500/-, I shall have to pay minimum balance charge, is knowledge.

(b) An Executive Information System (EIS) is the nature of Information System used by executives to access and administer the data they entail to make informed business decisions. Executive Information System, in itself is not an instrument, but rather, an infrastructure within a company. In the hierarchical structure of information systems, the EIS is at the pinnacle and is designed to renovate all significant data (from project to process to budget) into aggregated information that makes sense and brings value to the by and large business strategy.

As defined, EIS is not a piece of hardware or software, but an infrastructure that supplies to a firm's executives the up-to-the-minute operational data, gathered and sifted from various databases. The typical information mix presented to the executive may include financial information, work in process, inventory figures, sales figures, market trends, industry statistics, and market price of the firm's shares. EIS is able to link data from various sources both internal and external to provide the amount and kind of information executives find useful. These systems are designed for top management; easy to use; present Information in condensed view; access organization's databases and data external to the organization.

Alternative names of EIS are Enterprise Information Systems or Executive Support Systems (ESS). The components of an EIS are as follows:

Components of an EIS

Component	Description	
Hardware	Includes Input data-entry devices, CPU, Data Storage files and Output Devices.	
Software	Includes Text base software, Database, and Graphic types such as time series charts, scatter diagrams, maps, motion graphics, sequence charts, and comparison-oriented graphs (i.e., bar charts) Model base.	
User Interface	Includes hardware (physical) and software (logical) components by which people (users) interact with a	

	machine. Several types of interfaces can be available to the EIS structure, such as scheduled reports, questions/answers, menu driven, command language, natural language, and input/output.
Telecommunication	Involves transmitting data from one place to another in a reliable networked system.

4. (a) Benefits of Grid Computing are as follows:

- Making use of Underutilized Resources: Grid computing provides a framework for exploiting the underutilized computing resources and thus has the possibility of substantially increasing the efficiency of resource usage. Grid computing can be used to aggregate this unused storage into a much larger virtual data store, possibly configured to achieve improved performance and reliability over that of any single machine.
- Resource Balancing: For applications that are grid-enabled, the grid can offer
 a resource balancing effect by scheduling grid jobs on machines with low
 utilization. This feature of grid computing handles occasional peak loads of
 activity in parts of a larger organization.
- Parallel CPU Capacity: The potential for usage of massive parallel CPU capacity is one of the most common visions and attractive features of a grid. A CPU-intensive grid application can be thought of as many smaller sub-jobs, each executing on a different machine in the grid. To the extent that these sub-jobs do not need to communicate with each other, the more scalable the application becomes. A perfectly scalable application will, for example, finish in one tenth of the time if it uses ten times the number of processors.
- Virtual resources and virtual organizations for collaboration: Grid computing provides an environment for collaboration among a wider audience. The users of the grid can be organized dynamically into a number of virtual organizations, each with different policy requirements. These virtual organizations can share their resources such as data, specialized devices, software, services, licenses, and so on, collectively as a larger grid. These resources are virtualized to give them a more uniform interoperability among heterogeneous grid participants. The participants and users of the grid can be members of several real and virtual organizations. The grid can help in enforcing security rules among them and implement policies, which can resolve priorities for both resources and users.
- Access to additional resources: In addition to CPU and storage resources, a
 grid can provide access to other resources as well. For example, if a user
 needs to increase their total bandwidth to the Internet to implement a data
 mining search engine, the work can be split among grid machines that have

independent connections to the Internet. In this way, total searching capability is multiplied, since each machine has a separate connection to the Internet.

- Reliability: High-end conventional computing systems use expensive hardware to increase reliability. The machines also use duplicate processors in such a way that when they fail, one can be replaced without turning the other off. Power supplies and cooling systems are duplicated. The systems are operated on special power sources that can start generators if utility power is interrupted. All of this builds a reliable system, but at a great cost, due to the duplication of expensive components.
- Management: The goal is to virtualize the resources on the grid and more
 uniformly handle heterogeneous systems create new opportunities to better
 manage a larger, more distributed IT infrastructure. The grid offers
 management of priorities among different projects. When maintenance is
 required, grid work can be rerouted to other machines without crippling the
 projects involved.
- (b) Hardware Virtualization: Hardware Virtualization or Platform Virtualization refers to the creation of a virtual machine that acts like a real computer with an operating system. Software executed on these virtual machines is separated from the underlying hardware resources. For example, a computer that is running Microsoft Windows may host a virtual machine that looks like a computer with the Linux operating system; based software that can be run on the virtual machine. The basic idea of Hardware virtualization is to consolidate many small physical servers into one large physical server so that the processor can be used more effectively. The software that creates a virtual machine on the host hardware is called a hypervisor or Virtual Machine Manager. The hypervisor controls the processor, memory and other components by allowing several different operating systems to run on the same machine without the need for a source code. The operating system running on the machine will appear to have its own processor, memory and other components.

Storage Virtualization: Storage virtualization is the apparent pooling of data from multiple storage devices, even different types of storage devices, into what appears to be a single device that is managed from a central console. Storage virtualization helps the storage administrator perform the tasks of backup, archiving, and recovery more easily - and in less time - by disguising the actual complexity of a Storage Area Network (SAN). Administrators can implement virtualization with software applications or by using hardware and software hybrid appliances. The servers connected to the storage system aren't aware of where the data really is. Storage virtualization is sometimes described as "abstracting the logical storage from the physical storage.

- **5. (a)** Benefits of Business Process Automation (BPA) are as follows:
 - Saving on costs: Automation leads to saving in time and labor costs.

- ♦ Staying ahead in competition: Today, in order to survive, businesses need to adopt automation.
- Fast service to customers: This was not the initial reason for adoption of BPA but gradually business managers realized that automation could help them to serve their customers faster and better.

Challenges in implementing BPA are as follows:

How can any organization adjust with the increasing demands in an environment where, at the same time:

- ◆ The number of interfaces with the customers is growing (e.g. phone, fax, email, sms, PDA, etc.)
- The product, service and price options have increased the complexity of the business
- Most organizations have a whole suite of 'build and buy' systems and applications, often each with its own data format
- Budgets are being cut.
- (b) Various types of Relationships in an E-R Diagram are as follows:
 - (i) One-to-One relationship (1:1) A One-to-One relationship is shown on the diagram by a line connecting the two entities.

Example: A Teacher may be in-charge of a class. Each class must be incharge of by one teacher.



A student has one and only one Report card. Each report card is owned by one and only one student.



(ii) One-to-Many relationship (1:N) – A One-to-Many relationship is shown on the diagram by a line connecting the two entities with a "crow's foot" symbol denoting the 'many' end of the relationship.

Example: A student may borrow some books from the library. A book in the library may be borrowed by at most a student.



A class is formed by a group of atleast one student. Each student is allocated to one and only one class.



Further, a teacher teaches many courses.

(iii) Many-to-One relationship (M:1) – It is the reverse of One-to-Many relationship.

Example: As in two or more parent records to a single child record. For example,



When three administrators in a small town report to one minister.

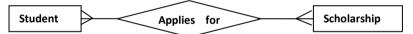


(iv) Many-to-Many relationships (M:N) – A Many-to-Many relationship is shown on the diagram by a line connecting the two entities with 'crow's foot' symbols at both ends.

Example: A student enrolls in atleast one course. A course is enrolled by at least one student.



A student may apply for more than one scholarship. Each scholarship may receive some applications from student, or none.



6. (a) Cloud Computing Architecture refers to the components and subcomponents that typically consist of a front end platform (fat client, thin client, mobile device), back end platforms (servers, storage), a cloud based delivery, and a network (Internet, Intranet, Intercloud). Combined, these components make up cloud computing architecture. Cloud architecture typically involves multiple cloud components communicating with each other over a tight or loose coupling of cloud resources, services, middleware, and software components.

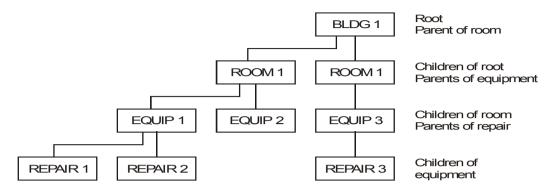
The protection in cloud computing depends on having the right architecture for the right application. Organizations must understand the individual requirements of their applications, and if already using a cloud platform, understand the corresponding cloud architecture. A cloud computing architecture consists of two parts - **Front End** and a **Back End** that connect to each other through a network, usually the Internet. The front end is the side the computer user, or client, sees. The back end is the "cloud" section of the system.

- Front End: The Front End of the cloud computing system comprises of the client's devices (or it may be a computer network) and some applications are needed for accessing the cloud computing system. All the cloud computing systems do not give the same interface to users. For example Web services like electronic mail programs use some existing web browsers such as Firefox, Microsoft's internet explorer or Apple's Safari. Other types of systems have some unique applications which provide network access to its clients.
- Back End: The Back End refers to some physical peripherals. In cloud computing, the back end is cloud itself which may encompass various computer machines, data storage systems and servers. Groups of these clouds make a whole cloud computing system. Theoretically, a cloud computing system can include practically any type of web application program such as video games to applications for data processing, software development and entertainment residing on its individual dedicated server for services. There are some set of rules, generally called as Protocols which are followed by this server and it uses a special type of software known termed as Middleware that allow computers that are connected on networks to communicate with each other. If any cloud computing service provider has many customers, then there's likely to be very high demand for huge storage space. Many companies that are service providers need hundreds of storage devices.
- **(b) Hierarchical Database Model:** In a Hierarchical Database Model, records are logically organized into a hierarchy of relationships. A hierarchically structured database is arranged logically in an inverted tree pattern.

All records in hierarchy are called nodes. Each node is related to the others in a parent-child relationship. Each parent record may have one or more child records, but no child record may have more than one parent record. Thus, the hierarchical data structure implements one-to-one and one-to-many relationships.

The top parent record in the hierarchy is called the **root record**. In this example, building records are the root to any sequence of room, equipment, and repair records. Entrance to this hierarchy by the database management system is made through the root record i.e., building. Records that "own" other records are called **parent records**. For example, room records are the parents of equipment records. Room records are also children of the parent record, building. There can be many levels of node records in a database.

For example, an equipment database (shown below) may have building records, room records, equipment records, and repair records. The database structure reflects the fact that repairs are made to equipment located in rooms that are part of buildings.



Hierarchical Database Model

- 7. (a) PDCA Cycle of TQM: Total Quality Management (TQM) processes are divided into four sequential categories: Plan, Do, Check, and Act (the PDCA cycle) which is as follows:
 - Plan: In the planning phase, people define the problem to be addressed, collect relevant data, and ascertain the problem's root cause;
 - **Do:** In the doing phase, people develop and implement a solution, and decide upon a measurement to gauge its effectiveness;
 - **Check:** In the checking phase, people confirm the results through before-and-after data comparison;
 - Act: In the acting phase, people document their results; inform others about process changes, and make recommendations for the problem to be addressed in the next PDCA cycle.
 - (b) System Investigation phase under SDLC (System Development Life Cycle): This is the first phase of System Development Life Cycle (SDLC) which examines that 'What is the problem and is it worth solving'? The Feasibility study is done under the following dimensions:
 - ◆ **Technical feasibility:** Does the technology exist to implement the proposed system or is it a practical proposition?
 - ♦ **Economic feasibility:** Is proposed system cost-effective: if benefits do not outweigh costs, it's not worth going ahead?
 - Legal feasibility: Is there any conflict between the proposed system and legal requirements?
 - ◆ Operational feasibility: Are the current work practices and procedures adequate to support the new system?
 - Schedule feasibility: How long will the system take to develop, or can it be done in a desired time-frame?

- (c) n-Tier Architecture: n-Tier Architecture is client-server architecture in which presentation, application processing, and data management functions are logically separated. By segregating an application into tiers, developers acquire the option of modifying or adding a specific layer, instead of reworking the entire application. For example, an application that uses middleware to service data requests between a user and a database employs multi-tier architecture. The most widespread use of multi-tier architecture is the Three-tier architecture.
- (d) Planning Languages in DSS: Two types of planning languages that are commonly used in DSS are: General-purpose planning languages and Special-purpose planning languages. These are discussed below:
 - General-purpose planning languages allow users to perform many routine tasks, for example; retrieving various data from a database or performing statistical analyses. The languages in most electronic spreadsheets are good examples of general-purpose planning languages. These languages enable user to tackle abroad range of budgeting, forecasting, and other worksheetoriented problems.
 - Special-purpose planning languages are more limited in what they can do, but they usually do certain jobs better than the general-purpose planning languages. Some statistical languages, such as SAS and SPSS, are examples of special purpose planning languages.
- (e) The primary responsibilities of a Certificate Authority are as follows:
 - Positively identifying entities requesting certificates;
 - Issuing, removing, and archiving certificates;
 - Protecting the Certificate Authority server;
 - Maintaining a namespace of unique names for certificate owners;
 - Serving signed certificates to those needing to authenticate entities; and
 - Logging Activity

MOCK TEST PAPER - 2

INTERMEDIATE (IPC): GROUP - II

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT SECTION – B: STRATEGIC MANAGEMENT SUGGESTED ANSWERS/HINTS

- 1. (a) A strategy is formed on the basis of certain assumptions or premises about the complex and turbulent organizational environment. Over a period of time these premises may not remain valid. Premise control is a tool for systematic and continuous monitoring of the environment to verify the validity and accuracy of the premises on which the strategy has been built. It primarily involves monitoring two types of factors:
 - (i) Environmental factors such as economic (inflation, liquidity, interest rates), technology, social and regulatory.
 - (ii) Industry factors such as competitors, suppliers, substitutes.
 - (b) Integrating cost leadership and differentiation is possible by providing the product/service at low cost through technologies that enable differentiation through focus on niche segments. Developments in process technology have made it possible to offer a wider variety of products and yet keep the cost low. An organisation that produces through mass production, but can use technological means to create variety in the product/service can sometimes combine the benefits of low-cost and differentiation. For e.g. the use of CAD and CAM and robot technology, results in manufacturing of small batch of products at low cost.
 - (c) Yes, like profit making organizations, non-profit organizations must also have business strategies. They are required to give direction, focus and efficient utilization of resources. In many non-profit organizations surpluses are important for survival and growth.
 - Compared to for-profit firms, non-profit and governmental organizations often function as a monopoly, produce a product or service that offers little or no measurability of performance, and are totally dependent on outside financing. Especially for these organizations, strategic management provides an excellent vehicle for developing and justifying requests for needed financial support.
 - (d) Identifying an organisation's existing vision, mission, objectives are the starting point for any strategic management process. Determining vision and mission provides long-term direction, delineate what kind of enterprise the company is trying to become and infuse the organisation with a sense of purposeful action.

- (e) The BCG growth share matrix represents businesses on a two-dimensional scale. The vertical axis represents market growth rate and provides a measure of market attractiveness. The horizontal axis represents relative market share and serves as a measure of company strength in the market. On the basis of different positions of the businesses on the matrix they are classified as stars, cash cows, question marks and dogs.
- 2. (a) (i) Incorrect: Every company has its own organisational culture. Each has its own business philosophy and principles, its own ways of approaching to the problems and making decisions, its own work climate, work ethics, etc. Therefore, corporate culture need not be identical in all organisations. However, every organisation over a period of time inherits and percolates down its own specific work ethos and approaches.
 - (ii) Correct: An organization can redefine its business by divesting a major product line or market. The divesting can be termed as retrenchment strategy. The enterprise may withdraw from marginal markets, withdraw some brands or sizes of products. It may also withdraw some of slow moving products. In an extreme manner it may seek retirement either from the production or the marketing activity.
 - (b) (i) Synchro-marketing: When the demand for the product is irregular causing idle capacity or over-worked capacities, synchro-marketing can be used to find ways to alter the pattern of demand so that it equates more suitably with the pattern of supply. It can be done through flexible pricing, promotion, and other incentives.
 - (ii) The changes in the environmental forces often require businesses to make modifications in their existing strategies and bring out new strategies. Strategic change is a complex process and it involves a corporate strategy focused on new markets, products, services and new ways of doing business.
 - (iii) Customers and suppliers must work together in the product development process. Right from the start the partners will have knowledge of all Involving all partners will help in shortening the life cycles. Products are developed and launched in shorter time and help organizations to remain competitive.
- 3. (a) A global strategy assumes more standardization of products across country boundaries. Under this strategy, the company tries to focus on a low cost structure by leveraging their expertise in providing certain products and services and concentrating the production of these standard products and services at a few favourable locations around the world. Competitive strategy is centralized and controlled by the home office.
 - (b) A Strategic Business Unit (SBU) is a unit of the company that has a separate mission and objectives which can be planned independently from other company

businesses. SBU can be a company division, a product line within a division or even a single product/brand, specific group of customers or geographical location. The SBU is given the authority to make its own strategic decisions within corporate guidelines as long as it meets corporate objectives.

- (c) Marketing mix is a systematic way of classifying the key decision areas of marketing management. It is the set of controllable marketing variables that the firm blends to produce the response it wants in the target market. The original framework of marketing mix comprises of 4Ps- product, price, place and promotion. These are subsequently expanded to highlight certain other key decision areas like people, processes, and physical evidence. The elements of original framework are:
 - Product: It stands for the "goods-and-service" combination the company offers to the target market.
 - **Price**: It stands for the amount of money customers have to pay to obtain the product.
 - Place: It stands for company activities that make the product available to target consumers and include marketing channel, distribution policies and geographical availability.
 - Promotion: It stands for activities that communicate the merits of the product and persuade target consumers to buy it.
- 4. An important component of strategic thinking requires the generation of a series of strategic alternatives, or choices of future strategies to pursue, given the company's internal strengths and weaknesses and its external opportunities and threats. The comparison of strengths, weaknesses, opportunities, and threats is normally referred to as SWOT analysis.
 - **Strength:** Strength is an inherent capability of the organization which it can use to gain strategic advantage over its competitors.
 - **Weakness:** A weakness is an inherent limitation or constraint of the organization which creates strategic disadvantage to it.
 - **Opportunity:** An opportunity is a favourable condition in the organisation's environment which enables it to strengthen its position.
 - **Threat:** A threat is an unfavourable condition in the organisation's environment which causes a risk for, or damage to, the organisation's position.

SWOT analysis helps managers to craft a business model (or models) that will allow a company to gain a competitive advantage in its industry (or industries). Competitive advantage leads to increased profitability, and this maximizes a company's chances of surviving in the fast-changing, competitive environment. Key reasons for SWOT analyses are:

- It provides a logical framework.
- It presents a comparative account.

- It guides the strategist in strategy identification.
- 5. Businesses have to respond to a dynamic and often hostile environment for pursuit of their mission. Strategies provide an integral framework for management and negotiate their way through a complex and turbulent external environment. Strategy seeks to relate the goals of the organisation to the means of achieving them.

A company's strategy is the game plan management is using to stake out market position and conduct its operations. A company's strategy consists of the combination of competitive moves and business approaches that managers employ to please customers, compete successfully and achieve organisational objectives.

Strategy may be defined as a long range blueprint of an organisation's desired image, direction and destination what it wants to be, what it wants to do and where it wants to go. Strategy is meant to fill in the need of organisations for a sense of dynamic direction, focus and cohesiveness.

The Generic Strategies

According to Glueck and Jauch there are four generic ways in which strategic alternatives can be considered. These are stability, expansion, retrenchment and combinations.

- (i) Stability strategies: One of the important goals of a business enterprise is stability to safeguard its existing interests and strengths, to pursue well established and tested objectives, to continue in the chosen business path, to maintain operational efficiency on a sustained basis, to consolidate the commanding position already reached, and to optimise returns on the resources committed in the business.
- (ii) **Expansion Strategy:** Expansion strategy is implemented by redefining the business by adding the scope of business substantially increasing the efforts of the current business. Expansion is a promising and popular strategy that tends to be equated with dynamism, vigor, promise and success. It is often characterised by significant reformulation of goals and directions, major initiatives and moves involving investments, exploration and onslaught into new products, new technology and new markets, innovative decisions and action programmes and so on. Expansion includes diversifying, acquiring and merging businesses.
- (iii) Retrenchment Strategy: A business organisation can redefine its business by divesting a major product line or market. Retrenchment or retreat becomes necessary or expedient for coping with particularly hostile and adverse situations in the environment and when any other strategy is likely to be suicidal. In business parlance also, retreat is not always a bad proposition to save the enterprise's vital interests, to minimise the adverse environmental effects, or even to regroup and recoup the resources before a fresh assault and ascent on the growth ladder is launched.

- (iv) Combination Strategies: Stability, expansion or retrenchment strategies are not mutually exclusive. It is possible to adopt a mix to suit particular situations. An enterprise may seek stability in some areas of activity, expansion in some and retrenchment in the others. Retrenchment of ailing products followed by stability and capped by expansion in some situations may be thought of. For some organisations, a strategy by diversification and/or acquisition may call for a retrenchment in some obsolete product lines, production facilities and plant locations.
- **6.** For implementing six sigma, there are two separate key methodologies for existing and new processes. They are known as DMAIC and DMADV.

DMAIC is an acronym for five different steps used in six sigma - Define, Measure, Analyze Improve, and Control. DMAIC methodology is directed towards improvement of existing product, process or service.

- Define: To begin with six sigma experts define the process improvement goals that
 are consistent with the strategy of the organization and customer demands. They
 discuss different issues with the senior managers so as to define what needs to
 done.
- Measure: The existing processes are measured to facilitate future comparison. Six sigma experts collect process data by mapping and measuring relevant processes.
- Analyze: Verify cause-and-effect relationship between the factors in the processes.
 Experts need to identify the relationship between the factors. They have to make a comprehensive analysis to identify hidden or not so obvious factor.
- Improve: On the basis of the analysis experts make a detailed plan to improve.
- Control: Initial trial or pilots are run to establish process capability and transition to production. Afterwards continuously measure the process to ensure that variances are identified and corrected before they result in defects.

DMADV is an acronym for Define, Measure, Analyze, Design, and Verify. DMADV is a strategy for designing new products, processes and services.

- Define: As in case of DMAIC six sigma experts have to formally define goals of the design activity that are consistent with strategy of the organization and the demands of the customer.
- Measure: Next identify the factors that are critical to quality (CTQs). Measure factors such as product capabilities and production process capability. Also assess the risks involved.
- Analyze: Develop and design alternatives. Create high-level design and evaluate to select the best design.
- Design: Develop details of design and optimise it. Verify designs may require using techniques such as simulations.

 Verify: Verify designs through simulations or pilot runs. Verified and implemented processes are handed over to the process owners.

However, in spite of different orientation in two methodologies, conceptually there is overlapping between the DMAIC and DMADV as both are essentially having similar objectives.

7. Technology is the most dynamic of all the environmental factors. An individual enterprise is concerned with the dynamics of its product and process technology, research and development activities in the industry and elsewhere, innovations in products and processes, technological obsolescence and so on. Changes in technology vitally affect the enterprise's costs, profitability, plant location decisions, product lines, growth and development.

The technology and business are highly interrelated and interdependent also. Technology is patronized by business. Technology also drives business and makes a total change on how it is carried out.

Technology can act as both opportunity and threat to a business. It can act as opportunity as business can take advantage of adopting technological innovations to their strategic advantage. However, at the same time technology can act as threat if organisations are not able to adopt it to their advantage. For example, an innovative and modern production system can act as weakness if the business is not able to change their production system. New entrants or existing competitors can always use availability of technological improvements in products or production methods that can be a threat to a business.

Technological opportunities and threats are not limited to the product or production. Technology permeates whole gambit of business. It can transform how a business acts and functions.