

FINAL EXAMINATION

GROUP III

(SYLLABUS 2008)

SUGGESTED ANSWERS TO QUESTIONS DECEMBER 2011

Paper- 12 : FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE

Time Allowed : 3 Hours

Full Marks : 100

The figures in the margin on the right side indicate full marks.

Please (i) Answer all bits of a question at one place.

(ii) Open a new page for answer to a new question.

(iii) Tick the question number answered on the front sheet of the answer-book.

Answer Question No. 1 from Part A which is compulsory and any five questions from Part B.

PART - A (25 Marks)

Q. 1. (a) Choose the correct words from those in italic type face :

- (i) A joint product should be processed further if (*post-separation/pre-separation*) costs are (*greater than/less than*) the (*increase in revenue/additional fixed costs*).
- (ii) Value (*engineering/analysis*) is cost avoidance or cost prevention before production whereas value *engineering/analysis* is cost reduction during production.
- (iii) The aim of ABM is to try to eliminate as far as possible the (*core/primary/secondary/discretionary*) activities.
- (iv) The point at which a physical activity causes an entry in the accounts which flushes out cost in a backflush system is known as the (*trigger point/bottleneck*).
- (v) Market (*skimming/penetration*) pricing should be used if an organization wishes to discourage new entrants into a market. [1×8=8]

- (b) (i) In the formula for the learning curve, $Y_x = aX^b$, how is the value of b calculated?
- A. Log of the learning rate/log of 2
 - B. Log of 2/learning rate

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- C. Learning rate \times log of 2
- D. Log of learning rate/2 [1]

- (ii) Which of the following is incorrect as a description of part of the ABC process?
- A. Transactions undertaken by support department personnel are appropriate cost drivers for long-term variable overheads.
 - B. Longer-term production overhead costs are partly driven by volume of output.
 - C. Longer-term production overhead costs are partly driven by the complexity and diversity of production work.
 - D. Short-term variable overhead costs should normally be traced to products using volume-related cost drivers. [1]

- (iii) Which of the following is correct?
- A. Cost of conformance = cost of prevention + cost of internal failure
 - B. Cost of conformance = cost of internal failure + cost of external failure
 - C. Cost of conformance = cost of appraisal + cost of prevention
 - D. Cost of non-conformance = cost of prevention + cost of appraisal [1]

- (iv) Which of the following statements relates to Kaizen Costing?
- A. Employees are often viewed as the cause of problems.
 - B. The aim is to meet cost performance targets.
 - C. It is assumed that current manufacturing conditions remain unchanged.
 - D. Costs are reduced by implementing continuous improvement. [1]

(c) In the context of a balanced score-card approach to performance measurement, to which of the four perspectives does each measure relate?

<i>Performance measure</i>	<i>Perspective</i>
A. Time taken to develop new products
B. Percentage of on-time deliveries
C. Average set-up time
D. Return on capital employed

(Note : Your answer may be of the form : Capital letter indicating performance measure—Name of the perspective). [4]

(d) Match the *descriptions* to the budgeting style :

- Description*
- (i) Budget allowances are set without the involvement of the budget holder.
 - (ii) All budget holders are involved in setting their own budgets.
 - (iii) Budget allowances are set on the basis of discussions between budget holder and those to whom they report.

Budgeting style

- A. Negotiated budgeting
- B. Participative budgeting
- C. Imposed budgeting

(Note : Your answer may be of the form :

Description No. _____ capital letter indicating Budgeting style) [1×3=3]

(e) Fill in the blanks in the statement below, using the words in the box :

Throughput Accounting ratio = per factory hour ÷ per factory hour.

Box of words
Bottlenecks
Constraints
Conversion cost
Material costs
Sales revenue
Throughput contribution

[1×2=2]

(f) An extract of the incurred at two different activity levels is shown. Classify the costs according to their behaviour patterns and show the budget cost allowance for an activity of 1,500 units.

	1,000 units (000)	2,000 units (000)	Type of cost (F/V/S-V)	Budget cost allowance for 1,500 units (000)
(i) Fuel	300	600
(ii) Photocopying	950	1,100
(iii) Heating	240	240
(iv) Direct wages	600	800

[1×4=4]

Answer 1. (a)

- (i) — post separation, less than, increase in revenue
- (ii) — value engineering, value analysis
- (iii) — discretionary
- (iv) — bottleneck
- (v) — penetration

Answer 1. (b)

- (i) — A ; (ii) — B ; (iii) — C ; (iv) — D

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Answer 1. (c)

- A. Learning
- B. Customer
- C. Internal
- D. Financial

Answer 1. (d)

- (i) — C ; (ii) — B ; (iii) — A

Answer 1. (e)

- (=) throughput contribution
(÷) conversion cost

Answer 1. (f)

- (i) Variable ` 450 (000)
- (ii) Semi-variable ` 1025 (000)
- (iii) Fixed ` 240 (000)
- (iv) Semi-variable ` 700 (000)

PART - B (75 Marks for any five questions)

Q. 2. (a) Saran Ltd. has achieved sales of ` 40 million and a net profit of ` 5 million in the year ended 31-03-2011. The following figures are extracted from the accompanying Balance Sheet (31-03-2011) of the company :

	(million)
Paid up Equity Share Capital	5
Reserve and Surplus	3
Long-term Loans	8
Current Liabilities and Provisions	4

The company wants to increase the Return on Equity by 7.5 percent in the year ending 31-03-2012.

Required :

Assess the change needed in the Net Profit margin of the company to meet the desired increase in its ROE. Assume that the other ratios will not change. [9]

- (b) (i) What do you understand by 'Trading on Equity'? [2]
 (ii) What are the limitations of Trading on Equity? [4]

Answer 2. (a)

By using DU PONT technique :

$$\begin{aligned} \text{Present Return on Equity} &= \frac{\text{NP}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Equity}} \\ &= \left(\frac{5}{40} \times \frac{40}{20(W1)} \times \frac{20}{8(W2)} \right) \times 100\% \\ &= 62.5\% \end{aligned}$$

W1

$$\begin{aligned} \text{Total Assets} &= \text{Total Liabilities as on 31-03-2011} \\ &= \text{Capital} + \text{Reserves} + \text{Loans} + \text{Current Liabilities.} \\ &= ₹ (5 + 3 + 8 + 4) \text{ m} \\ &= ₹ 20 \text{ million.} \end{aligned}$$

W2

$$\begin{aligned} \text{Equity} &= \text{Net work} = \text{Capital} + \text{Reserves} \\ &= ₹ (5 + 3) \text{ m} = ₹ 8 \text{ million.} \end{aligned}$$

$$\text{Now, required Return on Equity} = 62.5\% + 7.5\% = 70\%$$

$$\begin{aligned} \text{Required Net Profit margin} &= \left(\frac{\text{Return on Equity}}{\frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Equity}}} \right) \times 100\% \\ &= \left(\frac{70}{2.00 \times 2.50} \right) \times 100\% \\ &= 14\% \end{aligned}$$

$$\text{Existing Net Profit Margin} = \frac{5}{40} \times 100 = 12.5\%$$

$$\begin{aligned} \therefore \text{Change in Net Profit margin} &= 14\% - 12.5\% \\ \text{So, increase} &= 1.5\% \end{aligned}$$

Answer 2. (b)

- (i) The use long-term fixed interest bearing debt and preference share capital along with equity share capital is called 'Trading on Equity' or Financial Leverage.
 (ii) Trading on Equity suffers from the following limitations :
 (a) It is a double-edged weapon;

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- (b) It is beneficial only to companies having stability in earnings, such as an electricity company;
- (c) It increases risk and rate of interest;
- (d) It is liable to restrictions from financial institutions.

Q. 3. (a) RUI-WAY Ltd. has surplus cash of ₹ 80 lac. It wants to distribute 30 percent of it to the shareholders. The company decides to buyback some of its shares.

The finance manager of the company estimates that its share after repurchase is likely to be 10 per cent above the buyback price, if the buyback route is taken. The number of shares outstanding at present is 10 lac and the current EPS is ₹ 3.

Required :

Determine

- (i) the price at which the shares can be repurchased if the market capitalisation of the company should be ₹ 180 lac after buyback; [5]
 - (ii) the number of shares that can be repurchased; [1]
 - (iii) the impact of the share repurchase on the EPS, assuming the net income remains the same as before. [3]
- (b)** (i) Briefly discuss the Baumal Model of Cash Management. [3]
- (ii) Illustrate the model by using the following information about A Ltd.
The annual cash requirement of A Ltd. is ₹ 10 lac. The company has marketable securities in lot sizes of ₹ 100,000, ₹ 200,000, ₹ 250,000. Cost of conversion of marketable securities per lot is ₹ 1,000. The company can earn 5% annual yield on its securities. The optimal lot size to be sold will be ₹ ? [3]

Answer 3. (a)

RUI-WAY Ltd.

- (i) Let P be the buyback price decided by RUI-WAY Ltd.

Market capitalisation after buyback is given as ₹ 180 lac.

This should be equal to 1.1P (Original shares – shares bought back)

$$= 1.1P \left(10 \text{ lac} - \frac{30\% \text{ of } ₹ 80 \text{ lac}}{P} \right)$$

$$\therefore 1.1P \left(10 \text{ lac} - \frac{30\% \text{ of } ₹ 80 \text{ lac}}{P} \right) = ₹ 180 \text{ lac}$$

$$\text{or, } 11 \text{ lac } P - ₹ 26.4 \text{ lac} = ₹ 180 \text{ lac}$$

$$\text{hence, } P = ₹ 18.76.$$

- (ii) Number of shares to be bought back = $\frac{₹ 24 \text{ lac}}{₹ 10.76} = 1.28 \text{ lac shares (approx)}$

- (iii) New outstanding shares = 10 lac – 1.28 lac = 8.72 lac

$$\text{EPS} = \frac{3 \times 10 \text{ lac}}{8.72 \text{ lac shares}} = 3.44$$

So, the EPS of RUI-WAY Ltd. increases to 3.44.

Answer 3. (b)

- (i) Maintenance of optimum level of cash is the objective of cash management. The Baumal Model of cash management is similar to the Economic management of another current asset — the inventory model (EOQ).

According to this model, optimal level of cash balance is one at which cost of carrying the inventory of cash and cost of going to the market for satisfying cash requirements is minimum. The carrying cost of holding cash refers to the interest foregone on marketable securities whereas the cost of going to the market means cost of liquidating marketable securities in cash.

- (ii) The optimal lot size of the securities to be sold for A. Ltd. is determined as under :

Total cash requirement for a year = T = ₹ 10,00,000

Lot size (C) =	1,00,000	2,00,000	2,50,000
Number of Lots (T/C)	10	5	4
Conversion Cost (C) = (T/C) × B [Where B = Cost of conversion per lot]	10,000	5,000	4,000
Interest charges (I) = (C/2) × I	2,500	5,000	6,250
Total Cost (C) =	12,500	10,000	10,250

Economic lot size is ₹ 2,00,000 at which total costs are minimum.

[Alternatively, one can use the Formula : Economic lot size = $\sqrt{\frac{2 \times TB}{I}}$

Where T = Projected cash requirement = ₹ 10,00,000
 B = Conversion cost per lot = ₹ 1,000
 I = Interest earned on marketable per annum = 5%

So, the Economic lot size = $\sqrt{\frac{2 \times 10,00,000 \times 1,000}{0.05}} = ₹ 2,00,000$]

- Q. 4. (a)** An oil company imports crude oil at the rate of 100 tonnes per month. The price of crude oil in the month of January is ₹ 5,000 per barrel (1 barrel = $\frac{1}{7.33}$ tonnes). It is forecast that in the month of March the price per barrel of crude oil is likely to touch ₹ 6,000. The company wants to hedge against the rising price for its requirement in March. The futures contract price for March is now traded at ₹ 5,700 per barrel for 100 barrels.

Required:

- (i) Explain how the oil company can hedge its exposure against the rising price of crude, and state the number of contracts it should book for it. [3+2=5]

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(ii) What will be the effective price per barrel if in the month of March the price of crude oil is as under:

Spot price	—	₹ 5,500 per barrel	
Futures	—	₹ 5,800 per barrel.	[5]

(b) Mention, in brief, the main official foreign sources of finance. [5]

Answer 4. (a)

(i) The oil company must go long on futures of crude oil. Hedging strategy would be to take position in the futures market opposite to that of in the physical market. The hedging strategy should be :

January	—	buy futures contract now
March	—	purchase crude oil at the price prevailing then in spot market, and sell the futures contract.

Quantity to be imported/hedged = 100 tonnes or 733 barrels

Contract size = 100 barrels

No. of contract bought = $\frac{733}{100} = 7.33$ (rounded to 8)

(ii) Position in March :

Spot price = ₹ 5,500

Future price = ₹ 5,800

Purchase price in spot = $733 \times ₹ 5,500 = ₹ 40,31,500$

Cash flow on future position

Buying price = ₹ 5,700 per barrel

Selling price = ₹ 5,800 per barrel

Profit = ₹ 100 per barrel

Realization from futures market = $8 \times 100 \times 100$ (-) 80,000
₹ 39,51,500

Effective price per barrel = ₹ $39,51,500/733$

= ₹ 5,391.

Answer 4. (b)

OFFICIAL MAIN FOREIGNS SOURCES OF FINANCE :

1. Foreign Collaboration : In India joint participation of foreign and domestic capital has been quite common in recent years. Foreign collaboration could be either in the form of joint participation between private firms, or between foreign firms and Indian Government, or between foreign governments and Indian Government.

2. Bilateral Government Funding Arrangement : Generally, advanced countries provide aid in the form of loans and advances, grants, subsidies to governments of under-developed and developing countries. The aid is provided usually for financing government and public sector projects. Funds are provided at concessional terms in respect of cost (interest), maturity, and repayment schedule.

3. NRI Deposits and Investments : Non-resident Indian have always been making a contribution in Indian economy. Government has been making efforts to encourage their deposits and investments. Various schemes have been devised which ensure higher returns; procedures have been simplified to attract investments in primary and secondary market. Tax incentives are given on interest earned and dividends received by NRIs.

4. Loans from International Financial Institutions : International Bank for Reconstruction and Development (IBRD), International Monetary Fund (IMF), Asian Development Bank (ADB), and World Bank have been the major source of external finance to India.

5. External Commercial Borrowing (CEB) : Our country has also been obtaining foreign capital in the form of external commercial borrowings from agencies like US EXIM Bank, Japanese EXIM Bank, ECGC of UK, etc.

Q. 5. (a) The following quotes are available:

Spot (\$/€) 0.8385/0.8391

3-m swap points 20/30

Spot (\$/£) 1.4548/1.4554

3-m swap points 35/25

Find the 3-m (€/£) outright forward rates.

(b) What is 'Covered Interest Arbitrage'? Briefly state the role of an arbitrageur under covered interest arbitrage. [1+4=5]

Answer 5. (a)

Given \$/€ = 0.8385/0.8391

3m fwd. = 0.8405/0.8421

[Swap points ascending order

Hence, add to find fwd rates]

\$/£ = 1.4548/1.4554

3m fwd. = 1.4513/1.4529

[Swap points descending order

Hence, deduct to find fwd. rates]

To find €/£ (3m outright forward rates) :

We know that $\text{Bid} \left(\frac{€}{£} \right) = \text{Bid} \left(\frac{€}{\$} \right) \times \text{Bid} \left(\frac{\$}{£} \right)$

Since a quote of €/£ is not available, but we have \$/€, we use

$$\text{Bid} \left(\frac{€}{£} \right) = \frac{1}{\text{Ask} \left(\frac{\$}{£} \right)}$$

$$\text{Substituting the values we get Bid rate for } €/£ = \frac{1}{0.8421} \times 1.4513 = 1.7234$$

$$\text{Similarly } \text{Ask} \left(\frac{€}{£} \right) = \frac{1}{\text{Bid} \left(\frac{\$}{£} \right)} \times \text{Ask} \left(\frac{\$}{£} \right) = \frac{1}{0.8405} \times 1.4529 = 1.7286$$

So, we get the 3m outright forward (€/£) quote as 1.7234/1.7286.

Answer 5. (b)

A covered interest arbitrage exists when an arbitrage profit can be made. The process of borrowing in one currency and simultaneously investing in another with the exchange risk hedged in the forward market is referred to covered Interest Arbitrage.

If domestic interest rates are higher than the foreign interest rates, an arbitrageur would do the following :
He would borrow in foreign currency, convert receipts to domestic currency at the prevailing spot rate, invest in domestic currency denominated securities (as domestic securities carry higher interest). At the same time he would cover his principal and interest from the investment at the forward rate. At maturity, he would convert the proceeds of the domestic investment at prefixed domestic forward rate and payoff the foreign liability.

The difference between the receipts and payments serve as profit to customer.

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Q. 6. (a) A company expects to generate the following net income and incur the following capex in the next five years:

Year	1	2	3	4	5
	₹ (crore)				
NP	75	60	45	40	25
Capex	40	45	55	47	50

The total number of outstanding shares are 18,00,000 and the current dividend is ₹ 6.50 per share.

Required :

- (i) Determine the dividend per share if the firm follows a residual dividend policy.
- (ii) Determine the external financing needed if the current dividend is maintained.
- (iii) Determine the external financing required if the company maintains a 50% dividend payout ratio.
- (iv) Under which of the above is the external need of funds maximized? [2.5×4=10]

(b) Explain the 'Hedging Approach' to financing working capital requirements of a firm. [5]

Answer 6. (a)

Year	1	2	3	4	5	Total
N/P (₹ In crore)	75	60	45	40	25	
CAPEX (₹ In crore)	40	45	55	47	50	
(i) Residual Income (₹ In crore)	35	15	—	—	—	50
External funds (₹ In crore)	—	—	10	7	25	42
Dividend per share (₹)	194.44	83.33	Nil	Nil	Nil	277.77
(ii) Current dividend (₹ In crore)	1.17	1.17	1.17	1.17	1.17	5.85
External fund required (₹ In crore)	0	0	11.17	8.17	26.17	45.51
(iii) Dividend @50% (₹ In crore)	37.5	30	22.5	20	12.5	122.5
External funds (₹ in cr)	2.5	15	32.5	27	37.5	114.5

(iv) Maximum external funds are required when dividend rate is 50%.

Answer 6. (b)**Hedging Approach :**

It is a method of financing where each asset would be offset with a financing instrument of the same approximate maturity. With this approach, short-term or seasonal variation in current assets would be financed with short-term debt; the permanent component of current assets and all fixed assets would be met with long-term debt.

The rationale for the policy is that if long-term debt is used to finance short-term needs, the firm will be paying interest for the use of such funds at times when funds are needed.

Q. 7. (a) Cookme Ltd. a well-established food manufacturing and distribution company, currently has an annual turnover in excess of ₹ 15 crore. At present, the company has three production and distribution divisions, each responsible for specific product groups, and a cost of capital of 15%. The summary information of the Ready-to-cook division relating to divisional assets and profitability is as follows.

Ready-to-cook division

The division produces a wide range of products which it sells to both the supermarket sector and the restaurant trade.

Last year the divisional figures were as follows :

	₹ (crore)
Investment in non-current assets	1.5
Investment in working capital	1.0
Operating profit	0.5

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Divisional budgets are set at the beginning of each year and these are then monitored on a month by month basis. Managers are given as much freedom as possible to manage their divisions which operate as autonomous profit-making units. Divisional managers are rewarded in terms of divisional return on investment.

The company is currently considering expansion into a new but allied product range. This range consists of sauces and canned foods. Projected figures for the expansion into sauces and canned foods are :

	` (crore)
Additional non-current assets required	0.75
Additional investment in working capital	0.35
Budgeted additional profit	0.198

The manager of the Ready-to-cook division has produced successful results over the past few years for her division. She and her staff have enjoyed handsome bonuses on the basis of return on investment. The company has traditionally calculated return on investment as operating profit as a percentage of return on all net divisional assets, and bonuses are paid as a percentage on this basis. The board proposes that the Ready-to-cook division will be responsible for the expansion into sauces and canned foods.

Required :

- (i) Calculate the return on investment for the division both before and after the proposed divisional expansion. [4]
 - (ii) Calculate the residual income for the division both before and after the proposed divisional expansion. [4]
 - (iii) Determine how the manager of Ready-to-cook division of Cookme Ltd. would like to accept the proposed expansion. [2]
- (b) State briefly the importance of life cycle costing at today's business environment. [5]

Answer 7. (a)

Cookme Ltd.

(i)	Return on Investment	Before expansion	Additions	After proposed expansion
		` Cr	` Cr	` Cr
	Investment in non-current assets	1.5	+ 0.75	2.25
	Investment in working capital	1.0	+ 0.35	1.35
	Net divisional assets	2.5		3.60
	Operating profit	0.5	+ 0.198	0.698
	Return on investment	20.0%		19.4%

(ii) Residual Income (RI)

		Before expansion ₹ Cr		After proposed expansion ₹ Cr
Operating profit		0.500		0.698
Imputed interest on Net divisional assets	(₹ 2.5 cr × 15%)	0.375	(₹ 3.6 cr × 15%)	0.540
Residual income		<u>0.125</u>		<u>0.158</u>

(iii) Using return on investment (ROI) as a performance measure, the divisional manager would not be happy to accept the proposed expansion. The ROI would reduce if the expansion went ahead, indicating a deterioration in the division's performance, and because bonuses are paid as a percentage on this basis, the manager would receive a lower bonus.

If residual income (RI) was used as a performance measure the manager would be happy to accept the proposed expansion. This indicates an improvement in the division's performance and so the manager would receive a higher bonus.

Answer 7. (b)

Lif-cycle costing estimates and accumulates costs over a product's entire life cycle in order to determine whether the profits earned during the manufacturing phase will cover the costs incurred during the pre- and post-manufacturing stages. Three stages of a product's life cycle can be identified—the planning and design stage, the manufacturing stage and the service and abandonment stage.

Approximately 80% of a product's costs are committed during the planning and design stage. At this stage product designers determine the product's design and the production process.

In contrast, the majority of costs are incurred at the manufacturing stage, but they have already become locked-in at the planning and design stage and are difficult to alter. Cost management can be most effectively exercised during the planning and design stage and not at the manufacturing stage when the product design and process have already been determined and cost have been committed.

The pattern of cost commitment and incurrence will differ based on the industry and specific product introduced. For example, cost incurrence is high at the planning and development stage for manufacturing new aeroplanes or large product abandonment costs may be incurred for those products whose disposal involves harmful effects to the environment, such as nuclear waste or other toxic chemicals.

With the globalization of the economy, fierce trade competition and stricter regulation about environment, even durable products are now subject to shorter life-unlike their predecessors. Hence life cycle costing is so important to investors and accountants in today's business.

Q. 8. It has been suggested that much of the training of management accountants is concerned with cost control whereas the major emphasis should be on cost reduction.

Required :

(a) Distinguish between cost control and cost reduction. [3]

(b) Give three examples each of the techniques and principles used for

(i) cost control and

(ii) cost reduction. [6]

(c) Discuss the proposition contained in the statement.

[6]

Answer 8. (a)

Cost Control	Cost Reduction
(i) It is regulation of costs of operating a business and is concerned with keeping costs within acceptable limits.	(i) It is a planned and positive approach to reducing expenditure. It starts with an assumption that current or planned costs levels are too high and looks ways of reducing them without reducing effectiveness.
(ii) It is preventive function.	(ii) It is corrective function.
(iii) Emphasis is on present and past behaviour of cost.	(iii) Emphasis is on present and future cost.
(iv) Involves setting standards, analyzing variances and taking corrective actions.	(iv) Challenges the cost standards itself and tries to reduce cost on continuous basis.
(v) Limited to areas where standards can be set.	(v) Can be applied to each and every area of business.
(vi) Aims at lowest possible cost under given conditions.	(vi) Calls for change in conditions if that leads to lowering in cost.
(vii) It is on going or never ending process.	(vii) The programme can be finished.

Answer 8. (b)

(i) **Three examples of cost control techniques :**

- (A) **Budgetary control** – Cost control is achieved by setting predetermined absolute levels for expenditure. If flexible budgeting is used then the budget cost allowance can be flexed in line with changes in activity.
- (B) **Standard costing** – Designed to control unit costs rather than absolute levels of expenditure. The use of standard costing depends on the existence of a measureable output which is produced in standard operations. Control action is taken if the actual unit costs differ from standard unit costs by an excessive amount.
- (C) **Limits on authority to incur expenditure** – Many organisations restrict the authority for their managers to incur expenditure. For example, the manager may be required to seek separate authorisation for individual items of expenditure (though already included in the overall budget for overheads in a period) which are above a certain amount.

(ii) **Three example of cost reduction techniques :**

- (A) **Value analysis** – is a systematic interdisciplinary examination of factors affecting the cost of a product or service in order to devise means of achieving the specified purpose at the required standard of quality and reliability at the target cost. The motive in a value analysis exercise is to eliminate unnecessary costs without reducing the use value, the esteem value or the exchange value of the item under consideration.

- (B) **Work study** – This is a means of raising the production efficiency of an operating unit by the reorganisation of work. The two main parts to work study are method study and work measurement. Method study is the most significant in the context of cost reduction. It looks at the way in which work is done and attempts to develop easier and more effective methods in order to reduce costs.
- (C) **Variety reduction** – This involves standardisation of parts and components which can offer enormous cost reduction potential for some manufacturing industries. It leads to simplification of an organisation's product range.

Answer 8. (c)

The statement suggests that the training of management accountants should place the major emphasis on cost reduction. This is true to some extent because of the changes in the competitive environment and the globalization of markets. An organisation must provide goods and services of the right quality at prices which are attractive to the customer.

The **Japanese** in particular view costs as a target which must be reached rather than as a limit on expenditure. They employ cost reduction techniques to bring costs down below a target price with the result that prices dictate costs and not vice versa.

If companies are to compete effectively then they must adopt a similar philosophy. The management accountant needs to be trained to provide information which is useful for cost planning and cost reduction. An emphasis on cost control might create a tendency to concentrate effort and resources on the mechanics of recording and reporting historic costs, rather than on the planning and reducing of future costs.

On the other hand it is **still necessary to control costs** and report actual costs so that management can take control action if necessary. It is these reports on actual costs by which management will know whether the most effective cost targets as set at the start have been achieved.

Despite the implied criticism of management accounting training, an increasing awareness of the need for *a more strategic approach to management accounting* does exist, both among trainee and qualified management accountants.

In **conclusion** while there may be a case for a slight change in emphasis in the training of management accountants, this should not lead to the total abandonment of cost control principles and techniques.

