

Roll No. 29985

Total No. of Questions—8]

[Total No. of Printed Pages—7

Time Allowed—3 Hours

Maximum Marks—100

## FUN

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi medium. If a candidate who has not opted for Hindi medium, his answers in Hindi will not be valued.

Answer **all** questions.

Working notes should form part of the answer.

Marks

1. Answer the following :

5×2=10

(i) What is Cost accounting ? Enumerate its important objectives.

(ii) Distinguish between Fixed overheads and Variable overheads.

(iii) Re-order quantity of material 'X' is 5,000 kg.; Maximum level 8,000 kg.; Minimum usage 50 kg. per hour; minimum re-order period 4 days; daily working hours in the factory is 8 hours. You are required to calculate the re-order level of material 'X'. 460

(iv) What do you understand by Key factor ? Give two examples of it.

(v) What are the main advantages of Integrated accounts ? 2-30

2. SB Constructions Limited has entered into a big contract at an agreed price of Rs. 1,50,00,000 subject to an escalation clause for material and labour as spent out on the contract and corresponding actuals are as follows :

| Material | Standard             |                       | Actual               |                       |
|----------|----------------------|-----------------------|----------------------|-----------------------|
|          | Quantity<br>(tonnes) | Rate per tonne<br>Rs. | Quantity<br>(tonnes) | Rate per tonne<br>Rs. |
| A        | 3,000                | 1,000                 | 3,400                | 1,100                 |
| B        | 2,400                | 800                   | 2,300                | 700                   |
| C        | 500                  | 4,000                 | 600                  | 3,900                 |
| D        | 100                  | 30,000                | 90                   | 31,500                |

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| Labour         | Hours         | Hourly Rate<br>Rs. | Hours         | Hourly Rate<br>Rs. |
|----------------|---------------|--------------------|---------------|--------------------|
| L <sub>1</sub> | 60,000        | <u>15</u>          | 56,000        | <u>18</u>          |
| L <sub>2</sub> | <u>40,000</u> | <u>30</u>          | <u>38,000</u> | <u>35</u>          |

You are required to :

- (i) Give your analysis of admissible escalation claim and determine the final contract price payable. 4
- (ii) Prepare the contract account, if the all expenses other than material and labour related to the contract are Rs. 13,45,000. 3
- (iii) Calculate the following variances and verify them : 8
- Material cost variance
  - Material price variance
  - Material usage variance
  - Labour cost variance
  - Labour rate variance
  - Labour efficiency variance.
3. (a) Pharma Limited produces product 'Glucodin' which passes through two processes before it is completed and transferred to finished stock. The following data relates to March, 2010 : 8

|                                                   | Process-I<br>Rs. | Process-II<br>Rs. | Finished Stock<br>Rs. |
|---------------------------------------------------|------------------|-------------------|-----------------------|
| Opening Stock                                     | 1,50,000         | 1,80,000          | 4,50,000              |
| Direct materials                                  | 3,00,000         | 3,15,000          | —                     |
| Direct Wages                                      | 2,24,000         | 2,25,000          | —                     |
| Factory overheads                                 | 2,10,000         | 90,000            | —                     |
| Closing Stock                                     | 74,000           | 90,000            | 2,25,000              |
| Inter process profit included<br>in Opening stock | NIL              | 30,000            | 1,65,000              |

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Output of process I is transferred to process II at 25 percent profit on the transferred price, whereas output of process II is transferred to finished stock at 20 percent on transfer price. Stock in processes are valued at prime cost. Finished stock is valued at the price at which it is received from process II. Sales for the month is Rs. 28,00,000.

You are required to prepare Process-I a/c, Process-II a/c, and Finished Stock a/c showing the profit element at each stage.

- (b) A transport company has been given a 40 kilometre long route to run 5 buses. The cost of each bus is Rs. 6,50,000. The buses will make 3 round trips per day carrying on an average 80 percent passengers of their seating capacity. The seating capacity of each bus is 40 passengers. The buses will run on an average 25 days in a month. The other information for the year 2010-11 are given below :

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|                                      |                          |
|--------------------------------------|--------------------------|
| Garage rent                          | Rs. 4,000 per month      |
| Annual repairs and maintenance       | Rs. 22,500 each bus      |
| Salaries of 5 drivers                | Rs. 3,000 each per month |
| Wages of 5 conductors                | Rs. 1,200 each per month |
| Manager's salary                     | Rs. 7,500 per month      |
| Road tax, permit fee, etc.           | Rs. 5,000 for a quarter  |
| Office expenses                      | Rs. 2,000 per month      |
| Cost of diesel per litre             | Rs. 33                   |
| Kilometre run per litre for each bus | 6 kilometres             |
| Annual depreciation                  | 15% of cost              |
| Annual Insurance                     | 3% of cost               |

You are required to calculate the bus fare to be charged from each passenger per kilometre, if the company wants to earn a profits of 33 $\frac{1}{3}$  percent on taking (total receipts from passengers).

4. Answer of the following :

- (a) Following informations are available for the year 2008 and 2009 of PIX Limited :

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| Year          | 2008           | 2009          |
|---------------|----------------|---------------|
| Sales         | Rs. 32,00,000  | Rs. 57,00,000 |
| Profit/(Loss) | (Rs. 3,00,000) | Rs. 7,00,000  |

Calculate—(a) P/V ratio, (b) Total fixed cost, and (c) Sales required to earn a Profit of Rs. 12,00,000.

(ii) Explain the treatment of over and under absorption of Overheads in Cost accounting. 3

(iii) Which is better plan out of Halsey 50 percent bonus scheme and Rowan bonus scheme for an efficient worker ? In which situation the worker get same bonus in both schemes ? 3

5. Answer of the following :

5×2=10

(i) What do you understand by Capital structure ? How does it differ from Financial structure ?

(ii) Explain briefly the accounts receivable systems.

(iii) Briefly discuss the concept of seed capital assistance.

(iv) Enumerate the various forms of bank credit in financing working capital of a business organisation.

(v) Ascertain the compound value and compound interest of an amount of Rs. 75,000 at 8 percent compounded semiannually for 5 years.

6. The following figures and ratios are related to a company :

|                                                           |                 |
|-----------------------------------------------------------|-----------------|
| (i) Sales for the year (all credit)                       | Rs. 30,00,000 ✓ |
| (ii) Gross Profit ratio                                   | 25 percent ✓    |
| (iii) Fixed assets turnover (basis on cost of goods sold) | 1.5 ✓           |
| (iv) Stock turnover (basis on cost of goods sold)         | 6 ✓             |
| (v) Liquid ratio                                          | 1 : 1 ✓         |
| (vi) Current ratio                                        | 1.5 : 1 ✓       |
| (vii) Debtors collection period                           | 2 months ✓      |
| (viii) Reserve and surplus to Share capital               | 0.6 : 1 ✓       |
| (ix) Capital gearing ratio                                | 0.5 ✓           |
| (x) Fixed assets to net worth                             | 1.20 : 1 ✓      |

You are required to prepare :

- (a) Balance Sheet of the company on the basis of above details. 11
- (b) The statement showing Working capital requirement, if the company wants to make a provision for contingencies @ 10 percent of net working capital including such provision. 4
7. (a) The management of P Limited is considering to select a machine out of the two mutually exclusive machines. The company's cost of capital is 12 percent and corporate tax rate for the company is 30 percent. Details of the machines are as follows :

|                                           | Machine-I     | Machine-II    |
|-------------------------------------------|---------------|---------------|
| Cost of machine                           | Rs. 10,00,000 | Rs. 15,00,000 |
| Expected life                             | 5 years       | 6 years       |
| Annual income before tax and depreciation | Rs. 3,45,000  | Rs. 4,55,000  |

Depreciation is to be charged on straight line basis.

You are required to :

- (i) Calculate the discounted pay-back period, net present value and internal rate of return for each machine.
- (ii) Advise the management of P Limited as to which machine they should take up.

The present value factors of Re. 1 are as follows :

| Year   | 1    | 2    | 3    | 4    | 5    | 6    |
|--------|------|------|------|------|------|------|
| At 12% | .893 | .797 | .712 | .636 | .567 | .507 |
| At 13% | .885 | .783 | .693 | .613 | .543 | .480 |
| At 14% | .877 | .769 | .675 | .592 | .519 | .456 |
| At 15% | .870 | .756 | .658 | .572 | .497 | .432 |
| At 16% | .862 | .743 | .641 | .552 | .476 | .410 |

- (b) The following details are forecasted by a company for the purpose of effective utilisation and management of cash :

(i) Estimated sales and manufacturing costs :

| Year and month<br>2010 | Sales<br>Rs. | Materials<br>Rs. | Wages<br>Rs. | Overheads<br>Rs. |
|------------------------|--------------|------------------|--------------|------------------|
| April                  | 4,20,000     | 2,00,000         | 1,60,000     | 45,000           |
| May                    | 4,50,000     | 2,10,000         | 1,60,000     | 40,000           |
| June                   | 5,00,000     | 2,60,000         | 1,65,000     | 38,000           |
| July                   | 4,90,000     | 2,82,000         | 1,65,000     | 37,500           |
| August                 | 5,40,000     | 2,80,000         | 1,65,000     | 60,800           |
| September              | 6,10,000     | 3,10,000         | 1,70,000     | 52,000           |

(ii) Credit terms :

- Sales—20 percent sales are on cash, 50 percent of the credit sales are collected next month and the balance in the following month.
- Credit allowed by suppliers is 2 months.
- Delay in payment of wages is 1/2 (one-half) month and of overheads is 1 (one) month.

(iii) Interest on 12 percent debentures of Rs. 5,00,000 is to be paid half-yearly in June and December.

(iv) Dividends on investments amounting to Rs. 25,000 are expected to be received in June, 2010.

(v) A new machinery will be installed in June, 2010 at a cost of Rs. 4,00,000 which is payable in 20 monthly instalments from July, 2010 onwards.

(vi) Advance income-tax to be paid in August, 2010 is Rs. 15,000.

(vii) Cash balance on 1st June, 2010 is expected to be Rs. 45,000 and the company wants to keep it at the end of every month around this figure, the excess cash (in multiple of thousand rupees) being put in fixed deposit.

You are required to prepare monthly Cash budget on the basis of above information for four months beginning from June, 2010.

8. Answer of the following :

- (i) SK Limited has obtained funds from the following sources, the specific cost are also given against them :

| Source of funds   | Amount<br>Rs. | Cost of Capital        |
|-------------------|---------------|------------------------|
| Equity shares     | 30,00,000     | 15 percent             |
| Preference shares | 8,00,000      | 8 percent              |
| Retained earnings | 12,00,000     | 11 percent             |
| Debentures        | 10,00,000     | 9 percent (before tax) |

You are required to calculate weighted average cost of capital. Assume that Corporate tax rate is 30 percent.

- (ii) State the role of a Chief Financial Officer.

- (iii) Distinguish between ~~Fund~~ Flow Statement and Cash Flow Statement.