

DATE: 11.09.2016

BATCH : LI –15
MAXIMUM MARKS: 60

TIMING: 2 Hours

ANSWER SHEET**COST ACCOUNTING****Question – 1 (4 Marks)**

A newspaper presently sells 1,00,000 copies of its morning daily. It wants to publish evening daily. Particulars are:

	Actual for Morning	Estimates for Evening
Sales price	Rs. 2 per paper	Rs. 0.50 per paper
Variable cost	Rs. 1.20 per paper	Rs. 0.22 per paper
Fixed cost	Rs. 2.4 lakh per week	Rs. 10,000 per week

Sale of morning daily will fall @ 1 copy for every 10 copies sold of evening daily. Calculate Break-even sales for evening daily per week.

Solution

Fixed cost for evening news paper = ₹ 10,000

Variable cost: ₹

Cost to be incurred 0.22

Benefit lost due to 10

Contribution from 1 morning news paper, i.e. ₹ 0.80

∴ Contribution lost in 1 evening newspaper = $\frac{\text{Rs. } 0.80}{10} = 0.08$

Relevant variable cost 0.30

Break-even point = $\frac{\text{Fixed cost}}{\text{Contribution}} = \frac{10,000}{0.50 - 0.30} = \frac{10,000}{0.20} = 50,000$ copies

Hence, required break-even point = 50,000 copies.

Question - 2 (4 Marks)

PV ratio of a business is 30%. BES is 40% of the capacity. Capital turnover is 2.5 and profit is 15% on capital employed. At what level (% of the capacity) the business is operating? (Capital Turnover = Sales/C.E.)

Solution

Let sales = ₹ 100
 Contribution = 30% of sales = ₹ 30

$$\text{Capital Turnover Ratio} = \frac{\text{Turnover (sales)}}{\text{Capital employed}}$$

$$2.5 = \frac{\text{₹ 100}}{\text{Capital employed}}$$

$$\therefore \text{Capital Employed} = \frac{\text{₹ 100}}{2.5} = \text{₹ 40}$$

We have

$$\therefore \text{Profit} = 15\% \text{ of capital employed}$$

$$= \frac{15}{100} \times \text{₹ 40} = \text{₹ 6}$$

Now,

Contribution – Fixed Cost = Profit

$$\text{₹ 30} - \text{Fixed cost} = \text{₹ 6}$$

$$\therefore \text{Fixed cost} = \text{₹ 30} - \text{₹ 6} = \text{₹ 24}$$

$$\text{Break-even ratio} = \frac{\text{Fixed cost}}{\text{P.V. ratio}}$$

$$40\% \text{ of capacity} = \frac{24}{30\%}$$

$$\therefore \text{Capacity} = \frac{24 \times 100 \times 100}{30 \times 40} = \text{₹ 200}$$

Hence, it indicates that we are operating at 50% of capacity.

Question 3: (7 Marks)

EPS is a Public School having 25 buses each plying in different directions for the transport of its school students. In view of large number of students availing of the bus service, the buses work two shifts daily both in the morning and in the afternoon. The buses are garaged in the school. The workload of the students has been so arranged that in the morning, the first trip picks up senior students and the second trip plying an hour later picks up junior students. Similarly, in the afternoon, the first trip takes the junior students and an hour later the second trip takes the senior students home.

The distance travelled by each bus, one way is 16 km. The school works 24 days in a month and remains closed for vacation in May and June. The bus fee, however, is payable by the students for all the 12 months in a year.

The details of expenses for the year 2013-2014 are as under:

Driver's salary – payable for all the 12 in months.	Rs. 5,000 per month per driver.
Cleaner's salary payable for all the 12 months (one cleaner has been employed for every five buses).	Rs. 3,000 per month per cleaner
Licence Fees, Taxes etc.	Rs. 2,300 per bus per annum
Insurance Premium	Rs. 15,600 per bus per annum
Repairs and Maintenance	Rs. 16,400 per bus per annum
Purchase price of the bus	Rs. 16,50,000 each
Life of the bus	16 years

Scrap value	Rs. 1,50,000
Diesel Cost	Rs. 18.50 per litre

Each bus gives an average of 10 km. per litre of diesel. The seating capacity of each bus is 60 students. The seating capacity is fully occupied during the whole year.

The school follows differential bus fees based on distance traveled as under:

Students picked up and dropped within the range of distance from the school	Bus fee	Percentage of students availing this facility
4 km.	25% of Full	15%
8 km.	50% of Full	30%
16 km.	Full	55%

Ignore interest. Since the bus fees has to be based on average cost, you are required to

- (i) Prepare a statement showing the expenses of operating a single bus and the fleet of 25 buses for a year.
- (ii) Work out average cost per student per month in respect of:
 - (a) Students coming from a distance of upto 4 km. from the school.
 - (b) Students coming from a distance of upto 8 km. from the school; and
 - (c) Students coming from a distance of upto 16 km. from the school.

Solution:

(a)(i)

EPS Public School

Statement showing the expenses of operating a single bus and the fleet of 25 buses for a year

Particulars	Per bus per annum (Rs.)	Fleet of 25 buses per annum (Rs.)
Running costs : (A)		
Diesel (Refer to working note 1)	56,832	14,20,800
Repairs & maintenance costs: (B)	16,400	4,10,000
Fixed charges:		
Driver's salary (Rs. 5,000 × 12 months)	60,000	15,00,000
Cleaners salary (Rs.3,000 × ¹ / ₅ th × 12 months)	7,200	1,80,000
Licence fee, taxes etc.	2,300	57,500
Insurance	15,600	3,90,000
Depreciation	93,750	23,43,750
Total fixed charges: (C)	1,78,850	44,71,250
Total expenses: (A+B+C)	2,52,082	63,02,050

(2 Marks)

(ii) Average cost per student per month in respect of students coming from a distance of:

(a) 4 km. from the school {Rs. 2,52,082 / (354 students × 12 months)} (Refer to Working Note 2)	Rs. 59.34
(b) 8 km. from the school (Rs. 59.34 × 2)	Rs. 118.68
(c) 16 km. from the school (Rs. 59.34 × 4)	Rs. 237.36

(2 Marks)**Working Notes:****1. Calculation of diesel cost per bus:**

No. of trips made by a bus each day	4
Distance travelled in one trip both ways (16 km. × 2 trips)	32 km.
Distance traveled per day by a bus (32 km. × 4 shifts)	128 km.
Distance traveled during a month (128 km. × 24 days)	3,072 km.
Distance traveled per year (3,072 km. × 10 months)	30,720 km.
No. of litres of diesel required per bus per year (30,720 km. ÷ 10 km.)	3,072 litres
Cost of diesel per bus per year (3,072 litres × Rs. 18.50)	Rs. 56,832

(2 Marks)**2. Calculation of number of students per bus:**

Bus capacity of 2 trips (60 students × 2 trips)	120 students
$\frac{1}{4}$ th fare students (15% × 120 students)	18 students
$\frac{1}{2}$ fare 30% students (equivalent to $\frac{1}{4}$ th fare students)	72 students
Full fare 55% students (equivalent to $\frac{1}{4}$ th fare students)	264 students
Total $\frac{1}{4}$ th fare students	354 students

(1 Marks)**Question-4 (4 Marks)***Elaborate the practical application of Marginal Costing.***Solution: (1 marks for each point)**

Practical applications of Marginal costing:

- Pricing Policy: Since marginal cost per unit is constant from period to period, firm decisions on pricing policy can be taken particularly in short term.
- Decision Making: Marginal costing helps the management in taking a number of business decisions like make or buy, discontinuance of a particular product, replacement of machines, etc.
- Ascertaining Realistic Profit: Under the marginal costing technique, the stock of finished goods and work-in-progress are carried on marginal cost basis and the fixed expenses are written off to profit and loss account as period cost. This shows the true profit of the period.
- Determination of production level: Marginal costing helps in the preparation of break-even analysis which shows the effect of increasing or decreasing production activity on the profitability of the company.

Question 5: (4 Marks)

What is inter-process profit? State its advantages and disadvantages.

Solution: (2 Marks)

In some process industries the output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. *The difference between cost*

and the transfer price is known as inter-process profits.

The advantages and disadvantages of using inter-process profit, in the case of process type industries are as follows:

Advantages: (1 Marks)

1. Comparison between the cost of output and its market price at the stage of completion is facilitated.
2. Each process is made to stand by itself as to the profitability.

Disadvantages: (1 Marks)

- (v) The use of inter-process profits involves complication.
- (vi) The system shows profits which are not realised because of stock not sold out

Question 5: (7 Marks)

From the following Information for the month ending October, 2013, prepare Process Cost accounts for Process III. Use First-in-fist-out (FIFO) method to value equivalent production.

Direct materials added in Process III (Opening WIP)	2,000 units at Rs. 25,750
Transfer from Process II	53,000 units at Rs. 4,11,500
Transferred to Process IV	48,000 units
Closing stock of Process III	5,000 units
Units scrapped	2,000 units
Direct material added in Process III	Rs. 1,97,600
Direct wages	Rs. 97,600
Production Overheads	Rs. 48,800

Degree of completion:

	Opening Stock	Closing Stock	Scrap
Materials	80%	70%	100%
Labour	60%	50%	70%
Overheads	60%	50%	70%

The normal loss in the process was 5% of production and scrap was sold at Rs. 3 per unit.

Solution:

(a)

Process III

Process Cost Sheet (FIFO Method)

Opening Stock: 2,000 units; Introduced: 53,000 units

Statement of Equivalent Production

Input		Output		Equivalent production					
Item	Units	Item	Units	Mat- A	(%)	Mat- B	(%)	Labour & OHs.	(%)
Opening stock	2,000	Work on opening WIP	2,000	-	-	400	20	800	40
Process II transfer	53,000	Introduced & completed during the period (48,000 – 2000)	46,000	46,000	100	46,000	100	46,000	100
			48,000						

	Normal Loss (2,000+53,000 – 5,000) x 5%	2,500	-	-	-	-	-	-
	Closing WIP	5,000	5,000	100	3,500	70	2,500	50
		55,500	51,000		49,900		49,300	
	Abnormal Gain	500	500	100	500	100	500	100
	55,000	55,000	50,500		49,400		48,800	

(2 Marks)

Statement of Cost for each Element

Element of cost	Cost (Rs.)	Equivalent Production	Cost per unit (Rs.)
Material A:			
Transfer from Process-II	4,11,500		
Less: Scrap value of Normal Loss (2,500 × Rs. 3)	7,500		
	4,04,000	50,500	8
Material B	1,97,600	49,400	4
Wages	97,600	48,800	2
Overheads	48,800	48,800	1
	7,48,000		15

(2 Marks)

Process Cost Sheet

	(Rs.)
Opening WIP (for completion):	
Material- B (400 units × Rs. 4)	1,600
Wages (800 units × Rs. 2)	1,600
Overheads (800 units × Rs. 1)	800
	4,000
Introduced and completely processed during the period (46,000 units × Rs. 15)	6,90,000
Closing WIP:	
Material- A (5,000 units × Rs. 8)	40,000
Material - B (3500 units × Rs. 4)	14,000
Wages (2,500 units × Rs. 2)	5,000
Overheads (2,500 units × Rs. 1)	2,500
	61,500
Abnormal Gain (500 units × Rs. 15)	7,500

(2 Marks)

Process III A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Balance b/d	2,000	25,750	By Normal Loss	2,500	7,500
To Process II A/c	53,000	4,11,500	By Process IV A/c		
To Direct Material		1,97,600	(Rs. 6,90,000 + Rs.4000		
To Direct Wages		97,600	+Rs. 25,750)	48,000	7,19,750
To Production OH		48,800	By Balance c/d	5,000	61,500
To Abnormal Gain	500	7,500			
	55,500	7,88,750		55,500	7,88,750

(1 Marks)**LAW****Question: 1**

Some of the creditors of Get Rich Quick Ltd. have complained that the company was formed by the promoters only to defraud the creditors and circumvent the compliance of legal provisions of the Companies Act, 2013. In this context they seek your advice as to the meaning of corporate veil and when the promoters can be made personally liable for the debts of the company.

(5 Marks)**Answer 1:**

Corporate Veil: After incorporation, the company in the eyes of law becomes a different person from the shareholders who have formed the company. The company has its own existence and as a result the shareholders cannot be held liable for the acts of the company even though they hold the entire share capital of the company. This recognition of the company as a separate legal entity and being liable for its own acts and liabilities is known as the "Corporate Veil". However, under certain exceptional circumstances the courts lift or pierce the corporate veil by ignoring the separate entity of the company and the promoters and other persons who have managed and controlled the affairs of the company. Thus, when the corporate veil is lifted by the courts, the promoters and persons exercising control over the affairs of the company are held personally liable for the acts and debts of the company. In the following circumstances, corporate veil can be lifted by the courts and promoters can be held personally liable for the debts of the company.

- (i) Trading with enemy country.
- (ii) Evasion of taxes.
- (iii) Forming a subsidiary company to act as its agent.
- (iv) The benefit of limited liability is destroyed by reducing the number of members below 7 in the case of public company and 2 in the case of private company for more than six months.
- (v) Under law relating to exchange control.
- (vi) Device of incorporation is adopted to defraud creditors or to avoid legal obligations.

Question: 2

Explain the procedure for change of name of a company, as provided in the Companies Act, 2013.

(5 Marks)**Answer 2:****Procedure for the Change of name under the Companies Act, 2013:**

According to Section 13 (1) of the Companies Act, 2013, a company may, by special resolution, and after complying with the procedure specified in this section alter the provisions of its Memorandum.

The Name Clause in the Memorandum states the name of the company. It can be changed in the following manner:

- a. Passing of the Special Resolution of members at a duly convened general meeting;
- b. Hence, in order to convene the general meeting it will be preceded by a Board Meeting
- c. The change in name must be in accordance with the provisions of Section 4 (2) and (3). These sub sections prohibit a company from registering with a name similar to an existing company's name or with names listed as undesirable by the Act.
- d. After the approval of members the approval of the Central Government, must also be obtained. The power of Central Government in this regard has been delegated to the Registrar of Companies.
- e. The approval of the Central Government shall not be necessary when the name change is merely to delete or add the word "Private" before the word "Limited" in the name consequent upon conversion of the company from a public to a private company or vice versa;
- f. The documents are required to be filed with the Registrar, who will then register the new name in place of the old name of the company and issue a fresh certificate of incorporation in the new name;
- g. The new name will be effective only on and from the date of issue of the new certificate of incorporation by the Registrar as above.

Question: 3

Annual General Meeting of MGR Limited is convened on 28th December, 2008. Mr. J, who is a member of the company, approaches the company on 28th December, 2008 and demands inspection of proxies lodged with the company. Explain the legal position as stated under the Companies Act, 2013 in this regard.

(5 Marks)

Answer 3:

Under section 105 (8) of the Companies Act, 2013 every member entitled to vote at a meeting of the company or on any resolution to be moved thereat, shall be entitled during the period beginning 24 hours before the time fixed for the commencement of the meeting and ending with the conclusion of the meeting, to inspect the proxies lodged, at anytime during the business hours of the company. Provided not less than 3 days' notice in writing of the intention to inspect is given to the company.

In the given case, Mr. J who is a member approaches the company on 28th December and demands inspection of proxies lodged with the company. Based on the above provisions since prior notice of 3 days had not been given by Mr. J to the company for inspecting the proxies, the company may refuse inspection of proxy forms.

Question: 4

State what is meant by "Quorum" and when does quorum be considered immaterial under the provisions of the Companies Act, 2013.

(5 Marks)

Answer 4:

Quorum means the minimum number of members that must be present in person in order to constitute a meeting and transact business thereat. Thus quorum represents the

minimum number of members on whose presence the meeting of a company can commence its business. Under section 103 (2) in case the quorum is not present within half-an-hour from the time appointed for holding a meeting of the company the meeting shall stand adjourned to the same day in the next week at the same time and place, or to such other date and such other time and place as the Board may determine; or the meeting, if called by requisitionists under section 100, shall stand cancelled. Therefore, the quorum is an extremely important element of a validly held meeting.

Under the Companies Act, 2013 quorum is never considered immaterial in the holding of a valid meeting. However, under only one situation a meeting will be validly held even if the quorum is not present. If all the members are present, it is immaterial that the quorum required by the Articles is more than the total number of members and in such a case the meeting will be validly held even if the quorum as laid out in the Articles is not present. If for example, the Articles of a private company provide that 4 members personally present shall be a quorum and the number of members is reduced to 3, the meeting of members will be validly held when all the 3 members attend the meeting.
