

PUNJAB STATE TRANSMISSION CORPORATION LTD.

Departmental Accounts Examination- 2024 (2nd Session)

Category – SAS-II

Paper- VIII

Roll No.....

Works & Management Accounting

Time allowed: 3 hours

Max. Marks: 100

Note: All questions are compulsory

Q. 1(a) Write Short Notes on:

- Cost Centre
- Perpetual inventory system
- Stock Control through ABC analysis
- Internal Rate of Return

(Marks: 2.5*4=10)

ਪ੍ਰ.1 (ੳ) ਇਸ 'ਤੇ ਛੋਟੇ ਨੋਟ ਲਿਖੋ:

- ਲਾਗਤ ਕੇਂਦਰ
- ਸਥਾਈ ਵਸਤੂ ਪ੍ਰਣਾਲੀ
- ਏਬੀਸੀ ਵਿਸ਼ਲੇਸ਼ਣ ਦੁਆਰਾ ਸਟਾਕ ਨਿਯੰਤਰਣ
- ਵਾਪਸੀ ਦੀ ਅੰਦਰੂਨੀ ਦਰ

(ਨੰਬਰ: 2.5*4=10)

(b) The following information in respect of production of automatic components has been obtained from the cost records of ABC Ltd. for a specific period:

Sales (in units)	10,000
Variable cost per unit	Rs. 100
Fixed cost	Rs.6,00,000
Loss	Rs.1,00,000

On the basis of this information, you are required to determine individually.

- Increased sales volume required to get the company reimbursed for an extra cost of Rs.10 per unit for the use of new more effective forged part in the production of the component to increase in the sales at the existing sale price to enable the business to break even.
- The increased sales volume required to earn a profit of Rs. 1,00,000/- with a reduction of 10% in the sale price with a view to counter growing completion.
- The increased sales volume without a change in sale price per unit to meet an additional expense of Rs. 50,000/- for more intensive publicity while earning a profit of Rs. 1,00,000/-.

(Marks: 4+3+3=10)

(ਅ) ਆਟੋਮੈਟਿਕ ਕੰਪੋਨੈਂਟਸ ਦੇ ਉਤਪਾਦਨ ਦੇ ਸਬੰਧ ਵਿੱਚ ਹੇਠ ਲਿਖੀ ਜਾਣਕਾਰੀ ਇੱਕ ਖਾਸ ਮਿਆਦ ਲਈ ਏਬੀਸੀ ਲਿਮਿਟੇਡ ਦੇ ਲਾਗਤ ਰਿਕਾਰਡਾਂ ਤੋਂ ਪ੍ਰਾਪਤ ਕੀਤੀ ਗਈ ਹੈ:

ਵਿਕਰੀ (ਇਕਾਈਆਂ ਵਿੱਚ)	10,000
ਪਰਿਵਰਤਨਸ਼ੀਲ ਲਾਗਤ ਪ੍ਰਤੀ ਯੂਨਿਟ	ਰੁਪਏ 100
ਸਥਿਰ ਲਾਗਤ	6,00,000 ਰੁਪਏ
ਨੁਕਸਾਨ	1,00,000 ਰੁਪਏ

~~25 x 4~~ 100 + 2

- ਇਸ ਜਾਣਕਾਰੀ ਦੇ ਆਧਾਰ 'ਤੇ, ਤੁਹਾਨੂੰ ਵਿਅਕਤੀਗਤ ਤੌਰ 'ਤੇ ਨਿਰਧਾਰਤ ਕਰਨ ਦੀ ਲੋੜ ਹੁੰਦੀ ਹੈ।
- ਉਪਭੋਗਤਾ ਤੋਂ ਵਾਧੂ ਲਾਗਤ ਰੁਪਏ 10 ਪ੍ਰਤੀ ਯੂਨਿਟ, ਜੋ ਨਵੇਂ ਅਤੇ ਵਧੇਰੇ ਪ੍ਰਭਾਵਸ਼ਾਲੀ ਫੋਰਜ਼ਡ ਹਿੱਸੇ ਦੇ ਉਪਯੋਗ ਕਾਰਨ ਹੋਈ ਹੈ, ਨੂੰ ਵਾਪਸ ਪ੍ਰਾਪਤ ਕਰਨ ਲਈ ਵਿਕਰੀ ਦੀ ਮਾਤਰਾ ਵਿੱਚ ਵਾਧਾ ਲੋੜੀਂਦਾ ਹੈ। ਇਹ ਵਾਧਾ ਮੌਜੂਦਾ ਵਿਕਰੀ ਮੁੱਲ 'ਤੇ ਵਿਕਰੀ ਵਿੱਚ ਵਾਧਾ ਕਰਕੇ ਕਾਰੋਬਾਰ ਨੂੰ ਬਰੇਕਈਵਨ ਦੀ ਸਥਿਤੀ ਤੱਕ ਪਹੁੰਚਾਉਣ ਲਈ ਲੋੜੀਂਦਾ ਹੈ।
 - ਰੁਪਏ 1,00,000/- ਦਾ ਲਾਭ ਕਮਾਉਣ ਲਈ ਲੋੜੀਂਦੀ ਵਧੀ ਹੋਈ ਵਿਕਰੀ ਦੀ ਮਾਤਰਾ ਵਿਕਰੀ ਮੁੱਲ ਵਿੱਚ 10% ਦੀ ਕਟੌਤੀ ਦੇ ਨਾਲ ਵਧ ਰਹੀ ਸੰਪੂਰਨਤਾ ਦਾ ਮੁਕਾਬਲਾ ਕਰਨ ਲਈ।
 - 50,000/- ਰੁਪਏ ਦੇ ਵਾਧੂ ਖਰਚੇ ਨੂੰ ਪੂਰਾ ਕਰਨ ਲਈ ਪ੍ਰਤੀ ਯੂਨਿਟ ਵਿਕਰੀ ਮੁੱਲ ਵਿੱਚ ਬਦਲਾਅ ਕੀਤੇ ਬਿਨਾਂ ਵਧੀ ਹੋਈ ਵਿਕਰੀ ਦੀ ਮਾਤਰਾ 1,00,000/- ਰੁਪਏ ਦਾ ਮੁਨਾਫਾ ਕਮਾਉਂਦੇ ਹੋਏ ਵਧੇਰੇ ਤੀਬਰ ਪ੍ਰਚਾਰ ਲਈ।
(ਨੰਬਰ: 4+3+3=10)

Q. 2

- (a) A person owns a bus which runs between Delhi to Chandigarh and back, for 10 days in a month. The distance from Delhi to Chandigarh is 150 miles. The bus completes the trip from Delhi to Chandigarh and back in the same day. The bus goes another 10 days in a month towards Agra. The distance from Delhi to Agra is 120 miles. The trip is also completed in the same day. For the rest 4 days of its operation in a month it runs in the local city. Daily distance covered in local city is 40 miles.
Calculate the rate the person should charge from passenger when he wants to earn the profit of $33\frac{1}{3}\%$ on his takings. The other information are given below:

	Rs.
Cost of the Bus	60,000
Depreciation	20% p.a.
Salary of Driver	350 per month
Salary of Conductor	350 per month
Salary to Part-time Accountant	160 per month
Insurance	1,680 per annum
Diesel Consumption 4 miles per litre costing	1.00 per litre
Token Tax	600 per annum
Lubricant oil	10 per 100 miles
Repairs and Maintenance	500 per month
Permit Fee	284 per month
Normal Capacity	50 persons

The bus is generally occupied 90% of the capacity when it goes to Chandigarh and 80% when it goes to Agra. It is always full when it runs within the city. Passenger tax is 20% of his net takings.

(Marks: 10)

ਪ੍ਰ.2

- ਓ) ਇਕ ਵਿਅਕਤੀ ਦੇ ਕੋਲ ਇੱਕ ਬੱਸ ਹੈ ਜੋ ਮਹੀਨੇ ਵਿੱਚ 10 ਦਿਨ ਦਿੱਲੀ ਤੋਂ ਚੰਡੀਗੜ੍ਹ ਅਤੇ ਵਾਪਸ ਚਲਦੀ ਹੈ। ਦਿੱਲੀ ਤੋਂ ਚੰਡੀਗੜ੍ਹ ਦਾ ਫਾਸਲਾ 150 ਮੀਲ ਹੈ। ਬੱਸ ਦਿੱਲੀ ਤੋਂ ਚੰਡੀਗੜ੍ਹ ਅਤੇ ਵਾਪਸ ਦਾ ਯਾਤਰਾ ਇੱਕੋ ਦਿਨ ਵਿੱਚ ਪੂਰੀ ਕਰਦੀ ਹੈ। ਬੱਸ ਮਹੀਨੇ ਵਿੱਚ ਹੋਰ 10 ਦਿਨਾਂ ਲਈ ਦਿੱਲੀ ਤੋਂ ਆਗਰਾ ਵੱਲ ਚਲਦੀ ਹੈ। ਦਿੱਲੀ ਤੋਂ ਆਗਰਾ ਦਾ ਫਾਸਲਾ 120 ਮੀਲ ਹੈ। ਇਹ ਯਾਤਰਾ ਵੀ ਇੱਕੋ ਦਿਨ ਵਿੱਚ ਪੂਰੀ ਹੁੰਦੀ ਹੈ। ਮਹੀਨੇ ਵਿੱਚ ਬਾਕੀ 4 ਦਿਨ ਬੱਸ ਸਥਾਨਕ ਸ਼ਹਿਰ ਵਿੱਚ ਚਲਦੀ ਹੈ। ਸਥਾਨਕ ਸ਼ਹਿਰ ਵਿੱਚ ਰੋਜ਼ਾਨਾ 40 ਮੀਲ ਦਾ ਫਾਸਲਾ ਤਹਿ ਕੀਤਾ ਜਾਂਦਾ ਹੈ।

ਇਹ ਵੀ ਜਾਣਕਾਰੀ ਦਿਤੀ ਗਈ ਹੈ ਕਿ ਵਿਅਕਤੀ $33\frac{1}{3}\%$ ਨਫਾ ਆਪਣੀ ਕਮਾਈ 'ਤੇ ਕਮਾਉਣਾ ਚਾਹੁੰਦਾ ਹੈ। ਉਸਨੂੰ ਯਾਤਰੀ ਤੋਂ ਕਿੰਨਾ ਕਿਰਾਇਆ ਵਸੂਲਣਾ ਚਾਹੀਦਾ ਹੈ ਇਹ ਗਣਨਾ ਕਰੋ।

	ਰੁਪਏ
ਬੱਸ ਦੀ ਲਾਗਤ:	60,000
ਡੈਪਰੀਸਿਏਸ਼ਨ	(20% ਪ੍ਰਤੀ ਸਾਲ)
ਡਰਾਈਵਰ ਦੀ ਤਨਖਾਹ:	350 ਪ੍ਰਤੀ ਮਹੀਨਾ
ਕੰਡਕਟਰ ਦੀ ਤਨਖਾਹ:	350 ਪ੍ਰਤੀ ਮਹੀਨਾ
ਪਾਰਟ-ਟਾਈਮ ਅਕਾਊਂਟੈਂਟ ਦੀ ਤਨਖਾਹ:	160 ਪ੍ਰਤੀ ਮਹੀਨਾ
ਬੀਮਾ:	1,680 ਪ੍ਰਤੀ ਸਾਲ
ਡੀਜ਼ਲ ਦੀ ਖਪਤ 4 ਮੀਲ ਪ੍ਰਤੀ ਲੀਟਰ, ਕੀਮਤ	1.00 ਪ੍ਰਤੀ ਲੀਟਰ
ਟੈਕਨ ਟੈਕਸ:	600 ਪ੍ਰਤੀ ਸਾਲ
ਲੂਬਰੀਕੈਂਟ ਤੇਲ:	10 ਪ੍ਰਤੀ 100 ਮੀਲ
ਮੁਰੰਮਤ ਅਤੇ ਸੰਭਾਲ:	500 ਪ੍ਰਤੀ ਮਹੀਨਾ
ਪਰਮਿਟ ਫੀਸ:	284 ਪ੍ਰਤੀ ਮਹੀਨਾ
ਸਧਾਰਣ ਸਮਰੱਥਾ:	50 ਯਾਤਰੀ

ਬੱਸ ਅਮੂਮਨ 90% ਸਮਰੱਥਾ ਨਾਲ ਭਰੀ ਹੁੰਦੀ ਹੈ ਜਦੋਂ ਇਹ ਚੰਡੀਗੜ੍ਹ ਜਾਂਦੀ ਹੈ ਅਤੇ 80% ਸਮਰੱਥਾ ਨਾਲ ਜਦੋਂ ਇਹ ਆਗਰਾ ਜਾਂਦੀ ਹੈ। ਜਦੋਂ ਇਹ ਸ਼ਹਿਰ ਦੇ ਅੰਦਰ ਚਲਦੀ ਹੈ, ਤਾਂ ਇਹ ਹਮੇਸ਼ਾ ਪੂਰੀ ਤਰ੍ਹਾਂ ਭਰੀ ਹੁੰਦੀ ਹੈ। ਯਾਤਰੀ ਟੈਕਸ ਉਸ ਦੀ ਸ਼ੁੱਧ ਕਮਾਈ ਦਾ 20% ਹੈ।

(ਨੰਬਰ: 10)

(b) Difference between Budget and Forecast.

(Marks: 10)

(ਅ) ਬਜਟ ਅਤੇ ਪੂਰਵ ਅਨੁਮਾਨ ਵਿੱਚ ਅੰਤਰ।

(ਨੰਬਰ: 10)

Q. 3

(a) Following information has been obtained from the records of a Manufacturing Company:

	01.01.2006	31.12.2006
	Rs.	Rs.
Stock of Raw Materials	40,000	50,000
Stock of Finished Goods	1,00,000	1,50,000
Stock of Work-in-Progress	10,000	14,000

Transactions during the Year:

	Rs.		Rs.
Indirect Labour	50,000	Carriage outward	20,000
Lubricants	10,000	Power	30,000
Insurance on Plant	3,000	Direct Labour	3,00,000
Purchase of Raw Materials	4,00,000	Depreciation on Machinery	50,000
Sale Commission	60,000	Factory Rent	60,000
Salaries of Salesmen	1,00,000	Property Tax on Factory building	11,000
Administration Expenses	1,00,000	Sales	12,00,000

Prepare a Statement of Cost and Profit showing: (a) Cost of Raw Material Consumed, (b) Prime Cost, (c) Total Manufacturing Cost, (d) Factory Manufacturing Cost, (e) Cost of Production, (f) Cost of Goods Sold, (g) Cost of Sales and (h) Profit.

(Marks:7)

ਪ੍ਰ. 3

(ੳ) ਇੱਕ ਨਿਰਮਾਣ ਕੰਪਨੀ ਦੇ ਰਿਕਾਰਡਾਂ ਤੋਂ ਹੇਠ ਲਿਖੀ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕੀਤੀ ਗਈ ਹੈ:

	01.01.2006	31.12.2006	
	ਰੁ.	ਰੁ.	
ਕੱਚੇ ਮਾਲ ਦਾ ਸਟਾਕ	40,000	50,000	
ਤਿਆਰ ਮਾਲ ਦਾ ਸਟਾਕ	1,00,000	1,50,000	
ਕੰਮ-ਇਨ-ਪ੍ਰਗਤੀ ਦਾ ਸਟਾਕ	10,000	14,000	
ਸਾਲ ਦੌਰਾਨ ਲੈਣ-ਦੇਣ:	ਰੁ.	ਰੁ.	
ਅਸਿੱਧੇ ਲੇਬਰ	50,000	ਕੈਰੇਜ ਆਊਟਵਰਡ	20,000
ਲੁਬਰੀਕੈਂਟਸ	10,000	ਪਾਵਰ	30,000
ਪਲਾਂਟ 'ਤੇ ਬੀਮਾ	3,000	ਡਾਇਰੈਕਟ ਲੇਬਰ	3,00,000
ਕੱਚੇ ਮਾਲ ਦੀ ਖਰੀਦ	4,00,000	ਮਸ਼ੀਨਾਂ 'ਤੇ ਡੈਪਰੀਸਿਏਸ਼ਨ	50,000
ਵਿਕਰੀ ਕਮਿਸ਼ਨ	60,000	ਫੈਕਟਰੀ ਦਾ ਕਿਰਾਇਆ	60,000
ਸੇਲਜ਼ਮੈਨ ਦੀਆਂ ਤਨਖਾਹਾਂ	1,00,000	ਫੈਕਟਰੀ ਬਿਲਡਿੰਗ ਦਾ ਪ੍ਰਾਪਰਟੀ ਟੈਕਸ	11,000
ਪ੍ਰਸ਼ਾਸਨ ਦੇ ਖਰਚੇ	1,00,000	ਵਿਕਰੀ	12,00,000

ਖਰਚੇ ਅਤੇ ਮੁਨਾਫੇ ਦਾ ਬਿਆਨ ਤਿਆਰ ਕਰੋ, ਜਿਸ ਵਿੱਚ ਇਹ ਸ਼ਾਮਲ ਹੋਵੇ:

(ਕ) ਵਰਤੇ ਗਏ ਕੱਚੇ ਮਾਲ ਦੀ ਲਾਗਤ (ਖ) ਮੁੱਖ ਲਾਗਤ (ਗ) ਕੁੱਲ ਨਿਰਮਾਣ ਲਾਗਤ (ਘ) ਫੈਕਟਰੀ ਨਿਰਮਾਣ ਲਾਗਤ (ਙ) ਉਤਪਾਦਨ ਦੀ ਲਾਗਤ (ਚ) ਵਿਕਰੀ ਲਈ ਸਮਾਨ ਦੀ ਲਾਗਤ (ਛ) ਵਿਕਰੀ ਦੀ ਲਾਗਤ (ਜ) ਮੁਨਾਫਾ

(ਨੰਬਰ:7)

(b) S.V Construction Ltd. have obtained a contract for the construction of a bridge. The value of the contract is Rs. 12 lacs and the work commenced on 1st October, 2005. The following details are shown in their books for the year ended 30th September, 2006: -

Plant purchased	Rs. 60,000;
Wages paid	Rs. 3,40,000;
Material issued to site	Rs. 3,36,000;
Site expenses	Rs. 8,000;
General overheads apportioned	Rs. 32,000;
Wages accrued as on 30.09.2006	Rs. 2,800;
Material at site as on 30.09.2006	Rs. 4,000;
Direct expenses accrued as on 30.09.2006	Rs. 1200;
Work not yet certified at cost	Rs. 14,000;
Cash received being 80% of work certified	Rs. 6,00,000;
Life of plant purchased is	5 years
Scrap value is	0 (Nil)

(1) Prepare the contract account for the year ended 30th September, 2006; (2) Show the amount of profit which you consider might be fairly taken on the contract and how you have calculated it.

(Marks: 8)

(ਅ) ਐਸ.ਵੀ. ਕਨਸਟਰਕਸ਼ਨ ਲਿਮਿਟਡ. ਨੇ ਇੱਕ ਪੁਲ ਦੇ ਨਿਰਮਾਣ ਲਈ 12 ਲੱਖ ਰੁਪਏ ਦਾ ਕਾਨਟਰੈਕਟ ਪ੍ਰਾਪਤ ਕੀਤਾ ਹੈ। ਕੰਮ 1 ਅਕਤੂਬਰ, 2005 ਨੂੰ ਸ਼ੁਰੂ ਹੋਇਆ। 30 ਸਤੰਬਰ, 2006 ਨੂੰ ਖਤਮ ਹੋਏ ਸਾਲ ਲਈ ਉਹਨਾਂ ਦੀਆਂ ਕਿਤਾਬਾਂ ਵਿੱਚ ਹੇਠਾਂ ਦਿੱਤੇ ਵੇਰਵੇ ਦਰਸਾਏ ਗਏ ਹਨ:

	ਰੁ.
ਪਲਾਂਟ ਖਰੀਦਿਆ ਗਿਆ:	60,000
ਤਨਖਾਹਾਂ ਅਦਾ ਕੀਤੀਆਂ ਗਈਆਂ:	3,40,000
ਸਾਈਟ 'ਤੇ ਜਮਾਂ ਕੀਤਾ ਮਾਲ:	3,36,000
ਸਾਈਟ ਖਰਚੇ:	8,000
ਜਨਰਲ ਓਵਰਹੈਡ ਵੰਡੇ ਗਏ:	32,000
ਤਨਖਾਹਾਂ ਬਕਾਇਆ (30.09.2006):	2,800
ਸਾਈਟ 'ਤੇ ਮੌਜੂਦ ਮਾਲ (30.09.2006):	4,000
ਡਾਇਰੈਕਟ ਖਰਚੇ ਬਕਾਇਆ (30.09.2006):	1,200
ਅਪ੍ਰਮਾਣਿਤ ਕੰਮ ਦੀ ਲਾਗਤ:	14,000
ਕੈਸ਼ ਪ੍ਰਾਪਤ (ਪ੍ਰਮਾਣਿਤ ਕੰਮ ਦੇ 80% ਦੇ ਬਰਾਬਰ):	6,00,000
ਪਲਾਂਟ ਦੀ ਉਮਰ:	5 ਸਾਲ
ਸਕਰੈਪ ਵੈਲਯੂ	0(ਨਿਲ)

ਸਵਾਲ:

(1) 30 ਸਤੰਬਰ, 2006 ਨੂੰ ਖਤਮ ਸਾਲ ਲਈ ਕਾਨਟਰੈਕਟ ਖਾਤਾ ਤਿਆਰ ਕਰੋ।

(2) ਕਾਨਟਰੈਕਟ ਤੋਂ ਕਿੰਨਾ ਮੁਨਾਫਾ ਨਿਆਇਪੂਰਵਕ ਲਿਆ ਜਾ ਸਕਦਾ ਹੈ, ਇਹ ਦਰਸਾਓ ਅਤੇ ਉਸਦੀ ਗਿਣਤੀ ਵੀ ਦਿਖਾਓ।

(ਨੰਬਰ: 8)

(c) Explain Angle of Incidence.

(Marks: 5)

(ੲ) ਘਟਨਾ ਦੇ ਕੋਣ ਦੀ ਵਿਆਖਿਆ ਕਰੋ।

(ਨੰਬਰ: 5)

Q. 4 A company expects to have Rs. 37,500 cash in hand on 1st April, 2007 and requires you to prepare an estimate of cash position during the three months, April to June, 2007. The following information is supplied to you:

	Sales	Purchases	Wages	Factory Expenses	Office Expenses	Selling Expenses
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Feb	75,000	45,000	9,000	7,500	6,000	4,500
Mar	84,000	48,000	9,750	8,250	6,000	4,500
Apr	90,000	52,500	10,500	9,000	6,000	5,250
May	1,20,000	60,000	13,500	11,250	6,000	6,570
June	1,35,000	60,000	14,250	14,000	7,000	7,000

Other Informations:

1. Period of credit allowed by suppliers - 2 months.
2. 20% of sales is for cash and period of credit allowed to customers for credit sales is one month.
3. Delay in payment of all expenses- 1 month.
4. Income Tax of Rs. 57,500 is due to be paid on June 15, 2007.
5. The company is to pay dividends to shareholders and bonus to workers of Rs. 15,000 and Rs. 22,500 respectively in the month of April.
6. Plant has been ordered and is expected to be received and paid in May, it will cost Rs. 1,20,000.

(Marks: 20)

ਪ੍ਰ.4

ਇਕ ਕੰਪਨੀ ਨੂੰ ਉਮੀਦ ਹੈ ਕਿ 1 ਅਪਰੈਲ, 2007 ਨੂੰ ਇਸਦੇ ਕੋਲ ਰੁ. 37,500 ਨਕਦ ਹੋਵੇਗਾ ਅਤੇ ਤੁਹਾਨੂੰ ਅਪਰੈਲ ਤੋਂ ਜੂਨ, 2007 ਤੱਕ ਦੇ ਤਿੰਨ ਮਹੀਨਿਆਂ ਦੌਰਾਨ ਨਕਦ ਦੀ ਸਥਿਤੀ ਦਾ ਅਨੁਮਾਨ ਤਿਆਰ ਕਰਨ ਲਈ ਕਿਹਾ ਗਿਆ ਹੈ। ਹੇਠਾਂ ਦਿੱਤੀ ਜਾਣਕਾਰੀ ਪ੍ਰਦਾਨ ਕੀਤੀ ਗਈ ਹੈ:

	ਵਿਕਰੀ	ਖਰੀਦਦਾਰੀ	ਤਨਖਾਹਾਂ	ਫੈਕਟਰੀ ਦੇ ਖਰਚੇ	ਦਫਤਰੀ ਖਰਚੇ	ਵਿਕਰੀ ਦੇ ਖਰਚੇ
	ਰੁ.	ਰੁ.	ਰੁ.	ਰੁ.	ਰੁ.	ਰੁ.
ਫਰ.	75,000	45,000	9,000	7,500	6,000	4,500
ਮਾਰਚ	84,000	48,000	9,750	8,250	6,000	4,500
ਅਪ੍ਰੈਲ	90,000	52,500	10,500	9,000	6,000	5,250
ਮਈ	1,20,000	60,000	13,500	11,250	6,000	6,570
ਜੂਨ	1,35,000	60,000	14,250	14,000	7,000	7,000

ਹੋਰ ਜਾਣਕਾਰੀ:

- ਓ) ਸਪਲਾਇਰਾਂ ਦੁਆਰਾ ਦਿੱਤਾ ਗਿਆ ਕਰੈਡਿਟ ਪੀਰੀਅਡ: 2 ਮਹੀਨੇ।
- ਅ) ਵਿਕਰੀ ਵਿੱਚੋਂ 20% ਨਕਦ ਵਿਕਰੀ ਹੁੰਦੀ ਹੈ, ਅਤੇ ਕਰੈਡਿਟ ਵਿਕਰੀ ਲਈ ਗਾਹਕਾਂ ਨੂੰ 1 ਮਹੀਨੇ ਦਾ ਕਰੈਡਿਟ ਦਿੱਤਾ ਜਾਂਦਾ ਹੈ।
- ੲ) ਸਾਰੇ ਖਰਚਿਆਂ ਦੀ ਅਦਾਇਗੀ ਵਿੱਚ 1 ਮਹੀਨੇ ਦੀ ਦੇਰ ਹੁੰਦੀ ਹੈ।
- ਸ) ਆਮਦਨੀ ਟੈਕਸ ਰੁ. 57,500 ਜੇ 15 ਜੂਨ, 2007 ਨੂੰ ਭਰਨਾ ਹੈ।
- ਹ) ਕੰਪਨੀ ਨੂੰ ਅਪ੍ਰੈਲ ਮਹੀਨੇ ਵਿੱਚ ਸ਼ੇਅਰਹੋਲਡਰਾਂ ਨੂੰ ਡਿਵਿਡੈਂਡ ਅਤੇ ਮਜ਼ਦੂਰਾਂ ਨੂੰ ਬੋਨਸ ਦੇ ਤੌਰ 'ਤੇ ਰੁ. 15,000 ਅਤੇ ਰੁ. 22,500 ਅਦਾਇਗੀ ਕਰਨੀ ਹੈ।
- ਕ) ਪਲਾਂਟ ਆਰਡਰ ਕੀਤਾ ਗਿਆ ਹੈ ਜੋ ਮਈ ਮਹੀਨੇ ਵਿੱਚ ਪ੍ਰਾਪਤ ਹੋਵੇਗਾ ਅਤੇ ਉਸਦਾ ਮੁੱਲ ਰੁ. 1,20,000 ਹੈ, ਜੋ ਉਸੇ ਮਹੀਨੇ ਵਿੱਚ ਅਦਾ ਕੀਤਾ ਜਾਵੇਗਾ।

(ਨੰਬਰ: 20)

Q.5

- (a) A firm whose cost of capital is 10% is considering two mutually exclusive projects X and Y, the details of which are:

Project X
Rs.

Project Y
Rs.

Investment	70,000	70,000
Cash flow year 1	10,000	50,000
Cash flow year 2	20,000	40,000
Cash flow year 3	30,000	20,000
Cash flow year 4	45,000	10,000
Cash flow year 5	60,000	10,000
	<u>1,65,000</u>	<u>1,30,000</u>

Compute the:

1. Net present value at 10% profitably index.
 2. Internal rate of return.
- for the two projects.

Discount Factors

Year	10%	15%	20%	25%	30%	35%	40%
1	.909	.870	.833	.800	.769	.741	.714
2	.826	.756	.694	.640	.592	.559	.510
3	.751	.658	.579	.512	.455	.406	.364
4	.683	.572	.482	.410	.350	.301	.260
5	.621	.497	.402	.328	.269	.220	.186

(Marks: 15)

ਪ੍ਰ.5

(ੳ) ਇੱਕ ਫਰਮ, ਜਿਸਦੀ ਪੂੰਜੀ ਦੀ ਲਾਗਤ 10% ਹੈ, ਦੇ ਪਰਸਪਰ ਵਿਸ਼ੇਸ਼ ਪਰਿਯੋਜਨਾਵਾਂ X ਅਤੇ Y ਨੂੰ ਵਿਚਾਰ ਰਹੀ ਹੈ।

ਇਨ੍ਹਾਂ ਦੀਆਂ ਵੇਰਵਾਵਾਂ ਹੇਠਾਂ ਦਿੱਤੀਆਂ ਗਈਆਂ ਹਨ:

	ਪਰਿਯੋਜਨਾ X	ਪਰਿਯੋਜਨਾ Y
	ਰੁ.	ਰੁ.
ਨਿਵੇਸ਼	70,000	70,000
ਨਕਦ ਪ੍ਰਵਾਹ ਸਾਲ 1	10,000	50,000
ਨਕਦ ਪ੍ਰਵਾਹ ਸਾਲ 2	20,000	40,000
ਨਕਦ ਪ੍ਰਵਾਹ ਸਾਲ 3	30,000	20,000
ਨਕਦ ਪ੍ਰਵਾਹ ਸਾਲ 4	45,000	10,000
ਨਕਦ ਪ੍ਰਵਾਹ ਸਾਲ 5	60,000	10,000
	<u>1,65,000</u>	<u>1,30,000</u>

ਹੇਠਾਂ ਦਿੱਤੇ ਲਈ ਗਣਨਾ ਕਰੋ:

- ਸੁੱਧ ਵਰਤਮਾਨ ਮੁੱਲ (Net Present Value) 10% ਮੁਨਾਫੇ ਦੇ ਸੂਚਕਾਂਕ ਤੇ।
- ਅੰਦਰੂਨੀ ਮੁਨਾਫੇ ਦੀ ਦਰ (Internal Rate of Return)।

ਦੋਨੇ ਪਰਿਯੋਜਨਾਵਾਂ ਲਈ।

ਛੁਟ ਕਾਰਕ

ਸਾਲ	10%	15%	20%	25%	30%	35%	40%
1	.909	.870	.833	.800	.769	.741	.714
2	.826	.756	.694	.640	.592	.559	.510
3	.751	.658	.579	.512	.455	.406	.364
4	.683	.572	.482	.410	.350	.301	.260
5	.621	.497	.402	.328	.269	.220	.186

(ਨੰਬਰ: 15)

(b) Define Budget Manual.

(ਅ) ਬਜਟ ਮੈਨੂਅਲ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ।

(Marks: =5)

(ਨੰਬਰ: =5)

40%
714
10
4

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Sol 1(a)

(i) Cost Centre:- A cost centre is the smallest segment of activity or area or responsibility for which costs are accumulated. Typically cost centres are departments but in some instances, a department may contain several cost centres. These cost centres are the departments or sub-departments of an organization with reference to which cost is collected for cost ascertainment and cost control. For example, although an assembly department may be supervised by one foreman, it may contain several assembly lines. Sometimes each assembly line is regarded as a separate cost centre with its own assistant foreman. A cost centre can be a location i.e. an area such as department, storeyard or sales area or an item of equipment e.g. lathe machine, delivery vehicle or a person e.g. salesman, foreman.

The determination of a suitable cost centre is very important for ascertainment and control of cost. The manager incharge of a cost centre is held responsible for control of cost of his cost centre. It enables the accumulation of all such costs at one place for which a common base of recovery may be used.

(ii) Perpetual Inventory System: The Perpetual Inventory System may be defined as "a system of records maintained by the controlling department, which reflects the physical movements of stocks and their current balance." Bin cards and the stores ledger help the management in maintaining this system as they make a record of the physical movements of the stock on the receipts and issues of the materials and also reflect the balance in the stores. Thus, it is a system of ascertaining balance after every receipt and issue of materials through stock records to facilitate regular checking and to avoid closing down the firm for stocktaking. To ensure the accuracy of perpetual inventory records (ie bin card and stores ledger), physical verification of the stores is made by a programme of continuous stocktaking. It is possible that the balance of stock shown by bin cards or stores ledger may differ from the actual balance stock as ascertained by physical verification. It may be due the avoidable and unavoidable causes such as clerical mistakes, pilferage and thefts, carelessness in material handling, shrinkage and evaporation.

(iii) Stock Control through ABC Analysis: Manufacturing organizations find it useful to divide materials into three categories for the purpose of exercising selective control on materials. An analysis of the material costs will show that a smaller percentage of items of materials in the stores may contribute to a large percentage of the value of consumption and on

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the other hand, a large percentage of items may represent a smaller percentage of the value of items consumed. Between these two extremes will fall those items the percentage number of which is more or less equal to their value of consumption. Items falling in the first category are treated as "A" items, of the second category as "B" items and items of the third category are taken as "C" items. Such an analysis of material is known as ABC analysis. This technique of stock control is also known as stock control according to value method or Always Better Control method. Thus, under this technique of material control, materials are listed in "A", "B" and "C" categories in descending order based on money value of consumption.

The significance of this analysis is that a very close control is exercised over the Items of "A" group which account for a high percentage of costs while less stringent control is adequate for category "B" and very little control would suffice for category "C" items.

(iv) Internal Rate of Return: The internal rate of return for an investment proposal is the discount rate that equates the present value of initial cost of the investment with the present value of the expected net cash flows.

The value of r (internal rate of return) can be calculated either by means of computer or by the manual method and the value so obtained is compared with a required rate of return, known also as the cut off rate. If the internal rate of return is more than the required rate of return, the project is accepted, if not, it should be rejected.

Generally the required rate of return is the concern's cost of capital and the cost of capital is the rate of return on a project that will leave unchanged the market price of shares. Thus, cost of capital is the required rate of return needed to justify the use of capital.

If there are number of alternative proposals, the internal rates of all alternatives should be compared and the alternative which gives the maximum internal rate should be selected as the most profitable one.

Marks: 2.5*4 = 10

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1(b) Sales= Variable cost for 10,000 units + Fixed Cost – Loss
 =Rs. 100*10,000+Rs. 6,00,000 – Rs. 1,00,000 = Rs. 15,00,000

	Per Unit	Total (Rs.)
Sales	150	15,00,000
Less: Variable Cost	100	10,00,000
Contribution	50	5,00,000
Less: Fixed Cost	60	6,00,000
Loss	10	1,00,000

a) Contribution per unit = Rs. 50-Rs. 10 = Rs. 40
 Break- even point = Rs. 6,00,000/Rs. 40
 = 15,000 units

OR

=15,000*150 = Rs. 22,50,000

b) Reduced Contribution per unit with 10% reduction in price
 = Rs. 50- 10% of Rs. 150
 = Rs. 50- Rs. 15 =Rs. 35

Sales volume to earn profit of Rs. 1,00,000
 = F.C. + Profit/ Contribution per unit
 = Rs. 6,00,000 + Rs. 1,00,000/Rs. 35
 = 20,000 units

OR

=20,000*135 = Rs. 27,00,000

c) Contribution per unit = Rs. 50

Sales volume = $\frac{\text{Required Profit} + \text{F.C.} + \text{Additional Expenses}}{\text{Contribution per unit}}$
 = $\frac{\text{Rs. 1,00,000} + \text{Rs. 6,00,000} + \text{Rs. 50,000}}{\text{Rs. 50}}$
 = $\frac{\text{Rs. 7,50,000}}{\text{Rs. 50}} = 15,000 \text{ units}$

Or

=15,000*Rs. 150 = Rs. 22,50,000

Marks: 4+3+3 = 10

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Paper- VIII

Works & Management Accounting

Sol. 2 (i)

Particulars	Per Month Rs.	Rs.
Fixed Charges:		
Depreciation (Rs. 60,000 * 20/100 * 1/12)	1,000	
Salary of Driver	350	
Salary of Conductor	350	
Salary of part-time Accountant	160	
Insurance Rs. 1680/12	140	
Token Tax Rs. 600/12	50	
Repairs & Maintenance	500	
Permit Fee	284	2,834
Variable Expenses:		
Diesel (5,560 miles * Re. 1/4miles)	1,390	
Lubricant Oil (Rs. 10 / 100 miles * 5,560 miles)	556	1,946
Cost		4,780
Profit 33^{1/3}% of net takings or 50% on cost		2,390
Total net takings		7,170
Add: 20% Passenger Tax		1,434
		8,604
Total Passenger Miles		2,39,000
Delhi to Chandigarh	Passenger Miles	
10*300*50*90/100	1,35,000	
Delhi to Agra		
10*240*50*80/100	96,000	
Local		
4*40*50	8,000	
	2,39,000	
Rate per Passenger Mile = Rs. 8,604 / 2,39,000		3.6 paisa

Charge for Chandigarh per passenger

= 3.6 paisa* 150 miles = Rs. 5.40

Charge for Agra per passenger

= 3.6 paisa* 120 miles = Rs. 4.32

Working Note:

Total miles in a month

Miles

Chandigarh (10*150*2)

=3,000

Agra (10*120*2)

=2,400

Local (4*40)

= 160

5,560 miles

Marks: 10

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2, ii)

Budget and forecast both refer to the anticipated actions and events in a specified future period but still there are wide differences between the two as given below:

Sr. No.	Budget	Forecast
1	It relates to planned events i.e. the policy and programme to be followed in a future period under planned conditions.	It is concerned with probable events likely to happen under anticipated conditions during a specified period of time.
2	It is usually planned separately for each accounting period.	It may cover a long period or years.
3	It comprises the whole business unit. Sectional budgets are coordinated into a logical whole.	It may cover a limited function or activity of business as sales forecast.
4	Budget is a tool of control as it represents actions which can be shaped according to will to suit conditions which may or may not happen.	It does not connote any sense of control as forecast is merely a statement of future events.
5	The process of budget starts where forecast ends and converts it into a budget.	The function of forecast ends with the forecast of likely events.
6	It is made in respect of those spheres which are related to business or industry.	It is made in several other spheres which may not be connected with the budgeting process

Marks: 10

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Sol. 3(a)

Statement of Cost & Profit
for the year ended 31.12.2006

Particulars	Rs.	Rs.
Opening stock of Raw Materials	40,000	
Add: Purchase of Raw Materials	4,00,000	
	4,40,000	
Less: Closing stock of Raw Materials	50,000	
(a) Cost of Raw Materials Consumed		3,90,000
Direct Labour		3,00,000
(b) Prime Cost		6,90,000
Factory Overheads:		
Indirect Labour	50,000	
Lubricants	10,000	
Insurance on Plant	3,000	
Power	30,000	
Depreciation on Machinery	50,000	
Factory Rent	60,000	
Property Tax on Factory Building	11,000	2,14,000
c) Total Manufacturing Cost		9,04,000
Add: Opening Work-in-progress		10,000
		9,14,000
Less: Closing Work-in-progress		14,000
d) Factory (Manufacturing) Cost		9,00,000
Administration Expenses		1,00,000
e) Cost of Production		10,00,000
Add: Opening Stock of Finished Goods		1,00,000
Less: Closing Stock of Finished Goods		1,50,000
f) Cost of Goods Sold		9,50,000
Selling overheads		
Sales Commission	60,000	
Salaries of Salesman	1,00,000	
Carriage Outward	20,000	1,80,000
g) Cost of Sales		11,30,000
h) Profit		70,000
Sales		12,00,000

Marks: 7

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3. (b)

CONTRACT ACCOUNT

Dr.

Cr.

Particulars	Rs.	Amount (Rs.)	Particulars	Rs.	Amount (Rs.)
To Materials		3,36,000	By Work In Progress :		
To Wages	3,40,000		Certified Work	7,50,000	
Add: Accrued	2,800	3,42,800	Uncertified Work	14,000	7,64,000
To Site Expenses	8,000		By Materials at site		4,000
Add: Accrued	1,200	9,200	By plant at Site		48,000
To General Overhead Apportioned		32,000			
To Plant		60,000			
To Notional Profit c/d		36,000			
		8,16,000			8,16,000
To Profit & Loss A/c (Rs. 36,000 * 2/3 * 80/100)		19,200	By Notional Profit b/d		36,000
To Work In Progress A/c (Reserve)		16,800			
		36,000			36,000

Marks: 8

3. (c)

Angle of Incidence: This is the angle formed at the breakeven point at which the sales line cuts the total cost line. This angle indicates rate at which profits are being made. Large angle of incidence is an indication that profits are being made at a high rate. On the other hand, a small angle indicates a low rate of profit and suggests that variable costs form the major part of cost of production.

A large angle of incidence with a high margin of safety indicates the most favourable position of a business and even the existence of monopoly conditions.

Marks: 5

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Sol. 4

CASH BUDGET

Particulars	2007 April	2007 May	2007 June
	Rs.	Rs.	Rs.
Opening Balance (Cash in hand)	37,500	11,700	(91,050)
Receipts from:			
Cash Sales (20% of current month's sales)	18,000	24,000	27,000
Debtors (80% of previous month's sales)	67,200	72,000	96,000
Total of Receipts (A)	1,22,700	1,07,000	31,950
Payments:			
Creditors (2 months' previous purchases)	45,000	48,000	52,500
Wages (previous month's wages)	97,750	10,500	13,500
Factory Expenses (Previous month's expenses)	8,250	9,000	11,250
Office Expenses (Previous month's expenses)	6,000	6,000	6,000
Selling Expenses (Previous month's expenses)	4,500	5,250	6,570
Dividend to Shareholders	15,000	-	-
Bonus to Workers	22,500	-	-
Purchase of Plant	-	1,20,000	-
Income Tax	-	-	57,500
Total of Payments (B)	1,11,000	1,98,750	1,47,320
Closing Balance (Receipts-Payments) or (A-B)	11,700	(91,050)	(1,15,370)

The Company will need overdraft facilities in May and June to the extent of Rs. 91,050 and Rs. 1,15,370 respectively.

Marks: 20

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Sol. 5(a)

(i) Calculation of Net Present Value

(Cost of Capital being 10%)

Year	Cash Inflows		Discounted Cash Inflows		
	Project X	Project Y	P.V. Factors at 10%	Project X	Project Y
1	10,000	50,000	0.909	9,090	45,450
2	20,000	40,000	0.826	16,520	33,040
3	30,000	20,000	0.751	22,530	15,020
4	45,000	10,000	0.683	30,735	6,830
5	60,000	10,000	0.621	37,260	6,210
Present Value of cash inflow				1,16,135	1,06,550
Less: Initial cash outflow (Investment)				70,000	70,000
Net Present Value				46,135	36,550

Calculation of NPV at 10% Profitability Index

Profitability Index = Discounted Cash Inflows/ Discounted Cash Outflows

Project X= Rs. 1,16,135/ Rs. 70,000 = 1.659

Project Y= Rs. 1,00,550/ Rs. 70,000= 1.522

(ii) Internal Rate of Return for the two Projects

Project X

Year	Cash Inflows	P.V. Factors at 25%	Discounted Cash Inflows	P.V. Factors at 30%	Discounted Cash Inflows
1	10,000	0.800	8,000	0.769	7,690
2	20,000	0.640	12,800	0.592	11,840
3	30,000	0.512	15,360	0.455	13,650
4	45,000	0.410	18,450	0.350	15,750
5	60,000	0.328	19,680	0.269	16,140
			74,290		65,070

Present Value @ 30% is Rs. 65,070. Cost of Project X is Rs. 70,000, so NPV @ 30% is negative. Hence internal return must be lower than 30%. But it is higher than 25% because at the rate of discount, NPV of Rs. 74,290 is more than the cost of project.

IRR:

$$25\% + \frac{74,290 - 70,000}{74,290 - 65,070} \times 5 = 27.33\%$$

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Project Y

Year	Cash Inflows	P.V. Factors at 35%	Discounted Cash Inflows	P.V. Factors at 40%	Discounted Cash Inflows
1	50,000	0.741	37,050	0.714	35,700
2	40,000	0.559	22,360	0.510	20,400
3	20,000	0.406	8,120	0.364	7,280
4	10,000	0.301	3,010	0.260	2,600
5	10,000	0.220	2,200	0.186	1,860
			72,740		67,840

IRR: $35\% + 72,740 - 70,000 / 72,740 - 67,840 * 5 = 37.79\%$

(Marks: 15)

5(b) Budget Manual: A budget manual is a set of rules and instructions used by large organizations to prepare their budgets and related reports. As organizations become larger and more complex, it is no longer possible for just one person to prepare a budget. Large and complex organizations rely on such a manual to coordinate budgeting activities across several actors. Budget manuals are developed and updated through a budget committee that oversees standards and practices within the organization's financial units.

(Marks: 5)