STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086. (For candidates admitted during the academic year 2011-2012 and thereafter)

SUBJECT CODE: 11CM/MC/AC34

B.Com. DEGREE EXAMINATION NOVEMBER 2015 COMMERCE THIRD SEMESTER

COURSE : MAJOR CORE

PAPER : ADVANCED COST ACCOUNTING

TIME : 3 HOURS MAX. MARKS: 100

SECTION A

ANSWER ALL QUESTIONS.

 $(10 \times 3 = 30 \text{ marks})$

- 1. What is Contract Costing? State any 2 features of Contract costing.
- 2. How are costs classified in Transport Costing?
- 3. Define Standard Cost & Standard Costing.
- 4. What is meant by key factor?
- 5. What is abnormal gain? How is treated in process cost accounting?
- 6. Following expenses were incurred on a contract during 2010:

Materials Rs. 90,000, Wages Rs. 80,000, other expenses Rs. 5,000. Rs. 2,00,000 was received from the contractee, being 80% of work certified. Work done but not certified was Rs.5, 000. Determine the profit to be credited to profit & loss a/c when

- (a) Contract price is Rs. 5,50,000 (b) Contract price is Rs. 12,00,000.
- 7. Data relating to a job are given as:

Standard rate of wages per hour Rs.10, Standard hours 300, Actual rate of wages per hour Rs.12, Actual hours 200. Calculate Labour Cost Variance, Labour rate variance & Labour efficiency variance.

- 8. A transport company maintains a fleet of lorries for carrying goods from Delhi to Agra, 100 kms off. Each lorry which operates 25 days on an average in a month starts every day from Delhi with a load of 4 tonnes & returns Agra with a load of 2 tonnes. Calculate the total commercial tonne –kms & cost per commercial tonne –km when the total monthly charges for a lorry are Rs 27,000. What rate should the company charge if it plans to earn a gross profit of 20% on the freitage?
- 9. Calculate the break -even point & turnover required to earn a profit of Rs. 36,000. Fixed overheads Rs. 1,80,000, Selling Price Rs.20, Variable cost per unit Rs 2. If the company is earning a profit of Rs. 36,000 express the margin of safety available to it.

10. Following is the cost of producing 600 units of a product in Process X: Materials Rs.12,000, Labour Rs 4,500 & overheads Rs 1,500. The normal wastage is 10% of the units & this wastage can be sold in the market at Rs. 15 per unit. The actual output was 570 units. Prepare Abnormal Gain a/c & Normal Loss a/c.

SECTION B

ANSWER ANY FIVE QUESTIONS.

 $(5 \times 8 = 40 \text{ marks})$

11. S Construction company undertook a contract for erecting a sewerage treatment plant for Municipality for a total value of Rs 24 lakhs on 1.1.2009. Job would be completed by 31.7.2010. Prepare Contract A/c for the year ending 31.12.2009.

Materials (Rs.)	3,00,000	Materials at site	40,000
		on 3.12.2009	
Wages (Rs.)	6,00,000	Work certified	16,00,000
Overhead charges (Rs.)	1,20,000	Special plant	2,00,000

Cash received is 80% of work certified. Depreciate Plant by 10%.

8% of the value of material issued & 7% of wages may be taken to have been incurred for the portion of the work completed, but not yet certified. Overheads are charged as a % of direct wages. Prepare the Contract A/c.

12. The product of a manufacturing concern passes through 2 processes A & B & then to finished stock. In each process 5% of the total weight is lost & 10% is scrap which from processes A & B realizes Rs. 80 /tonne & Rs. 200/tonne respectively. Following information is given:

	Process A	Process B
Materials (tonnes)	1,000	70
Cost of materials (Rs/tone)	125	200
Wages (Rs)	28,000	10,000
Manufacturing expenses (Rs)	8,000	5,250
Output (tonnes)	830	780

Prepare process cost accounts showing cost per tonne of each process. There was no stock or WIP in any process.

13. Following information is available from the cost records of United Automobiles Ltd manufacturing spare parts.

Direct materials: X	Rs 8	Variable	150% of
Y	Rs 6	overheads	wages
Direct wages:		Fixed	Rs 750
X	24 hours @ 25paise /hour	overheads	
Y	16 hours @ 25paise /hour		
Selling price:			
X	Rs 25		
Y	Rs 20		

The directors are desirous of adopting any one of the following sales mixes for the next period.

- a) 250 units of X & 250 units of Y
- b) 400 units of Y only
- c) 400 units of X & 100 units of Y
- d) 150 units of X & 350 units of Y.

State which of the sales mixes would you recommend to the management.

14. From the following data calculate all possible overhead variances.

	Budgeted	Actual
Output	15,000 units	16,000 units
No. of working days	25	27
Fixed overheads	Rs. 30,000	Rs. 30,500
Variable overheads	Rs. 45,000	Rs. 47,000

15. John owns a fleet of trucks. His records for 2010 contain the following details. Compute cost per effective running km.

No. of trucks	10	Scrap value at the end of life	Rs 20,000
Life of each truck in kms	2,00,000	Manager's salary p.m.	Rs 2,000
Monthly distance run by a	5,000	Accountant's	Rs 1,500
truck in kms		salary p.m.	
Average empty running	20%	Driver's salary per	Rs 700
p.m.		truck per month	
Fuel usage	01 litre for every 20 kms	Cleaner's salary per	Rs 400
		truck p.m.	
Cost of truck	Rs 1,20,000	Salary of 3 mechanics common for all trucks each p.m.	Rs 500
Garage expenses for 10	Rs 12,000	Road tax per truck p.a.	Rs 1,200
trucks p.a.			
Insurance	at 2.4% on cost of truck	Price of petrol per litre	Rs 30
	p.a.		
Lubricants, tyres & repairs per km	Rs 0.40		

16. From the following data, calculate labour mix variance.

Standard Labour:

100 skilled workers @ Rs 300 per month

200 semi-skilled workers @ Rs 200 per month

Actual Labour:

110 skilled workers @ Rs 350 per month

340 semi-skilled workers @ Rs 225 per month.

Due to shortage of skilled workers, it was decided to reduce the number of skilled workers by 10% & increase that of semi skilled workers @5%.

17. B Ltd manufactures product A which yields 2 by products B & C. The actual joint expenses of manufacture for a period were Rs. 8,000. It was estimated that the profits on each product as a percentage of sales would be 30%, 25% & 15% respectively. Subsequent expenses were:

	A	В	С
	Rs.	Rs.	Rs.
Materials	100	75	25
Direct wages	200	125	50
Overheads	150	125	75
Total	450	325	150
sales	6,000	4,000	2,500

Prepare a statement showing the apportionment of the joint expenses of manufacture over the products. Presume that selling expenses are apportioned over the products as a percentage to sales.

SECTION C

ANSWER ANY TWO QUESTIONS.

 $(2 \times 15 = 30 \text{ marks})$

18. The standard cost of a chemical mixture is as under:

8 tons of material A at Rs. 40 per ton.

12 tons of material B at Rs.60 per ton.

Standard yield is 90% of input.

Actual cost for a period is as under:

10 tons of material A at Rs 30 per ton

20 tons of material B at Rs 68 per ton.

Actual yield is 26.5 tons.

Compute all material variances.

19. The following details relate to an intermediary process in a factory:

	% of degree of completion	No. of units	Cost (Rs)
Opening work in progress		300	12,300
Materials	50%		ŕ
Labour	80%		
Overheads	80%		
Transfer from previous	100%	3,800	1,36,800
process			
Process material added			7,900
Direct wages			37,400
Overheads			14,960
Transfer to next process	100%	3,500	
(finished)			
Closing work in progress		600	
Materials	100%		
Labour	80%		
Overheads	80%		

Prepare i) Process cost accounts for the intermediary process

- ii) statement of equivalent units on FIFO basis
- iii) statement of distribution of cost on the basis of equivalent units.
- 20. A company annually manufactures 10,000 units of a product at a cost of Rs.4 per unit & there is home market for consuming the entire volume of production at the sale price of Rs. 4.25 per unit. In the year 2014 there is a fall in the demand for home market which can consume 10,000 units only at the sale price of Rs 3.72 per unit. The analysis of the cost per 10,000 units is as follows:

Materials Rs 15,000, Wages Rs 11,000, Fixed Overheads Rs 8,000, Variable overheads Rs 6,000. The foreign market is explored & it is found that that this market can consume 20,000 units of the product if offered at a sale price of Rs. 3.55 per unit. It is also discovered that for additional 10,000 units of the product (over initial 10,000 units) fixed overheads will increase by 10%. Is it worthwhile to try to capture the foreign market?

21. A company undertook a contract for construction of a large building complex. The construction work commenced on 1st April, 2000 & the foll: data are available for the year ended 31st March 2001.

	Rs'000s		Rs '000s
Contract price	35,000	Plant hire charges	1,750
Work certified	20,000	Wages related to	500
		contract	
Cash received	15,000	Site office costs	678
Materials issued to site	7,500	Head office	375
		expenses	
		apportioned	
Planning & estimating	1,000	Site expenses	902
costs		incurred	
Direct wages paid	4,000	Work not certified	149
Materials returned	250		
from site			

The contractors own a plant which originally costs Rs. 20 lakhs has been continuously in use in this contract throughout the year. The residual value of the plant after 5 years of life is expected to be Rs. 5 lakhs. Straight line method of depreciation is in use. As on 31.3.2001 the direct wages due & payable amounted to Rs 2,70,000 & the materials at site were estimated at Rs 2,00,000. Prepare

- i) Contract A/c for year ended 31.3.2001 & ascertain the profit to be taken to P/L a/c
- ii) Show the relevant entries in the Balance Sheet.
