Birla Institute of Technology & Science, Pilani (Rajasthan) 333031

Financial and Management Accounting (MBA G515)

Comprehensive Semester Examination (1st Semester 2017 – 18)

Faculty Incharge: Dr. Saurabh Chadha

Date: 01st December 2017 **Time Allotted:** 3 hours **MM:** 80 Marks

(All Questions are compulsory, Closed Book)

Name: **ID No:**

Q1. Case Study: **(20 Marks)**

STI is a NRI-owned company headquartered in CA, USA. The company provides software services and software products in the area of telecom. It has been growing phenomenally in the past two years. Yet, it has to refuse projects since it is unable to handle more business. The CEO of STI has suggested that a possible solution to handle more projects could be to set up a development centre in India. To carry a feasibility study, CEO hires the services of Delhi-based consultant. The consultant identified three locations for setting up the development centre: Delhi, Noida and Gurgaon. The major cost elements associated with these three locations are summarized below:

- Rental of office space: Delhi office, Rs 3,000 per square feet per annum; Noida office, Rs 700 and Gurgaon office, Rs 900. The development centre would require the office for 50 engineers. On an average, 100 square feet per engineer would be required after taking into account all service areas also.
- Setup costs including architect's fee: Delhi office, Rs 12,00,000; Noida office, Rs 35,00,000; and Gurgaon office, Rs 17,00,000.
- Cost of 64 kpbs STP internet link shared with other companies through software technology park (STP): Delhi site, Rs 10,00,000; Noida site, Rs 8,00,000; and Gurgaon site Rs 12,00,000. However, the running cost for all the three sites would be Rs 3,00,000 per annum.
- Average price of personal computers, Rs 60,000, and workstation cost to buy additional equipment to set up the office such as UPS, LAN hubs, routers and Ethernet switch and so on, Rs 85,000 per work station at all the sites.
- Employee compensation:
    - Annual salary, Rs 2,00,000
    - Housing facility/Monthly rent of a two-bed room apartment: Delhi, Rs 9,500; Noida Rs 5,000 and Gurgaon Rs 4,500.
    - Transport facility, No. of buses required: 3; Monthly charges per bus: Delhi Rs 17,000; Noida and Gurgaon Rs 22,000 each.
- Cost of running offices:
    - Annual Electricity charges: Delhi, Rs 6,00,000; Noida Rs 7,00,000; and Gurgaon, Rs 4,50,000

- Annual water charges: Delhi Rs 25,000; Noida, Rs 28,000 and Gurgaon Rs, 38,000.
- Telephone charges: Rs 20,000 monthly irrespective of the location.

- Consultant fee: Rs 3,00,000.

Based on the above facts, prepare an annual cost schedule (Fixed and Variable Cost) for the consideration of the CEO and recommend him the best location for setting up of the development center.

Q2. Prepare the cost sheet and calculate the selling price to obtain a profit of 20% on selling price **(20 Marks)**

Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
Materials used in manufacturing	55,000	Direct Expenses	5,000
Materials used in primary packaging	10,000	Indirect expenses: Factory	1,000
Materials used in selling the product	1,500	Admin. Exp	1,250
Materials used in factory	750	Dep. on office building	750
Materials used in office	1,250	Dep. on factory building	1,750
Labour required in production	10,000	Selling Expenses	3,500
Labour for factory supervision	2,000	Freight on materials purchased	5,000
		Advertising	1,250

Q3: Prepare a cash budget for October 2017 for the Baba company, which sells one product, **(20 Marks)** herbal soap, by the case. On October 1, 2017, part of the trail balance showed:

Cash: Rs 4,800

Accounts Receivable: Rs 15,600

Allowance for Bad debts: Rs 1,900

Inventory: Rs 9,000

Accounts Payable: Rs 6,600

The company pays for its purchases within 10 days. Assume that one-third of the purchases of any month are due and paid for in the following month. The cost of the merchandise purchased is Rs 12 per case. At the end of each month it is desired to have an inventory equal in units to 50% of the following month's sales in units.

Sales terms include a 1% discount if payments are made by the end of the calendar month. Past experience indicates that 60% of the billings will be collected during the month of the sale. 30% in the following calendar month, 6% in the next following calendar month. 4% will be uncollectible. The company's fiscal year begins August 1.

Unit selling price: Rs 20

August actual sales: Rs 12,000

September actual sales: Rs 36,000

October estimated sales: Rs 30,000

November estimated sales: Rs 22,000

Total sales expected in the fiscal year: Rs 3,60,000

Exclusive of bad debts, total budgeted selling and administrative expenses for the fiscal year are estimated at Rs 61,500 of which Rs 24,000 is Fixed expense (which includes a Rs 13,200 annual depreciation charge). The Baba company incurs these fixed expenses uniformly throughout the year. The balance of the selling and general administrative expenses varies with the sales. Expenses are paid as incurred.

Q4: Consider the following data: **(10 Marks)**

- Master Budget data: sales, 2,500 clients at Rs 350 each; variable costs, Rs 250 per client; fixed costs, Rs 1,50,000.
- Actual results at actual prices: sales, 3,000 clients at Rs 360 per client; variable costs, Rs 8,00,000; fixed costs, Rs 159,500.

Prepare a summary performance report and calculate Master budget operating income, Actual operating income, sales activity variances and Flexible budget variances.

Q5: Consider the following information of two companies: **(10 Marks)**

Particulars	X Ltd	Y Ltd
Cash	210,000	320,000
Debtors	330,000	630,000
Inventory	1,230,000	950,000
Plant and Equipment	1,695,000	2,400,000
Total Assets	**3,465,000**	**4,300,000**
Creditors	900,000	1,050,000
8% Debentures	500,000	1,000,000
Equity Share Capital	2,065,000	2,250,000
Total Liabilities	**3,465,000**	**4,300,000**
Sales	5,600,000	8,200,000
COGS	4,000,000	6,480,000
Other operating expenses	800,000	860,000
Interest Expenses	40,000	80,000
Income taxes	266,000	273,000

Answer each of the following questions by making a comparison of relevant ratios:

a) Which company is using the equity shareholder's money more profitably?

b) Which company is better able to meet its current obligations?

c) If you were to purchase the debentures of one company, which company debentures would you buy?

d) Which company collects its receivables faster, assuming all sales to be credit sales?

e) Which company is extended credit for a longer period by the creditors, assuming all purchases (equivalent to COGS) to be credit purchases?