## pH 351.1

Reg. No.

## St Aloysius College (Autonomous) Mangaluru

gemester I - P.G. Examination - M.Com. (Finance and Analytics)

November - 2018 FINANCIAL STATEMENT ANALYSIS

fime: 3 hrs.

Max Marks: 70

#### SECTION - A

## Answer any FIVE of the following

(5×4=20)

- 1. Explain the structure of IFRS.
- 2. Briefly explain CPPA and CCA.

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- 3. Describe the methods of financial statement analysis.
- 4. Explain accounting concepts applicable to Profit and Loss Account.
- 5. Distinguish between cash flow statement and fund flow statement.
- 6. What is environmental accounting? Discuss corporate environment accounting practices adopted in India.
- 7. Explain capital reserve and how it is treated in consolidate financial statement.

#### SECTION - B

#### Answer any FOUR of the following

(4×10=40)

- 8. Briefly explain the need and challenges of global convergence of accounting.
- 9. Define Social Accounting. Describe the methods of measurement of social cost and benefit.
- 10. The summarized profit and loss account of P Ltd for 2017 prepared under historical cost of convention, was as follows:

		₹
Turnover		3,60,000
Less: Opening stock	36,000	
Purchases	2,00,000	
Closing stock	(52,000)	1,84,000
Gross profit		1,76,000
Less: Depreciation	20,000	
Other operating cost	1,27,000	1,47,000
Operating profit		29,000
Less: Interest payable		5,000_
Profit before taxation		24,000
Taxation		10,000
Profit after taxation		14,000
Less: Dividends		7,000
Retained profits for the year		7,000

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The following additional information is provided:

a) Relevant index for the stocks are as follows:

Average for October/December 2016	120
At December 31, 2016	124
Average for 2017	135
Average for October/December 2017	140
At December 31, 2017	143

On an average company holds stocks for 3 months

b) All the company's fixed assets were purchased when the company was incorporated in January, 2011. Their original cost was ₹ 2,00,000 and they are being depreciated over a ten year period assuming a nil residual value. There is no change in the estimated life of the asset. The following current cost valuation are provided:

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At January 1, 2017

₹ 3,10,000

At December 31, 2017

₹ 3,50,000

c) Net borrowings were approximately one third of net operating assets throughout 2017.

#### Required:

A summarized profit and loss account for 2017 prepared on CCA basis, so far as the information permits. Ignore monetary working capital adjustment.

11. From the following information, prepare a summarized balance sheet as at  $31^{\rm st}$ 

Stock velocity	
Fixed asset turnover ratio	6
	4
Capital turnover ratio	2
Gross profit	
Debt collection period	20%
Creditors payment period	2 months
The area	73 days
The gross profit was	¥ co

Closing stock was ₹ 5,000 in excess of opening stock. ₹ 60,000

All working should from part of your answer.

prepare cash flow statement of Suryam Ltd from the following:

- mater	1.4.2016	Balance	sheet		5017
Liabilities	₹	31.3.2017	Assets	1.4.2016	31.3.2017
Share capital	1,00,000	4,00,000	Goodwill	-	20,000
8% Debentures	***	2,00,000	Machinery	1,25,000	4,75,000
Retained earnings	60,000	90,000	Stock	20,000	80,000
Creditors	40,000	1,00,000	Debtors	30,000	1,00,000
Bills payable	20,000	40,000	Cash at bank	50,000	1,50,000
Provision for tax	30,000	40,000	Cash in hand	25,000	45,000
	2,50,000	8,70,000		2,50,000	8,70,000

Additional information:

- a) During 2016-17, a business of a sole trader was purchased by issuing shares for ₹ 2,00,000. The assets acquired from him were: Goodwill ₹ 20,000, Machinery ₹ 1,00,000, Stock ₹ 50,000 and Debtors ₹ 30,000.
- b) Provision for tax charged in 2016-17 was ₹ 35,000.
- c) The debentures were issued at a premium of 5% which is included in the retained earnings.

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- d) Depreciation charged on machinery was ₹ 30,000

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13. Following are given Balance Sheet as on 31<sup>st</sup> March, 2016 and 2017 of Delhi Metal works company, you are required to prepare a common size Balance sheet showing percentage in a form suitable for analysis and interpret the same.

(₹ in '000)

ST.

Liabilities	31.3.2016	31.3.2017	Assets	31.3.2016	31.3.2017
Equity share capital	1,200	1,200	Fixed asset:	ton z	PONTOKE'S
Preference share capital	600	600	Gross block	5,640	6,050
Reserves and surplus	1,800	2,150	Less: Depreciation	3,510	3,760
Debentures	400	400	Net Block	2,130	2,290
Loan (within one year)	1,470	1,310	Investments	730	730
Creditors	3,190	3,300	Cash and bank	150	350
Provision for tax	630	690	Debtors	1,660	1,950
			Stock	3,840	3,550
			Other current asset	780	780
	9,290	9,650		9,290	9,650

## SECTION - C (Compulsory)

Page No. / (1×10≈10)

14. A Ltd acquired 1,600 equity shares of ₹ 100 each in B Ltd on 1<sup>st</sup> April, 2017. summarized Balance sheets of A Ltd and B Ltd as on 31-03-2018 were as under-

	- 4-	Baland	e sheet		
Liabilities	A Ltd	B Ltd	Assets	A Ltd	Pi
Share Capital	1,121		Land and Building	1,50,000	BLto
5,000 Equity Shares of ₹ 100 each	5,00,000		Plant and Machinery	2,40,000	1,80,0
2,000 Equity Shares of ₹100 each		2,00,000	Investment in shares of B Ltd (at cost)	3,40,000	1
General reserve	2,40,000	1,20,000	Stock	1,20,000	36
Profit and loss a/c (as on 1-4-2017)	57,200	36,000	Debtors	44,000	36,0 40,0
Bank Overdraft	80,000		Bills receivables (including ₹ 3,000 from B Ltd)	15,800	
ills Payable ncluding 3,000 to A Ltd)		8,400	Cash at bank	14,500	8,00
reditors	47,100	9,000			
	9,24,300	3,73,400			
		,, -, ,, ,		9,24,300	3,73,40

You are also supplied following information:

a) B Ltd had made bonus issue out of general reserve on 31st March, 2018 as one equity share for every two shares held by its shareholders. Effect has

YSIUS COLLEGE yet to be given in the accounts for this issue.

ALORE-575 003 The Directors are adviced that land and building of B Ltd are under valued by ₹ 20,000 and plant and machinery of B Ltd overvalued by ₹ 10,000. Value of these assets have to be adjusted accordingly.

c) Sundry creditors of A Ltd include ₹ 12,000 due to B Ltd.

You are required to prepare the consolidated Balance Sheet as at 31st March 2018.

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## St Aloysius College (Autonomous) Mangaluru

Semester I - P.G. Examination - M.Com.(Finance and Analytics) November -2018

## WORKING CAPITAL MANAGEMENT

time: 3 hrs.

Max Marks: 70

#### SECTION - A

## Answer any FIVE questions.

(5x4=20)

- 1. Explain the internal factors determining the working capital requirements.
- Explain any two electronic clearance services in banks.
- Write a note on debt securitization. 3.
- Explain risk return trade off from using current liabilities.
- Explain the relevance of cash flow process.
- Write the components of working capital.
- The following information is available in respect of a company.
  - On an average, debtors are collected after 45 days. Inventories have an average holding period of 75 days and creditors period on an average is 30 days.
  - The firm spends a total of ₹120 Lakhs annually at a constant rate.
  - It can earn 20% on investments.

You are required to calculate the minimum cash to be maintained to meet the payments and savings by reducing the average inventory period by 30 ST.ALOYSIUS COLLEGE days.

SECTION - B

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(4x10=40)

## Answer any FOUR questions.

8. X Traders Ltd. currently sells on terms of net 30 days. All the sales are on credit basis and average collection period is 35 days. Currently, it sells 5,00,000 units at an average price of ₹50 per unit. The variable cost to sales ratio is 75% and a bad debt to sales ratio is 3%. In order to expand sales, the management of the company is considering changing the credit terms from net 30 to '2/10, net 30'. Due to the change in policy, sales are expected to go up by 10%, bad debt loss on additional sales will be 5% and bad debt loss on existing sales will remain unchanged at 3%. 40% of the customers are expected to avail the discount and pay on the tenth day. The average collection period for the new policy is expected to be 34 days. The company required a return of 20% on its investment in receivables. You are required to find out the impact of the change in credit policy on the profit of the company. Ignore taxes.



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9. Z Products Ltd. is considering the revision of its credit policy with a view to increasing its sales and profits. Currently all its sales are on credit and the customers are given one month's time to settle the dues. It has a contribution of 40% on sales and it can raise additional funds at a cost of 20% per annum. The marketing director of the company has given the following options with draft estimates for consideration.

Particulars	Current position	Option I	Option II	Option III
Sales (₹ Lakhs)	200	210	220	250
Credit period (months)	1	11/2	21/2	3
Bad debts (% of sales)	2	21/2	3	5
Cost of credit administration (₹ Lakhs)	1.20	1.30	1.50	3.00

Advise the company to take the right decision. (Workings should form part of the answer).

 The probability distributions of the daily usage rate and the lead time for procurement are given below. (These distributions are independent)

Daily u	sage Rate in	Lead T	ime in
Tonne	Probability	Days	Probability
2	0.2	25	0.2
3	0.6	35	0.5
40	0.2177014.	45	0.3

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The stock out cost is estimated at ₹8,000 per tonne and the carrying cost in ₹2000 per tonne per year.

- What is the optimal level of safety stock?
- · What is the probability of stock out?
- 11. Elucidate the different tools and techniques of inventory management.
- Explain the concept of operating life cycle and its relevance in working capital management.
- 13. Describe the different sources of working capital finance.

#### SECTION - C

#### 14. Compulsory

(10)

a) From the following details, prepare an estimate of the requirement of Working Capital:

Production 60,000 units

Selling price per unit ₹5

Raw material 60% of selling price

Direct wages 10% of selling price

page No.3

Overheads 20% of selling price

Materials in hand 2 months requirement

Production Time 1 month

Finished goods in Stores 3 months

Credit for Material 2 months

Credit allowed to Customers 3 months

Average Cash Balance ₹20,000

Wages and overheads are paid at the beginning of the month following/in production all the required materials are charged in the initial stage and wages and overheads accrue evenly.

- b) What is the effect of Double Shift Working on the requirement of Working Capital? The following assumptions are made before estimating the Working Capital requirement for double shift working:
  - Production will be 10000 units per month per month or 1,20,000 units per year.
  - Materials may not be required at double rate. Due to inventory control measures it may be taken as 2/3.
  - WIP will be the same at 5000 units. This will not increase as WIP of first shift will be handed over to second shift.
  - 50% of overheads are assumed as fixed. This will not increase due to double shift working.

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## St Aloysius College (Autonomous) Mangaluru

Semester I – P.G. Examination – M.Com.(Finance and Analytics)

November – 2018

**INCOME TAX** 

ge: 3 hrs.

Max Marks: 70

#### SECTION - A

## Answer any FIVE questions.

(5x4=20)

 $_{\rm Mr.\ Maitra}$ , a citizen of U.K came to India for the first time on 01-05-2011. He stayed here without any break for 3 years and left for Bangladesh on 01-05-2014. He returned to India on 01-04-2015 and went back to U.K on 01-12-2015. He was posted back to India on 20-01-2018. Determine his residential status for the assessment year 2018-19.

Shri. A.K. Roy who is not covered by the Payment of Gratuity Act, 1972 receives a gratuity of ₹11,64,000 when he retires on 23<sup>rd</sup> June 2017 after a service of 34 years, 9 months and 23 days. His last drawn emoluments are ST.ALOYSIUS COLLEGE

- Basic salary ₹75,000 per month.

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- Dearness allowance ₹15,000 per month (not as per terms of employment).
- Servant allowance ₹600 per month (fixed).
- Annual increment of basic salary ₹3,000 per month falls due on 1<sup>st</sup> January every year.

What amount of gratuity is exempt from tax in the assessment year 2018-19?

- What is meant by annual value of property? What are the deductions allowed from annual value of house property while computing the income from house property?
- What are the deduction available to the assessee under Section 36 of the I.T.Act (Any four)?
- Asha Anand, a resident individual, received in cash the following income as interest on securities during the previous year ending 31st March, 2018:
- ₹8,000 as interest on Government Securities.
- ₹7,200 as interest on debentures issued by the local authority.
- ₹7,200 as interest on debentures of Meghdoot limited (not listed at any stock exchange).
- ₹7,200 as interest on debentures of Mercury Paints Limited (listed on Delhi Stock Exchange).
- ₹7,200 as interest on tax-free debentures of Gunjan Electricals Limited (not listed on any stock exchange).
- Determine the income under the head income from other sources for the assessment year 2018-19, assuming that the interest is paid in each case on 30th June and 31st December.

6. Summarise exemptible capital gains.
7. From the following information determine the depreciation allowance for the

riu	essment year 2018-19:	
355	essment year 20	12,00,000
1.	WDA of Pant and Machinery on 01-04-2017  WDA of Pant and Machinery on 01-04-2017 for production	10,00,000
2	P&M purchased on 13 department  In June 2017, the assessee purchased the following	
3.	assets:	1,00,000
	ii) Air conditioner for guest house	4,00,000
	iii) Car	3,00,000
4.	P&M purchased on 10-11-2017 to department	

## SECTION - B

## Answer any FOUR questions.

(4x10=40)

8. Mr. Girish is the owner of following house property in Mysore. Particulars in respect of which for the year ended 31-3-2018 are as follows: Compute his income from the house property for the AY 2018-19.

Particulars	I House LOP	II House LOP ₹	III House Dwelling House ₹
Annual rent for 12 months	24,000	18,000	Nil
Standard rent	18,000	12,000	Nil
Municipal value	16,000	14,000	35,600
Total municipal tax	1,600	1,400	3,560
Municipal tax paid by Girish	1,600	700	3,560
Municipal tax paid by tenant	Nil	700	Nil
Repairs	1,000	500	2,000
Vacancy period	2 Months	Nil	Nil
Interest on loan for repairing house	800	600	2,000
Unrealised rest allowed in the A.Y 2014-15 recovered during the year for the first house.	4,000	Nil	Nil

9. Following is the Profit and Loss A/c of Mr. Sajib (resident) for the year

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particulars	7	Particulars	₹
expenses	4,500	By Gross profit	1,50,000
to Fire mount	5,600	By Bad debts recovered but allowed earlier	5,000
To Bad debto	800	By Interest from securities	6,000
To Salary to staff	78,000	By Rent received from employees	12,000
To Audit fee (in cash)	22,250	By Interest from debtors for delayed payments	3,000
To Proprietors Bonus	13,000	By Amount received from LIC on maturity of policy.	3,000
To Interest on capital	3,000		
ro Income tax	1,900		
Depreciation	2,500		
ra Sales tax (due)	3,000		
To Advance Income	1,200	2	
ro Charity	900		-/
To Motor car	40.17.750	W. mi	
To Municipal taxes of Quarters let to employees	6,000	ST.ALOYSIUS COLLEGE PG Library MANGALORE-575 003	100
To Net profit	35,600		1,79,00
	1,79,000		1,79,000

### Additional Information:

- i) Office expenses include ₹3,000 paid as compensation to an old employee whose service were terminated in the interest of the business and ₹1,200 by way of help to a poor student.
- ii) WDV of plant and machinery ₹10,000. A new machinery costing ₹20,000 was purchased on 16-12-2017 and put into use on 16-01-
- iii) 60% of motor car expenses are for proprietor's personal use. Compute business income for the A.Y 2018-19.
- 10. Mr. Ramanand inherited 20 acres of agricultural land in urban limits from his father during 1979. The FMV on 01-04-2001 was ₹38,000 per acre. He made improvements during the P.Y 2007-08 at a cost of ₹3,000 per acre

On 17-08-2017 he sold 10 acres at ₹12,50,000 per acre and expenditure on transfer was 4%. He made the following appropriations.

- a) Purchased another 10 acre of agricultural land at ₹1,90,000 per acre.
- b) Purchased residential house for ₹24,00,000.
- c) Paid ₹9,00,000 for a bank loan taken for private purpose.
- d) Compute taxable capital gains.

CII 2001-02: 100 and 2017-18:272.

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11. Mr. Sumanth assessee, furnishes following the a resident income/expenditure relevant for the previous year ending March 31, 2018.

Business Income	7
	83,0
Long term capital gain	4,10,0
Short term capital gain (not covered by the Section 111A)	20,0
Other short term capital gain	10,0
Interest on debentures	20,0
Payment of medical insurance premium on own life	9,0
Donation to the National Trust for welfare of persons with	4,0
Conations to the fund set up by the Gujarat Government	-
Solidation to Rajiv Gandhi foundation	3,0
Donation to PM Draught Relief Fund	1,0
Donation to approved the it is a state of	5,0
Donation to approved charitable institution termine his net income for the A V 2018 10	11,0

Determine his net income for the A.Y 2018-19.

12. What are the provisions regarding set-off of the following losses:

i) Long-term capital losses

ST. ALOYSIUS COLLEGE

ii) Short-term capital losses

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iii) Speculation losses

iv) Losses of lottery and card games

13. Describe any ten items of income which can be included under the head 'Income from other sources'.

#### SECTION - C Compulsory

- 14. Mr. Rajesh (Resident), a manager in the Delhi company Ltd., Delhi, submits the following particulars of income for the year ended 31-03-2018.
  - a) Basic salary ₹15,000 p.m.
  - b) D.A ₹4,000 p.m.
  - c) He draws entertainment allowance of ₹2,000 p.m. out of which he spends ₹1,500 p.m on entertaining customers of company.
  - d) He has been provided with a unfurnished house by the company for which a sum of ₹800 p.m is deducted from salary. The company pays a rent of ₹10,000 p.m for the house directly to the landlord.
  - e) During the year he received ₹18,000 medical reimbursement for the medical treatment in a private nursing home.
  - f) Mr. Rajesh had taken interest free loan of ₹16,000 to purchase
  - g) Professional tax and life insurance premium of employee were paid by the employer. Professional tax amounted to ₹200 p.m and premium on
  - h) Services of cook, watchman and gardener were provided by the employer. The salaries paid to the above amounted to ₹6,000 p.a, ₹3,000 p.a and ₹4,500 p. a respectively.
  - i) Mr. Rajesh and his family went to his home town on leave and the expenses of ₹5,600 being the cost of II class rail ticket was reimbursed
  - j) Purchase of air tickets ₹60,000 through credit card provided by the
  - k) Club facility in remote area ₹500 p.m.'

Transfer allowance ₹1,40,000 (amount spent ₹1,00,000).Compute taxable income from salary for the assessment year 2018-19.

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# St Aloysius College (Autonomous)

Mangaluru

gemester I- P.G. Examination - M.Com.(Finance and Analytics) November - 2018

**BUSINESS STATISTICS** 

fime: 3 hrs.

Max Marks: 70

## SECTION - A

## Answer any FIVE questions.

(5x4=20)

- 1. Discuss briefly the applications of statistics in business and management.
- 2. Define the terms 'Parameter', 'Statistic', 'Population' and 'Sample'.
- 3. Briefly explain the formation of a discrete frequency distribution.
- 4. Distinguish between 'Classification' and 'Tabulation'. Mention the methods of classification of data.
- 5. Find the class interval if the arithmetic mean of the following distribution is 33 and assumed mean is 35:

Step deviations	-3	-2	-1	0	+1	+2
Frequency	5	10	25	30	20	10

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- 6. Define Karl Pearson's coefficient of correlation. How do you interpret a calculated value of Karl Pearson' coefficient of correlation?
- 7. A market research firm is interested in surveying certain attitudes in a small community. There are 125 households broken down according to income, ownership of a telephone and ownership of a T.V.

	Households income of ₹8		Households with annual income of above ₹8,000		
	Telephone Subscriber	No Telephone	Telephone Subscriber	No Telephone	
Own T.V.	27	20	18	10	
No T.V.	18	10	12	10	

What is the conditional probability of drawing a household that owns a T.V.? Given that the household is a telephone subscriber?

#### SECTION - B

### Answer any FOUR questions.

(4x10=40)

- 8. "Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write" (H.G Wells). How far do you think his dream has been realized?
- Explain the i) Square and ii) Circle diagrams.
- 10. What is dispersion? Describe the significance of measuring dispersion.

11. Given below is the distribution of 140 candidates obtaining marks  $\chi$  or higher in a certain examination (all marks are given in whole numbers).

X	10	20	30	40	50	60	70	80	90	100
							25			

Calculate the mean and median marks obtained by the candidates.

12. The following table gives the distribution of items of production and also the relatively defective items among them, according to size groups. Find the correlation coefficient between size and defect in quality and its probable error.

Size-group	15-16	16-17	17-18	18-19	19-20	20-21
No. of items	200	270	340	360	400	300
No. of defective items	150	162	170	180	180	114

13. The following table shows the number of customers returning the products in a marketing territory. The data is for 100 stores:

No. of returns	0	1	2	3	4	5	6
No. of stores	4	14	23	23	18	9	9
		. 7		23	10	9	

Fit a Poisson distribution.

#### SECTION - C

## 14. Compulsory

(10)

Fit a normal curve to the following data by the method of areas:

Variable	Frequency
60-62	5
63-65	18
66-68	42
69-71	27
72-74	8

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## St Aloysius College (Autonomous)

Mangaluru

Semester I - P.G. Examination - M.Com.(Finance and Analytics) November - 2018

## ECONOMIC ANALYSIS FOR DECISION MAKING

Time: 3 hrs. 11270 1A 12 MANGALURI STARL

Max Marks: 70

### SECTION - A

## Answer any FIVE questions.

(5×4=20)

- 1. What is Decision-making of business managers? List out any four areas of decision -making by the business managers.
- 2. Demand equation for the electricity in India is Qd=2.61-0.43Px+1.22Y. Px stands for the price of the product and Y for income. If the price of the electricity is ₹5 per unit and income is ₹100, find the total quantity of electricity consumption. Calculate the price and income elasticity of demand.
- 3. Following table shows the Quarterly GDP data of India in rupees (billion) for the past three years.

Year	Quarter							
	$Q_1$	Q <sub>2</sub>	Q <sub>3</sub>	Q <sub>4</sub>				
2015-16	25630.13	25812.39	26395.26	27195.71				
2016-17	27750.63	27681.67	28213.65	28830.35				
2017-18	29291.85	29378.24	30082.46	31009.01				

Forecast for the 2018-19 first quarter based on 4 period simple moving overage and weighted moving average with 40%, 30%, 20% and 10% weights. If the actual GDP in the first quarter of 2018-19 is 31626.22, what is the percent error in forecasting?

- 4. A firm has the following production function: Q=2K" L"ST.ALOYSIUS COLLEGE Calculate marginal product functions for labour and capital ANGALORE-575 003
- Describe law of supply with diagrammatic illustration.
- Differentiate between collusive and non-collusive oligopoly.
- Describe the features of business cycle.

#### SECTION - B

#### Answer any FOUR questions.

(4x10=40)

- 8. What is meant by macro economics? Distinguish between micro economics and macro economics. What is the relationship between the two?
- 9. Distinguish between cardinal and ordinal utility measurement. Show the derivation of demand curve using indifference curves.
- 10. Briefly explain Marginal Rate of Technical Substitution (MRTS). Why does MRTS decrease along an isoquant convex to origin?

11. How do you explain Supply Function? What are the determinants and measurements of elasticity or supply?

12. What are the characteristics of an oligopolist industry? How does price and

output decisions are taken under oligopoly market? 13. Describe the various stages of business cycle. What are the causes behind

PG Library MANGALORE-575 003 these cycles?

## SECTION - C

14. Analyse the case (Compulsory)

(10)

Indian Meteorological Department (IMD) in its monsoon forecast for the year 2018 announced that monsoon will be 'normal' for the coming monsoon season which covers the period from June to September. Press release stated that the rainfall will be around 97 percent of the long period average (LPA) which comes with a model error of plus or minus five percent. Economic observers said that if the forecast turns out to be correct, it will be good for the macro economy. IMD had forecasted a normal rainfall for the two preceding years viz. 2016 and 2017, actual rainfall during these years was 97 percent and 98 percent respectively.

A comparison of the last two decades of monsoon forecast and actual rainfall shows that a forecast of normal rainfall was mostly associated with a more or less normal rainfall. Starting from 1997- to 2017, IMD forecasted normal rainfall for a total of 10 years. Actual rainfall during these years ranged from a drought with 88 percent rainfall to a surplus with 106 percent compared with the LPA and the average rainfall across these 10 years was around 97.5 percent. Comparing the average rainfall of the 10 years forecasted as normal with the definition of normal rainfall with a minimum of 96 percent to a maximum of 104 percent shows that monsoon has been on the lower side of the band indicating a deficient rainfall. However, the average rainfall in years forecasted as normal is well above the average rainfall during the El Nino years which is around 86 percent. A categorical statement by the IMD states that there is no possibility of El Nino for the coming season that should augur well for the Indian economy.

#### Questions:

- 1) Why a normal monsoon should augur well for the Indian Economy?
- 2) Why the meteorological department forecast the rainfall with an error of plus or minus five percent? Answer the question with your understanding of forecasting.

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Reg. No.

## St Aloysius College (Autonomous)

## Mangaluru

Semester I - P.G. Examination - M.Com. (Finance and Analytics)

November - 2019

## FINANCIAL STATEMENT ANALYSIS

Time: 3 hrs.

Max Marks: 70

SECTION - A PG Library

Answer any FIVE of the following

MANGALORE-575 WW3

(5×4=20)

- Describe the characteristics of a good financial statement.
- 2. What is Social Accounting? Why it is important?
- 3. What do you understand by comparative financial statement? How are they more useful than single year statement?
- 4. Briefly explain implementation challenges of IFRS.
- 5. Explain the need for inflation accounting.
- 6. Explain the fundamental assumptions as per AS 1.
- 7. How would you ascertain the amount of minority interest?

#### **SECTION - B**

#### Answer any FOUR of the following

(4×10=40)

- 8. Write a note on AS 25 Interim Financial Reporting.
- What is Human Resource Accounting? Discuss the important approaches to the valuation of human resource accounting.
- The following are the summarized Balance sheets of H Ltd and S Ltd as at 31<sup>st</sup> March 2018.

March 2018. Liabilities	H Ltd ₹	S Ltd ₹	Asset	H Ltd ₹	S Ltd ₹
Share of ₹ 100	5,00,000	2,00,000	Fixed Asset	3,50,000	1,50,000
General reserve	1,00,000		Stock	90,000	40,000
Profit and loss	95,000		Debtors	60,000	30,000
6% debentures		1,00,000	6% debentures in S Ltd (₹ 60,000)	65,000	
	60,000	45,000	Shares in S Ltd (1,500 shares)	1,20,000	
			Cash	70,000	25,000
			Profit and loss		1,00,000
	7,55,000	3,45,000		7,55,000	3,45,000

H Ltd acquired shares on 1<sup>st</sup> July 2017. The profit and loss a/c of S Ltd showed a
H Ltd acquired shares on 1<sup>st</sup> July 2017. The profit and loss a/c of S Ltd showed a
debit balance of ₹ 1,50,000 on 31<sup>st</sup> March 2017. Trade creditors of S Ltd include
₹ 20,000 for goods supplied by H Ltd on which H Ltd made a profit of ₹ 2,000.

Half of the goods were still in stock on 31<sup>st</sup> March 2018. H Ltd paid an expense of S Ltd amounting to ₹ 2,000 charged to the profit and loss of H Ltd, but not considered in the account of S Ltd.

Prepare consolidated Balance Sheet.

11. A company held the following monetary items on January 1:

	₹
Debtors	41,000
Bills receivable	10,000
cash	20,000
THE PARTY OF THE P	71,000

Less: Bills Payable 10,000

 Creditors
 25,000
 35,000

 Net monetary asset
 36,000

The transactions affecting monetary items during the year were:

- a) Sales of ₹ 1,40,000 made evenly throughout the year.
- c) Operating expenses of ₹ 35,000 were incurred evenly throughout the year.
- d) One machine was sold for ₹ 18,000 on July 1.
- e) One machine was purchased for ₹ 25,000 on December 31.

The general price index was as follows:

On January 1st	300	ST.ALOYSIUS COLLEGE
Average for the year	350	The state of the s
On July 1	360	MANUALORE-575 003
On December 31	400	

You are required to compute the general purchasing power gain or loss, for the year stated in terms of the current year-end rupee.

 Swasthik Oils Ltd has furnished the following information for the year ended 31<sup>st</sup> March 2016.

Net profit37,500Dividend (including interim dividend paid)12,000Provision for income tax7,500Income-tax paid during the year6,372Loss on sale of asset (net)60Book value of assets277.5Depreciation charged to profit and Loss account30,000Profit on sale of investment150Value of investment sold41,647.5Interest income on investment3,759		₹ In lakhs	
Provision for income tax 7,500 Income-tax paid during the year 6,372 Loss on sale of asset (net) 60 Book value of assets 277.5 Depreciation charged to profit and Loss account 30,000 Profit on sale of investment 150 Value of investment sold 41,647.5	Net profit	37,500	
Income-tax paid during the year 6,372 Loss on sale of asset (net) 60 Book value of assets 277.5 Depreciation charged to profit and Loss account 30,000 Profit on sale of investment 150 Value of investment sold 41,647.5	Dividend (including interim dividend paid)	12,000	
Loss on sale of asset (net) 60  Book value of assets 277.5  Depreciation charged to profit and Loss account 30,000  Profit on sale of investment 150  Value of investment sold 41,647.5	Provision for income tax	7,500	
Book value of assets 277.5  Depreciation charged to profit and Loss account 30,000  Profit on sale of investment 150  Value of investment sold 41,647.5	Income-tax paid during the year	6,372	
Depreciation charged to profit and Loss account 30,000 Profit on sale of investment 150 Value of investment sold 41,647.5	Loss on sale of asset (net)	60	
Profit on sale of investment 150  Value of investment sold 41,647.5	Book value of assets	277.5	
Value of investment sold 41,647.5	Depreciation charged to profit and Loss account	30,000	
	Profit on sale of investment	150	
Interest income on investment 3,759		41,647.5	
	Interest income on investment	3,759	

15,000
15,780
d 84,112.5
21,840
5,775
69,480
38,970
30,862.5
11,032.5
2,569.5

You are required to prepare the cash flow statement in accordance with AS-3 for the year ended 31<sup>st</sup> March, 2016 (Make assumptions wherever necessary).

- 13. Using the following data, complete the Balance sheet of X Ltd as at 31.03.2017
  - a) Gross profit 25% of sales.

ST.ALOYSIUS COLLEGE PG Library

b) Gross profit - ₹ 1,20,000

MANGALORE-575 003

- c) Shareholders equity ₹ 20,000
- d) Credit sales to total sales 80%.
  - e) Total inventory to total assets 4 times
  - f) Cost of sales to inventory 10 times
  - g) Average collection period 5 days, assume 365 days in a year.
  - h) Long term debt = ?
  - i) Current ratio 1.5
  - j) Sundry creditors ₹ 60,000

## Balance sheet of X Ltd as on 31.03.2017

Balaire	¥	Assets	₹
Liabilities	(	Assets	
	?	Cash	?
Sundry creditors	- 2	Sundry Debtors	?
Long term debt	·		2
Share capital	?	Inventory	
Silare Capital		Fixed assets	,
	- 3		?
	r		

SECTION - C (Compulsory)

 $(1 \times 10 = 10)$ 

14. From the following balance sheet of XYZ Co. Ltd prepare Fund Flow Statement

(₹ in 000')

Liabilities	2015	2016	Assets	2015	2016
Equity share	600	800	Goodwill	230	180
Preference share	300	200	Land and Buildings	400	340
General Reserve	80	140	Plant and machinery	160	400
Profit and Loss A/c	60	96	Debtors	320	400
Proposed dividend	84	100	Stock	154	218
Creditors	110	166	Bills Receivable	40	60
Bills payable	40	32	Cash	30	20
Tax provision	80	100	Bank	20	16
	1,354	1,634		1,354	1,634

#### Additional Information:

- a) Proposed dividend made during 2015 has been paid during 2016.
- b) Depreciation:
  - i) ₹ 20,000 on plant and machinery and ii) ₹ 40,000 on land and buildings.
- c) Interim dividend has been paid ₹ 40,000 in 2016.
- d) Income-tax ₹ 70,000 has been paid during 2016.

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## St Aloysius College (Autonomous)

## Mangaluru

Semester I- P.G. Examination - M.Com.(Finance and Analytics)

November - 2019

## WORKING CAPITAL MANAGEMENT

Time: 3 hrs.

Max Marks: 70

SECTION - ST. ALOYSIUS COLLEGE

Answer any FIVE questions.

MANGALORE-575 003 (5x4=20)

- 1. Explain the mechanism of repo and reverse repo rates.
- 2. Explain collection float and its impact on profitability.
- 3. Write a note on trade off between profitability and risk.
- 4. Write the reasons for cash flow problems.
- Explain certificate of deposit as a source of working capital finance.
- 6. Write the relevance of operating cycle in working capital management.
- 7. United Industries Ltd. projects that cash outlays of ₹37,50,000 will occur uniformly throughout the coming year. Company plans to meet its cash requirements by periodically selling marketable securities from its portfolio. The firm's marketable securities are invested to earn 12% and the cost per transaction of converting securities to cash is ₹40.
  - Use the Baumol Model to determine the optimal transaction size of marketable securities to cash.
  - What will be the company's average cash balance?
  - How many transfers per year will be required?
  - What will be the total annual cost of maintaining cash balances?

#### SECTION - B

#### Answer any FOUR questions.

(4x10=40)

8. X Traders Ltd. currently sells on terms of 30 days. All the sales are on credit basis and average collection period is 35 days. Currently, it sells 5,00,000 units at an average price of ₹50 per unit. The variable cost to sales ratio is 75% and a bad debt to sales ratio is 3%. In order to expand sales, the management of the company is considering changing the credit terms from net 30 to '2/10, net 30'. Due to the change in policy, sales are expected to go up by 10%, bad debt loss on additional sales will be 5% and bad debt loss on existing sales will remain unchanged at 3%. 40% of the customers are expected to avail the discount and pay on the tenth day. The average collection period for the new policy is expected to be 34 days. The company required a return of 20% on its investment in receivables.

You are required to find out the impact of the change in credit policy on the profit of the company. Ignore taxes.

9. The probability distributions of the daily usage rate and the lead time for procurement are given below. (These distributions are independent).

Dallering	an Pate in	Lead 7	rime in
	age Rate in Probability	Days	Probab
Tonne		25	0.2
2	0.2	The state of the s	0.5
3	0.6	35	
1	0.2	45	0.3

The stock out cost is estimated at ₹8,000 per tonne and the carrying cost is ₹2,000 per tonne per year,

What is the optimal level of safety stock? ST.ALOYSIUS COLLEGE.

 What is the probability of stock out? MANGALORE-575 003

10. A trader, whose current sales are in the region of ₹6,00,000 per annum and on an average collection period of 30 days, wants to pursue a more liberal policy to improve sales. A study of management consultants revealed the following information -

Credit Policy	Increase in collection (days)	Increase in sales (₹)	Present default anticipated (%)
Α	10	30,000	1.5
B	20	48,000	2
C	30	75,000	3
D	45	90,000	4

The selling price per unit is ₹3. The average cost per unit is ₹2.25 and variable cost per unit is ₹2. The current bad debt loss is 1%. The required rate of return is 20%. Assume 360 days a year. Which of the above policies you recommend for adoption?

- 11. Elucidate the tools and techniques used in receivables management.
- 12. Explain the factors determining the working capital requirement.
- 13. Critically evaluate the techniques and tools of inventory control.

#### SECTION - C

14. Compulsory

(10)

X Ltd is launching a new project for the manufacture of unique equipment. At full capacity of 24000 units, the cost per unit will be as follows:

Re ruit capacity of 2 to 5	₹
Materials	80
Labour and variable cost	40
Fixed manufacturing and administrative expenses	20
Depreciation	10
V. 1	150

The selling price per unit expected at ₹200 and the selling expenses per unit will be ₹10, 80% being variable.

In the first two years, production and sales are expected to be as follows:

Year	Production in units'	Sales (units)
1		14000
2		18000

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To assess working capital requirement, the following additional information were given.

- Stock of raw-material 3 months average consumption.
- Debtors one month average cost of sales.
- Creditors for supply of materials-two months average purchase of the year.
- Creditors for expenses-one month average of all expenses during the year.
- Minimum desired cash balance ₹20,000.
- Stock of finished goods is taken at average cost.

You are required to prepare a projected statement of working capital requirement for two years.

\*\*\*\*\*\*

рН	-		2		4
pН	3	5	2	۰	2

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## St Aloysius College (Autonomous)

## Mangaluru

Semester I - P.G. Examination - M.Com. (Finance and Analytics)

November - 2019

#### INCOME TAX

Time: 3 hrs.

ST.ALOYSIUS COLLEGE Marks: 70

SECTION - A PG Library
MANGALORE-575 003

(5×4=

Answer any FIVE of the following.

- "In certain cases, a person is liable not only for his income or loss, but also for the income or loss of other persons". Comment on this statement.
- Explain the provisions of Income tax Act , 1961 regarding set off and carry forward of losses.
- 3. Sri. Naveen was an employee of a company. He sought premature retirement from service on 1<sup>st</sup> November 2018 after completing 25 years of service. From 1<sup>st</sup> August, 2017 his pay scale was ₹ 18,000-900-24,300 and he was getting dearness allowance of ₹ 1,800 per month which was treated as part of salary for the purpose of retirement benefits. He had 07 months earned leave to his credit (on the basis of 30 days per year) which was approved. Hence he was paid ₹ 1,32,300 as salary and ₹ 12,600 as dearness allowance. Compute the amount exempt regarding encashment of earned leave for the assessment year 2019-20, if he joined another company on 1<sup>st</sup> January 2019 at ₹ 22,500 per month.
- The depreciated value of a block of assets (consisting of asset A and B) (rate of depreciation 10%) is ₹ 1,17,000 on 01.04.2018. The following information is available.

Asset	Rate of Depreciation (%)	Date of purchase	When it is put to use	Actual cost (₹)
Asset C	10	10.03.2018	10.04.2018	20,000
Asset D	10	01.03.2018	03.02.2019	30,000
Asset E	10	06.05.2018	06.05.2018	40,000
Asset F	10	15.05.2018	02.01.2019	60,000
Asset G	10	06.06.2018	06.04.2019	80,000

Plant A is sold on 16.08.2018 for ₹ 86,000. Determine the amount of depreciation.

- 5. Distinguish between short term capital gain and long term capital gain.
- The following particulars are of taxable income under the various heads of Shri Pramod kumar for the previous year 2018-19:

1.	Income from house property	18,000
2.	Income from the following business:-	
	a) Profit from the cloth business	35,000
	b) Loss from sugar business	16,000
	c) Loss from silver business	22,000
	d) Loss from share speculation	15,000

PH 353.1

e) Profit from specified business

70,000

Page No.2

60,000

Loss from house property for the assessment year 2018-19 is brought Income from other sources

Loss from the specified business for the assessment year 2018-19 is brought forward ₹ 1,00,000.

Compute gross total income after setting off the losses. Is there any loss which can be carried forward?

7. From the following information, compute eligible deductions from the gross total income of X for the assessment year 2019-20.

 LIC premium paid (sum assured ₹ 2,00,000 policy taken on 10.2.2017).

30,000

₹

2. Deposit in PPF

ST.ALOYSIUS COLLEGE 60,000

Repayment of housing loan to SBI PG Library 50,000

MANGALORE-575 003 30,000

Payment to LIC Pension fund

5. Interest paid on loan is taken for the higher 15,000 education of wife

6. Medical Insurance premier paid by cheque for parents (aged 75 years) not dependent on assessee.

25,000

#### SECTION - B

#### Answer any FOUR of the following

 $(4 \times 10 = 40)$ 

8. Mr. Mukesh is owner of three houses in Bengaluru.

Particulars	House A (₹)	House B (₹)	House C (₹)
Fair rent	18,000	15,000	12,000
Municipal valuation	15,000	20,000	10,000
Let out (rent per month)	2,000	1,500	2,500
Use by tenant	Residential	office	Residential
Construction started	30.5.2013	1.1.2012	2.3.2010
Construction completed	1.4.2016	1.6.2016	31.3.2011
Repair expenses	1,000	-	4,000
Collection charges	2,000	500	•
Interest on loan:-			
a) For construction	10,000	-	-
b) For marriage of daughter	-	6,000	-
c) For repair	-		1,000

Municipal tax is 10% of municipal valuation. Municipal tax of House A was paid by owner but municipal tax of House B was not paid upto 31st March 2019. Municipal tax of House C was paid by the tenant. The house C has remained vacant for 2 months. Compute his Income from House property for the assessment year 2019-20 by making assumption that housing loan in respect of House A and House C was taken after 01.04.1999.

9. Mr. David presents you the Trading and profit and loss account for the previous year ended 31st March 2019 and requires you to compute Income from business for the assessment year 2019-20.

Particulars	ment y	Particulars	₹
To opening sock	85,000	By sales	3,94,000
To purchases	2,40,000		1,10,000
To wages	35,000		
To carriage Inward	12,000		
To gross profit	12,000		
10 gross prone	1,32,000		
	5,04,000		5,04,000
To staff salary	18,750	By gross profit	1,32,000
To Bank cash transaction	18,750	By interest on	17,800
tax	12.000	debenture (net)	
To Audit fees	12,000	By bad debts recovered	
10 Addit ICCS	5,500	(previously allowed)	5,200
To income tax	32,000	By sundry income	2,650
To car expenses	15,000	By rent from house let	
To car expenses	15,000	out	90,000
To rent and rates	40,000		
To donation	2,500		
To general expenses	18,650		
To GST provision	16,000		
To technical know how purchased during the year	30,000		
To interest on capital	16,000		
To depreciation on car	18,000		
To provision for bad debts	6,500		
To net profit	16,750		
	2,47,650		2,47,650

Additional information:

ST.ALOYSIUS COLLECE MANGALORE 575 003

- i) Opening stock is under-valued by 15%.
- ii) Closing stock is over-valued by 10%. iii) Purchase includes a cash payment of ₹ 30,000 towards raw materials.
- iv) 20% of car expenses are attributable to the use of car for personal purposes.
- v) Out of the income tax and GST provision, income tax of ₹ 6,250 and GST of ₹ 1,250 were paid before filing the return of Income.
- vi) Donation of ₹ 5000 to Delhi University for carrying on research in social sciences.
- 10. Mr. Bharat pathak gives the following information:
  - i) Mr. Pathak first time went to Japan on 10th January 2008 and came back to India on 22<sup>nd</sup> June 2008.
- ii) On 30th September 2011 he went to England and came back to India after 90days.
  - iii) On 16th July 2014 he had gone to Sri lanka and came back to India after staying 100 days.
  - iv) On 2<sup>nd</sup> December 2016 he had gone to Nepal for 85 days.
  - v) In the previous year 2018-19 he was out of India for 180 days.

He submits the following details of his incomes for the previous year: Contd....4

Page No.4 PH 353.1

i) Salary ₹ 80,000 received in Japan for the services given in India.

- ii) Commission received in India for the services given in Sri Lanka ₹ 1,40,000.
- iii) House rent of the house situated in Nepal received in India ₹ 30,000.
- iv) Dividend from England based company received in India ₹ 75,000.
- v) Profit of the business situated in Japan brought to India ₹ 5,00,000. Determine residential status of Mr. Pathak for the previous year 2018-19 and compute his total income.
- 11. Mrs. Geetha Rao, a Physician and resident of Chennai submits the following receipts and payments account for the year ending 31.03.2019.

Receipts	₹	Payments	₹
To Balance b/d	70,000	By rent of clinic 2016-17 2017-18	80,000 1,20,000
To Consultation fees: 2016-17 2017-18	25,000 2,50,000 30,000	By surgical equipments	1,00,000
2018-19	80,000	By computers	50,000
To visiting fees To winning from lottery (Gross)	50,000	By interest on loan (profession)	12,000
To interest on post- office savings account	30,000	By professional books purchased (annual publication)	15,000
Tif from nationts	40,000	By purchase of car	1,50,000
To gift from patients	20,000	By household expenses	20,000
To share from HUF	90,000	By income tax	5,000
To sale of medicine To loan from bank	1,50,000	By life insurance premium	18,000
		By gift to mother	12,000
		By car expenses	30,000
		By lottery ticket	25,000
	750	By staff salary	1,20,000
		By Balance c/d	78,000
	8,35,000		8,35,000

Additional information:

- i) WDV of car on 31.03.2018 was ₹ 1,00,000 on which 15% depreciation is to be charged. Car is used 60% for profession and 40% for private
- ii) Visiting fee due but not received for 2018-19 is ₹ 18,000.
- iii) Consultation fees due but not received for 2018-19 is ₹ 8,000.
- iv) Surgical equipments and computers were purchased and put to use on

Determine taxable income from profession for assessment year 2019-20.

- 12. Mr. sudhir (resident) gives the following details for the previous year 2018-
  - 19. compute his net income for the assessment year 2019-20.
  - a) Business income ₹ 8,00,000

ST.ALOYSIUS COLLEGE PG Library MANGALORE-575 QUA

b) Any other income ₹ 80,000

c) Mediclaim insurance premium paid on 20.04.2018 to GIC on the life his dependent father (his age is 87 years and he is resident in India) -₹8,000

PH 353.1 Page No.5

d) Expenditure incurred during the previous year 2018-19 on medical treatment of his dependent grand mother being a person with disability (expenditure is recovered from GIC) ₹ 3,000.

- e) Expenditure incurred on medical treatment of dependent mother (her age is 65 years and she is resident in India during the previous year) in recognized hospital (who is suffering from diseases). (However amount is recovered from Insurance company ₹ 70,000) ₹ 80,000.
- f) Expenditure incurred on medical treatment of dependent sister (who is suffering from specified disease) in a recognized hospital (However the amount is received from insurance company ₹ 30,000) ₹ 80,000.
- g) Expenditure incurred on medical treatment of his brother who is suffering from specified disease (his age is 65 years and he is non resident in India during the previous year) in a recognized hospital (However ₹ 35,000 is recovered from the Insurance company) ₹ 45,000.
- 13. From the following particulars, compute taxable capital gains of Mr. Shankar (resident) for assessment year 2019-20.

Assets	Date of purchas	Cost (₹)	FMV on 1.4.2001	Date of sale	Sale price (₹)	Selling expenses (₹)
	е			1.10.18	15,00,000	20,000
House property	1.12.07	75,000		1.11.18	3,00,000	4,500
Personal jewellery	1.12.18	12,000	20,000			1,000
Listed debentures	1.12.07	50,000		1.02.19	2,00,000	1,000
	1 12 12	30,000	-	1.01.19	12,000	-
Personal car	1.12.12		45 000	1.03.19	8,50,000	30,000
Urban agricultural land	1.12.85	48,000	45,000		₹ 1.00.000.	

He purchased a new agricultural land on 31.03.2019 for ₹ 1,00,000.

(CII: 2001-02=100; 2007-08=129; 2012-13=200; 2018-19=280)

### SECTION - C (Compulsory)

(1×10=10)

- 14. Mr.Gupta is an employee of a textile company of Indore since 2005. He has submitted the following particulars of his income for the Financial year 2018
  - i) Net basic salary ₹4,00,000 after deduction of contribution to recognized provident fund ₹ 72,500 and rent of bungalow @ 10% of salary.
  - ii) D.A ₹ 1,000 per month (₹ 200 per month enters into retirement
  - iii) Education allowance for two children at ₹ 150 per month per child. ST.ALOYSIUS COLLEGE
  - iv) Commission on sales @1% ₹ 10,000.

PG Librar v) Entertainment allowance ₹ 700 per month.

- vi) Traveling allowance for his official tours ₹ 30,000. Actual expenditure on tour amounted to ₹ 22,000.
- vii) He resides in the bungalow of the company. Its fair rent is ₹ 10,000 per month. A watchman and cook have been provided by the company at the bungalow who were paid ₹ 4,000 per month each.
- viii) He has been provided with a large motor car for his official as well as personal use. The running and maintenance costs are borne by the
- ix) Employer's contribution to RPF is ₹ 47,500 and the interest credited to this fund at 10% rate amounted to ₹ 50,000.

Compute income from salaries for the assessment year 2019-20.

## St Aloysius College (Autonomous)

## Semester I – P.G. Examination – M.Com.(Finance and Analytics) November – 2019

## BUSINESS STATISTICS

Time: 3 hrs.

Max Marks: 70

SECTION - A PG Library

Answer any FIVE questions.

MANGALORE-575 09 (5x4=20)

Discuss briefly the applications of statistics in Economics.

The following data are the monthly salaries in rupees of 20 employees of a firm.

130	62	145	118	125	76	151	142	110	98
cr	110	100							
65	116	100	103	71	85	80	122	132	95

The firm gives bonuses of ₹10, 15, 20, 25 and 30 for individuals in the respective salary groups exceeding ₹60 but not exceeding ₹80, exceeding ₹80 but not exceeding ₹100 and so on up to exceeding ₹140 but not exceeding ₹160. Express the given data in the form of a grouped frequency

- 3. Briefly explain the term 'Measures of Central Tendency'.
- Define the term 'Class Limits', 'Class Interval', 'Class Frequency', and 'Class Mid-Point'.
- 5. What are the requisites of a good average or measure of central tendency?
- Give a few practical situations where you would expect Poisson Law to hold.
- Calculate the coefficient of correlation between X and Y series from the following data:

	Series	
	X	Y
No. of pairs of observations	15	15
Arithmetic mean	25	18
Standard Deviation	3.01	3.03
Sum of squares of deviations from mean	136	138

Summation of products of deviations of X and Y series from their respective arithmetic means = 122.

#### SECTION - B

#### Answer any FOUR questions.

(4x10=40)

- 8. Briefly explain grouped and ungrouped frequency distributions.
- 9. Explain briefly the constructions of Histogram and Ogives.

10. Two brands of tyres are tested with the following results.

Life	Number	of tyres
(in thousands of miles)	Brand X	Brand Y
20-25	1	0
25-27.5	7	4
27.5-30	15	20
30-31	10	32
31-32	15,	30
32-33	17	12
33-34	13	2
34-35	9	0
35-37.5	8	0
37.5-40	2	0
40-45	3	0
Total	100	100

Draw a histogram for each frequency distribution.

11. A charitable organization decided to give old age pension to people over sixty years of age. The scale of pensions were fixed as follows:

Age group	60-65	₹20 per month
Age group	65-70	₹25 per month
Age group	70-75	₹30 per month
Age group	75-80	₹35 per month
Age group	80-85	₹40 per month

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The ages of 25 persons who secured the pensions right are as given below: 74, 62, 84, 72, 61, 83, 72, 81, 64, 71, 63, 61, 60, 67, 74, 64, 79, 73, 75, 76, 69, 68, 78, 66, 67.

Calculate the monthly average pensions payable per person and the standard deviation.

- 12. "High positive coefficient of correlation between increase in the sale of news papers and increase of the number of crimes leads to the conclusion that newspaper reading may be responsible for the increase in the number of crimes". Discuss the statistical validity of the above statement.
- Twelve dice were thrown 4096 times. Each 4, 5 or 6 spot appearing was considered to be a success while a 1, 2 or 3 spot was failure. Calculate the theoretical frequencies for 0, 1, 2,...,12 successes.

#### SECTION - C

#### 14. Compulsory

(10)

The following table shows the corresponding values of three variables  $X_1$ ,  $X_2$  and  $X_3$ . Find the least square regression equation of  $X_3$  on  $X_1$  and  $X_2$ . Estimate  $X_3$  when  $X_1=10$  and  $X_2=6$ .

12	8	6	5	3	Xı
3	4	7	10	16	X <sub>2</sub>
30	42	54	72	90	X <sub>3</sub>
3	4 42	7			

## St Aloysius College (Autonomous) Mangaluru

Semester I - P.G. Examination - M.Com. (Finance and Analytics)

November - 2019

### FINANCIAL MANAGEMENT AND POLICY

Time: 3 hrs.

Max Marks: 70

(5×4=20)

SECTION - A ST.ALOYSIUS COLLEGE

Answer any FIVE of the following.

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Explain profit maximization and state its limitations.

- 2. Elucidate the emerging role of financial manager.
- 3. What is the significance of cost of capital?
- 4. Explain the usefulness of leverage in financial decision making.
- 5. Explain the traditional approach of capital structure.
- 6. A firm's sales ₹ 75,00,000; variable costs ₹ 42,00,000 and fixed cost ₹ 6,00,000. It has borrowed ₹ 45,00,000 at 9% and its equity capital ₹ 55,00,000. Calculate the operating, financial and combined leverages of the firm.
- 7. The following information is supplied to you about a company.

Earnings of the company ₹ 1

₹ 15,00,000

Dividends paid

₹ 5,00,000

Number of issued shares

₹ 1,00,000

Price earnings ratio

10

Rate of return on investment

15%

Determine the theoretical market price as per Walter's approach. What is the optimum dividend payment ratio for the firm?

#### **SECTION - B**

### Answer any FOUR of the following.

(4×10=40)

8. Skyline Software Ltd has appointed you as its financial manager. The company wants to implement a project for which 30 lakhs is required to be raised from the market as a means of financing the project. The following financing plans and options are at hand.

₹ in 000's

Particulars	Plan A	Plan B	Plan C
Option 1: Equity shares	30	30	30
Option 2:			
Equity shares	15	20	10
12% Preference shares	Nil	10	10
10% Non convertible debentures	15	Nil	10

Assuming corporate tax to be 35% and the face value of all the shares and debentures to be ₹ 100 each. Calculate the indifference points and earnings per share (EPS) for each of the financing plans. Which plan should be accepted by the company? Give reasons.

9. A firm's after tax cost of capital of the specific sources and their sources are as below:

Source	(7)	[7]	Specific costs (%)
Debt	3,00,000	2,70,000	8
Preference capital	2,00,000	2,30,000	14
Equity	5,00,000	7,50,000	17
PROPERTY.	10,00,000	12,50,000	

Calculated the weighted cost of capital using

- a) Book value weights
- b) Market value weights
- Consider the following figures pertaining to risk free rate, market rate of return of a security of A Ltd. during the last 6 years.

Year	Risk free rate (R <sub>f</sub> )	Market rate (R <sub>m</sub> )	Security return (R <sub>1</sub> )
1	0.06	0.14	0.08
2	0.05	0.03	0.11
3	0.07	0.21	0.29
4	0.08	0.26	0.25
5	0.09	0.03	0.07
6	0.07	0.11	0.04

On the basis of the above information, you are required to determine the cost of equity capital using CAPM. Past data may be taken as proxy for the future.

11. The following is the data regarding two companies 'X' and 'Y' belonging to the same risk class:

Particulars	Company X	Company Y
Number of ordinary shares	90,000	1,50,000
Market price per share	₹ 1.20	₹ 1.00
6% debentures	₹ 60,000	
Profit before interest	18,000	18,000

All profits after debenture interest are distributed as dividends. Explain how an investor holding 10% of shares in Company X will be better off in switching his holdings to Company Y.

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12. Explain in detail the concept of

a) Leverages and financial distress

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- b) Ratios and industry norms for capital structure
- From the following capital structure of XYZ, determine appropriate weighted average cost of capital after calculating specific costs.

₹

Equity shares (1,00,000) 38,00,000

Preference shares 8,00,000

Debentures 50,00,000

Bank loan (long term) 18,00,000

Bank loan (short term) 14,00,000

Trade creditors 6,00,000

#### Additional information:

- i) Equity shares include the existing 60,000 shares having current market value of ₹ 40 per share and the balance is net proceeds from the new issue in the current year (issue price of the share ₹ 40; floatation cost per share ₹5) The projected EPS and DPS for the current year are ₹ 8 and ₹ 5 respectively.

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- ii) Dividend indicated on preference shares is 12%. PG Library
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- iii) Pre tax cost of debentures 11%
- iv) Interest on bank loan 12% (long term) and 11.5% (short term)
- v) Corporate tax: 35% Dividend tax 10%
- vi) Market value of preference shares is ₹ 8,50,000

## SECTION - C (Compulsory) (1×10=10)

- 14. Company X and Company Y are in the same risk class and are identical in every respect except that Company X uses debt, while Company Y does not. The levered firm has ₹ 9,00,000 debentures carrying 10% rate of interest. Both the firms earn 20%. Operating profit on their total assets of ₹ 15 lakhs. Assume perfect capital markets, rational investors and so on; a tax rate of 35% and capitalization rate of 15% for an all equity company.
  - a) Compute the value of firms X and Y using the net income (NI) Approach.
  - b) Compute the value of each firm using the net operating income (NOI)
     Approach.
  - c) Using the NOI Approach, calculate the overall cost of capital (K<sub>0</sub>) for firms X and Y.
  - d) Which of these two firms has an optimal capital structure according to the NOI Approach? Why?

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