EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT

Second Year First Semester Examination in Bachelor of Business Administration/ Bachelor of Commerce -2017/2018(July 2019)

(Proper)

DAF 2033 Fundamentals of Corporate Finance

Answer All Questions. Time: Three (03) hours.

Calculator Permitted.

Use Table Attached.

The financial statements of RTS plc Trading Company are given below:

The Income statement for the year ended 31.12.2018

	Rs. '000	Rs. '000
Sales		4,000
Less : Cost of Sales:		
Opening Stock	400	
Purchase	2,400	
	2,800	
Less: Closing Stock	600	2,200
Gross Profit		1,800
Add: Investment Income		100
		1,900
Less: Operating expenses:		
Administration	600	
Selling & Distribution	400	
Finance	60	1,060
Operating Profit Before Tax		840
Less: Taxation		240
Operating Profit After Tax		600

The Statement of Financial Position as at 31st December

Assets	2017		2018	
	Rs. '000	Rs. '000	Rs. '000	Rs. '
Non- Current Assets:				
Property	1,900		1,900	
Plant and Machinery	900		800	
Motor Vehicles	400		300	
Furniture and Equipment	350	3,550	300	3,
Current Assets:				
Stocks	400		600	
Debtors	620		880	
Cash & Cash Equivalents	230	1,250	420	1
Total		**4,800**		5
Liabilities				
Capital and Reserves				
Stated Ordinary Share Capital (88,000 shares)	1,760		1,760	
Stated 10% Preference Share Capital (3,000 shares)	600		600	
General Reserve	420		520	
Accumulated Profits	600	3,380	800	3
Non-Current Liabilities				
15% Debentures		320		
Current Liabilities				
Creditors	550		560	
Tax Payable	220		240	
Dividends Payable	250		300	
Administrative expenses payable	80	**1,100**	100	1
Total		**4,800**		5

02. The Statement of Financial Position of DRG plc as at 31.12.2018 is as follows:

Liabilities	Rs.	Assets	Rs.
Ordinary shares (Rs.10 each)	2400,000	Non-current Assets	2000,000
12% Redeemable Preference shares (Rs.10 each)	800,000	Investment	1000,000
Profit & Loss Account	600,000	Debtors	800,000
Creditors	200,000	Cash & Bank	200000
	4000,000		**4000,000**

All the 12% redeemable preference shares were to be redeemed at the stated value of Rs.10 each on 01.01.2019 out of the distributable profits amounting to Rs.500,000. The company issued sufficient number of ordinary shares at Rs.10 each to back up the balance of fund required. All the shares were subscribed fully and cash duly received. Part of investments costing Rs.300,000 was sold for Rs.350,000. Payment was duly made to the preference shareholders.

Required:

Open the relevant ledger accounts, post into them the above transactions, and draft the Statement of Financial Position of the company after the redemption of preference shares.

(15 Marks)

03.

a. Two components A and B are used as follows :

Normal usage	300 units per week each.
Maximum usage	450 units per week each.
Minimum usage	150 units per week each.
Re-order Quantity	A 2400 units B 3,600 units.
Re-order Period	A-4 to 6 weeks, B-2 to 4 weeks.

Calculate for each component

(a) Re-order level. (b) Minimum level.

(c) Maximum level. (d) Average stock level.

Top Brand Garments is a garment manufacturing Company consisting of th production departments namely, Cutting, Stitching, and Ironing, and two ser departments namely, Maintenance and Welfare.

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b. A firm is able to obtain quantity discounts on its orders of material as follows:

Price per tonne Rs	Tonnes
6.00	Less than 250
5.90	250 and less than 800
5.80	800 and less than 2,000
5.70	2,000 and less than 4,000
5.60	4,000 and over

The annual demand for the material is 4,000 tonnes. Stock holding costs are 2 of material cost per annum. The delivery cost per order is Rs 6. You are requ to calculate the best quantity to order.

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04. The budgeted Production Overhead for a quarter of 2019 was as follows.

Overheads	**Rs.**
Indirect materials	75000
Indirect wages	50000
Depreciation on machineries	100000
Rent for building	75000
Power and Energy for machinery	50000
Lighting	25000
Insurance for machineries	15000

The bases for the apportionment of overhead among the departments were as follows.

Bases	Total	Departments				
		Cutting	Stitching	Ironing	Maintenance	Welfare
Direct Material (Rs.000)	150	100	20	10	10	10
Direct Wages (Rs.000)	100	30	50	10	5	5
Value of Machineries (Rs.000)	1000	400	300	200	50	50
Floor Area (Sq. ft.000)	50	20	15	10	3	2
Machine Hours (000)	25	5	10	5	3	2
Direct Labour Hours	3000	500	1500	800	100	100
No.of Switches	250	50	100	75	15	10

The total overheads of the service departments, Maintenance and Welfare, were to be re apportioned among the Production departments as follows.

	Cutting	Stitching	Ironing	Maintenance	Welfare
Maintenance %	30	40	20	-	10
Welfare %	20	40	20	20	-

Required:

i. Using appropriate bases, apportion the production overhead among all the departments.

ii. Reapportion the total overhead of the service departments among the production departments using Algebra method or repeated apportionment method.

iii. Calculate the Overhead absorption rate (Rs.) based on direct labour hours for all the production departments.

iv. Determine the total cost of a garment whose direct material cost and direct labour cost are Rs. 250 and Rs.150 respectively and which would consume labour hours of 4, 5 and 3 in departments of Cutting, Stitching, and Ironing respectively.

(25 Marks)

05.

a. Micro plc manufactures dresses. It produces three varieties of dresses, which a immensely popular because they are designed in a very innovative style. Informati on future market demands as well as labour hours is given the table below.

	Type 1	Type 2	Type 3
Contribution	Rs.80	Rs.60	Rs.100
Labour hours required per unit	2	3	4
Estimated sales demand (units)	650	800	900

This year company faces the problem of restricted labour hours. There are 4,0 labour hours available.

Required:

Calculate optimum production plan for the company in order to maximize t profits.

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b. The information of XY plc given below:

(a)

Month	Sales Rs.	Materials Rs.	Wages Rs.	Overheads Rs.
February	14,000	9,600	3,000	1,700
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

(b) Credit terms are :

Sales and debtors-10% sales are on cash, 50% of the credit sales are collect next month and the balance in the following month.

Creditors - Materials 2 months

Wages ¼ month

Overheads ½ month

(c) Cash and bank balance on Ist April, 2010 is expected to be Rs. 6,000.

04. (I) A firm is considering two mutually exclusive investments, Project P and Project Q. The expected cash flows of these projects are as follows:

year	Cash flows (Rs)	
	Project P	**Project Q**
0	(750,000)	(850,000)
1	450,000	50,000
2	350,000	100,000
3	200,000	150,000
4	120,000	300,000
5	80,000	600,000

Cost of capital is 10%

Required:

(i) Calculate the NPV for each of the projects.

(ii) What is the IRR of each project?

(iii) Which project would you choose? Why?

(15 Marks)

(II) A Project costs Rs.200,000 now and is expected to generate an annual cash inflow of Rs.85,000, Rs.60,000, Rs.6,5000, and Rs.90,000 during the each year of next 4 years. The opportunity cost of capital is 12%.

Required:

(a) Calculate the Payback Period (PP) of the project. If the maximum PP is set 3 years, should it be accepted?

(b) Calculate the Discounted Payback Period (DPP) of the project. If the maximum DPP is set 3 years, what would be the answer?

(10 Marks)

(Total 25 Marks)