



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF CIVIL AND WATER ENGINEERING

CIVIL ENGINEERING BUSINESS STUDIES II

TCW 5102

Supplementary Examination Paper

July 2016

This examination paper consists of 6 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: NONE

Examiner's Name: MR A. DUBE

INSTRUCTIONS

1. Answer any Four (4) questions
2. Each question carries 25 marks
3. Use of calculators is permissible

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25
TOTAL	100

QUESTION 1

a) Explain the common law duties of employers towards their employees.

(15 marks)

b) An employer is vicariously liable for the delicts, that is , wrongs committed by his employees acting in course and within the scope of their employment.

Explain the grounds under which this principle is often justified. **(10 marks)**

QUESTION 2

a) Compare and contrast the following types of business organizations:

i) A sole proprietorship with a partnership, **(9 marks)**

ii) A partnership with a company. **(9 marks)**

a) Explain the disadvantages a public company has over a private company.

(7 marks)

QUESTION 3

A company has to choose between two projects both of which involve an investment of £25,000. The current cost of capital is 10%. The net cash flows of the projects are:

Year	Project A	Project B
	\$	\$
1	2,000	15,000
2	3,000	5,000
3	3,000	5,000
4	8,000	3,000
5	22,000	9,000

Required:

- b) For each Project calculate the following:
- i) Simple Payback Period..... **(3 marks)**
 - ii) Net Present value (NPV) **(6 marks)**
 - iii) Profitability Index (P.I.) **(3 marks)**
 - iv) Internal Rate of Return (IRR) **(7 marks)**
- b) State 3 advantages and 3 disadvantages of the Payback method **(6 marks)**

QUESTION 4

Discuss the information needs of each of the following accounting information users:

- a) Management, (5 marks)
- b) Shareholders, (5 marks)
- c) The bank; (5 marks)
- d) Employees; (5 marks)
- e) Competitors. (5 marks)

QUESTION 5

The following list of balances has been were extracted from the books of Tanya Ltd as at 31 December 2015:

	\$	\$
Issued and paid-up capital:		
160 000 ordinary shares @ \$1		160 000
40 000 8% preference shares @ \$2		80 000
P & L account (1 January 2015)		7 780
General reserve		25 000
7% debentures		40 000
Premises cost	287 910	
Motor vehicles (cost)	32 000	
Plant, equipment (cost)	16 880	
Provision for depreciation of motor vehicles		4 800
Stock (1 January 2015)	49 600	
Bank overdraft		11 752
Cash	1 558	
Purchases and Sales	535 600	696 500
Returns	500	1 600
Wages	65 460	
Rates, water, insurance	3 600	
General expenses	22 536	
Preference dividend paid	3 200	
Debtors, creditors	60 260	53 944
Bad debts	2 150	
Discount allowed	122	
	<u>1 081 376</u>	<u>1 081 376</u>

Additional details as at 31 December 2015:

- a) Stock value \$39 400.
- b) Rates pre-paid \$1 000. Wages still outstanding \$3 360.
- c) Invoice unpaid for general expenses \$30.
- d) Depreciation: motor vehicles 20% on cost.
plant and equipment 25% on cost.
- e) The directors of the company propose a dividend of 10% for ordinary shares. Preference shares to receive their final dividend.
- f) Debenture interest is owing as at 31 December 2015.
- g) A provision of \$19 200 is to be made for taxation.

Required:

- a) From the information supplied above, prepare the following statements for Tanya Ltd for the year ending 31 December 2015:
 - (i) Statement of Comprehensive Income (11 marks)
 - (ii) Statement of Changes in Equity (4 marks)
 - (iii) Statement of Financial Position . (10 marks)

QUESTION 6

Tonderai graduated as a civil and water engineer at NUST three years ago. He is currently employed by Chegutu Municipality. Although a full-time employee, Tonderai also does part-time work with a number of construction companies within and outside the city of Chegutu.

Since attending a workshop at NUST on Entrepreneurship, Tonderai has been thinking very hard on how he could raise funds to start a consultancy firm. He believes that he could invest a regular sum of money at the end of each month for a period of five years in order to raise a capital amount of \$50 000 with which he should start 'Tonderai Civil & Water Engineers Consultancy (Pvt) Limited'.

After visiting a number of banks and other finance houses, Tonderai found that these institutions offered a variety of investment schemes. However, he seemed to be attracted by the Stanbic Bank scheme that guaranteed a nominal rate of 15% per annum monthly compounding for investments of five years and above.

You have been approached by Tonderai for advice on a number of issues.

- a) Calculate for Tonderai the regular sum of money to be invested at the end of each month in order to raise the requisite capital amount. **(6 marks)**

- b) Determine how much Tonderai could invest today at 15% per annum monthly compounding for five years in order to raise the \$30 000. **(6 marks)**

- c) Many new businesses collapse at their infancy, advise Tonderai on ALL issues that he must know or understand in relation to the efficient running of a business. **(13 marks)**