

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

END OF SEMESTER EXAMINATIONS MAY 2004

PROJECT DEVELOPMENT AND MANAGEMENT – TXT 4229

TIME: 3 HOURS

INSTRUCTIONS

Answer **ANY** five (5) questions from the six (6) provided. Each question carries 20 marks.

1. Winchester plc is considering acquiring a machine to produce parts for the motor industry. Two machines are available, Machine A and Machine B. Machine A has an investment cost of \$4 848 000 while machine B costs \$7 590 000.

The following are their expected cash flows over 4 years.

Machine A		Machine B	
Year	Cash Flow	Year	Cash Flow
1	4 000 000	1	1 000 000
2	2 000 000	2	1 000 000
3	1 000 000	3	4 000 000
4	500 000	4	4 000 000

The cost of capital is 10%

- (a) Rank the machines in accordance with their NPV and their IRR. (15 marks)
- (b) Advse Wincheste plc which machine they should select and why. (5 marks)
2. Please refer to the attached information on the Matabeleland Zambezi Water Project (MZWP)
- (a) What type of project is MZWP? (2 marks)
- (b) Identify the sub projects of MZWP and their deliverables (8 marks)
- (c) You have been engaged as Project Manager for the pipeline sub project. Describe how you would produce the project statement of work (SOW). (10 marks)

3. (a) Graphically present the Project Life – cycle structure. (4 marks)
- (b) To which part of the structure are maximum resources needed and why? (6 marks)
- (c) What factors influence the shape of the project life-cycle cash flow curve? (10 marks)

3. Draw the network and identify the critical path. Also calculate the earliest, latest and finishing times for each activity shown on the following table.

Activity	Proceeding Activity	Time (weeks)	
A	-	4	
B	-	6	
C	A, B	7	
D	B	8	
E	B	5	
F	C	5	
G	D	7	
H	D, E	8	
I	F, G, H	4	(20 marks)

5. (a) What is project management?
Illustrate your answer with a pictorial representation (6 marks)
- (b) List four (4) of the most important roles of a project manager (4 marks)
- (c) Describe the project managers role in value management. (10 marks)
6. Describe the elements of a project close-out report. (20 marks)

END OF QUESTION PAPER