BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF ECONOMICS

PROGRAMME: MASTER OF SCIENCE IN PURCHASING AND SUPPLY CHAIN MANAGEMENT

EXAMINATION JUN 2024

COURSE: PROJECT AND CONTRACT MANAGEMENT (MSC 505)

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. **Section A** is compulsory

2. Answer any three (3) questions in **Section B.**

2. Begin a new answer on a fresh page.

3. No cell phones are allowed in the examination room.

SECTION A: This section is compulsory.

Question 1

A building project is to be undertaken. The table below the activities involved.

Activity	Immediate Predecessors	Duration (Days)	Number of Workers Required
A	--	2	3
B	A	4	2

C	A	6	1
D	B,C	8	3
E	C	3	2
F	D	2	2
G	D,E	4	2
H	D,E	6	1
I	F,G,H	2	3

a) Complete the activity network for the project.　　　　　　　　(4 marks)

b) Find the earliest start time for each activity.　　　　　　　　(2 marks)

c) Find the latest finish time for each activity.　　　　　　　　(2 marks)

d) Find the critical path and state the minimum time for completion　　(3 marks)

e) State the float for each non-critical activity.　　　　　　　　(2 marks)

f) Given that each activity starts as early as possible, draw a resource histogram for the project.　　　　　　　　(4 marks)

g) There are only 3 workers available at any time. Use resource levelling to explain why the project will overrun and state the minimum extra time required.(3 marks)

SECTION B: Answer any 3 questions in this section.

Question 2

A property owner is faced with a choice of:

(a) A large-scale investment (A) to improve her flats. This could produce a substantial pay-off in terms of increased revenue net of costs but will require an investment of $1,400,000. After extensive market research it is considered that there is a 40% chance that a pay-off of $2,500,000 will be obtained, but there is a 60% chance that it will be only $800,000.

(b) A smaller scale project (B) to re-decorate her premises. At $500,000 this is less costly but will produce a lower pay-off. Research data suggests a 30% chance of a gain of $1,000,000 but a 70% chance of it being only $500,000.

(c) Continuing the present operation without change (C). It will cost nothing, but neither will it produce any pay-off. Clients will be unhappy and it will become harder and harder to rent the flats out when they become free.

How will a decision tree help the taking of the decision? **(25 marks)**

Question 3

Explain how technological innovation is aiding project planning and management.
(25Marks)

Question 4

Model forms of contracts may be used by buyers and sellers as the basis for their contractual agreement?

a) Identify examples of model contract forms and outline where they are likely to be used? **(10 marks)**

b) Evaluate the use of standards as the basis of a legally binding agreement between two organizations? **(15 marks)**

Question 5

Explain why bespoke terms (Contract specific in a contract) may be preferred to using the standard terms and conditions or model forms? **(25 marks)**

Question 6

Evaluate the remedies available to the effected party after a breach to a contract
(25Marks)

END OF EXAMINATION PAPER