

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**  
**FACULTY OF COMMERCE**

Nov 2023

**DEPARTMENT OF ECONOMICS**

**PROGRAMME: MASTER OF SCIENCE IN PURCHASING AND SUPPLY CHAIN  
MANAGEMENT**

**EXAMINATION**

**COURSE: PROJECT AND CONTRACT MANAGEMENT: SCME 505 (1)**

**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 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)

**SECTION B: Answer any 3 questions in this section.**

**Question 2**

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

- Complete the activity network for the project. (4 marks)
- Find the earliest start time for each activity. (2 marks)
- Find the latest finish time for each activity. (2 marks)
- 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)

**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**