



**PANIPIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

**FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION**

**DEPARTMENT OF GOVERNANCE AND MANAGEMENT SCIENCES**

<b>QUALIFICATION: BACHELOR OF BUSINESS MANAGEMENT HONOURS</b>	
<b>QUALIFICATION CODE:</b> 08BBMH	<b>LEVEL:</b> 8
<b>COURSE CODE:</b> APM811S	<b>COURSE NAME:</b> ADVANCED PROJECT MANAGEMENT
<b>SESSION:</b> JULY 2025	<b>PAPER:</b> THEORY
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>SECOND OPPORTUNITY EXAMINATION PAPER</b>	
<b>EXAMINER(S)</b>	DR VUSUMUZI SIBANDA
<b>MODERATOR:</b>	MR. J.V OLU OJO

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. There are six questions, answer <b>any FOUR</b>.</li><li>2. Read all the questions carefully before answering.</li><li>3. Number the answers clearly</li></ol>

***PERMISSIBLE MATERIALS***

1. Examination question paper
2. Examination answer sheet
3. Calculator

**THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)**

### Question 1

You have just been hired on a permanent basis by your new employer. A financial advisor with one of the local commercial banks has approached you with a loan proposal for constructing a family house. Considering this family's house construction as a project:

- (a) Outline six (6) steps you will follow in developing a WBS for this project. (6 marks)
- (b) Develop a work breakdown structure for this project. (9 marks)
- (c) Outline any ten (10) benefits of using a WBS as a project management tool. (10 marks)

### Question 2

- (a) With the aid of diagrams, compare the functional project structure and the matrix project structure and demonstrate the strengths or appropriateness of each in project management. (15 marks)
- (b) Outline any **five (5)** reasons why projects are started (5 marks)
- (c) State any **five (5)** reasons why projects are terminated. (5 marks)

### Question 3

A company is considering which of the two mutually exclusive projects it should undertake. The finance director thinks that the project with the higher NPV should be chosen, whereas the managing director thinks that the one with the higher IRR should be undertaken, especially as both projects have the same initial outlay and length of life. The company anticipates a cost of capital of 10%, and the net after tax cashflows of the projects are as follows:

Year	Project X (N\$)	Project Y(N\$)
0	200 000	200 000
1	35 000	218 000
2	80 000	10 000
3	90 000	10 000
4	75 000	4 000
5	20 000	3 000

#### Required:

- (a) Calculate the NPV and IRR of each project. (12 marks)
- (b) Advise with justification, which project the company must undertake (if either). (5 marks)
- (c) Discuss the advantages and disadvantages of the payback method as a project investment appraisal technique. Note: you are not required to perform any calculations for payback. (8 marks)

#### Question 4

A project has activities and duration times in days as shown in the table below:

Activities	Immediate Predecessor	Optimistic Time	Most Likely Time	Pessimistic Time
A	-	6	7	8
B	-	3	5	7
C	-	4	7	10
D	A	2	3	4
E	B	3	4	11
F	C	4	8	12
G	C	3	3	9
H	E, F	6	6	12
I	D	5	8	11
J	H, G	3	3	9

Required:

- (i) Calculate the expected (mean) time for each activity **(5 marks)**
- (ii) Calculate the variance for each activity **(5 marks)**
- (iii) Construct the project activity network diagram using the AON methodology and indicate each activity's duration (mean time), ES, LS, EF, LF and Slack on the diagram. **(10 marks)**
- (iv) Identify the critical path through the network diagram. **(1 mark)**
- (v) What is the earliest time that the project may be completed? **(2 marks)**
- (vi) Identify burst activities and merge activities on the network diagram. **(2 marks)**

#### Question 5

- (a) Define the concept of project risk in project management **(2 marks)**
- (b) Discuss any **five (5)** categories of risk in project management **(15 marks)**
- (c) With the aid of appropriate examples, discuss any **four (4)** risk mitigation strategies **(8 marks)**

## Question 6

You are the project manager for an event planning company that has been contracted to organise an international conference for a client in the tech industry. The scope of the project includes arranging the venue, organizing travel and accommodation for international guests, coordinating speakers, and managing the event's promotional activities. The budget provided by the client is N\$500,000, and the event should be ready to kick off in six months.

Due to the pandemic, international travel has become uncertain. You have identified this as a significant project risk that could impact the overall success of the event. Meanwhile, your client insists that a virtual conference would not provide the same networking opportunities and requests you to proceed with the plan.

Midway through the project, it becomes apparent that due to the increasing number of COVID-19 cases, international travel restrictions are being imposed again. Now, the uncertainty has turned into a reality, and the project faces a considerable challenge.

**Answer the following questions:**

- (i) Given the constraints of the project, how would you adjust your management approach in response to this alteration? (4 marks)
- (ii) What would be your next steps in discussing this issue with your client? (3 marks)
- (iii) How would you reassess the project risks given this change? (3 marks)
- (iv) How might this scenario impact the other project constraints such as scope, cost, schedule, quality, and resources? (10 marks)
- (v) What alternative solutions can you propose to the client to ensure project success in the current situation? (5 marks)

**""END OF EXAMINATION""**