



**PAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**HAROLD PURKEWITZ GRADUATE SCHOOL OF BUSINESS SCHOOL OF MANAGEMENT**

<b>COURSE CODE:</b> LMP721C	<b>COURSE NAME:</b> LEADING AND MANAGING PROJECTS
<b>DATE:</b> JUNE 2025	<b>MODE:</b> FM
<b>DURATION:</b> 3 Hours	<b>MARKS:</b> 100

<b>SECOND OPPORTUNITY EXAMINATION</b>	
<b>EXAMINERS:</b>	DR VUSUMUZI SIBANDA
<b>MODERATOR:</b>	

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. There are five questions; answer any four (4).</li><li>2. Write clearly and neatly.</li><li>3. Begin a new Question on a fresh page</li><li>4. Number the answers clearly.</li></ol>

**PERMISSIBLE MATERIALS**

1. Examination script
2. Answer Sheet/Booklet
3. Calculator

**THIS EXAMINATION CONSISTS OF 3 PAGES (INCLUDING THIS FRONT PAGE)**

### Question 1

Suppose your company is planning on hiring for a job vacancy that has arisen in the company. Considering this 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

Newport Leisure Park Ltd is considering investing US \$135,000 in a flume ride project. The Ride has an estimated life of six years at the end of which it will be sold for US\$10,000. The projected operating net cash flows are as follows:

Year	Net Operating Cashflow (US\$)
1	14,000
2	25,000
3	35,000
4	36,000
5	30,000
6	25,000
Total	165,000

The cost of capital is 12 per cent.

Required:

- (a) Calculate the payback period for this project. [3marks]
- (b) Calculate the NPV of this project. [5 marks]
- (c) Calculate the IRR of this project. [5 marks]
- (d) Calculate the Profitability index of the project. [3 marks]
- (e) Assuming that the depreciation of US\$20.833 on a straight-line basis for each year is the only operating expense, calculate the ARR of the project. [5 marks]
- (f) Based on your calculations in (a) to (e) above, what is your advice to Newport Leisure Park Ltd? [4 marks]

### Question 3

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 the ES, EF, LS, LF and Slack for each activity **(8 marks)**
- (iv) Identify the critical path through the network diagram. **(2 marks)**
- (v) What is the earliest time that the project may be completed? **(3 marks)**
- (vi) Identify burst activities and merge activities on the network diagram. **(2 marks)**

### Question 4

Feasibility studies are essential in ensuring that projects are viable, sustainable, and aligned with organisational objectives. Critically evaluate the role of feasibility studies in project management, analysing how different types of feasibility assessments influence project decision-making. Using relevant examples, apply your knowledge to assess how organisations can effectively integrate feasibility study findings into project selection, planning, and execution to enhance project success.

**(25 marks)**

### Question 5

Explain the concept of project life cycles in project management and demonstrate how each stage is essential for successful project management.

**(25 marks)**



**PAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

**HAROLD PURKEWITZ GRADUATE SCHOOL OF BUSINESS SCHOOL OF MANAGEMENT**

<b>COURSE CODE:</b> LMP721C	<b>COURSE NAME:</b> LEADING AND MANAGING PROJECTS
<b>DATE:</b> JUNE 2025	<b>MODE:</b> FM
<b>DURATION:</b> 3 Hours	<b>MARKS:</b> 100

<b>SECOND OPPORTUNITY EXAMINATION</b>	
<b>EXAMINERS:</b>	DR VUSUMUZI SIBANDA
<b>MODERATOR:</b>	MRS SAARA NAMBINGA

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Write clearly and neatly.</li><li>3. Begin a new Question on a fresh page</li><li>4. Number the answers clearly.</li></ol>

**PERMISSIBLE MATERIALS**

1. Examination script
2. Answer Sheet/Booklet
3. Calculator

**THIS EXAMINATION CONSISTS OF 3 PAGES (INCLUDING THIS FRONT PAGE)**

### Question 1

Suppose your company is planning on hiring for a job vacancy that has arisen in the company. Considering this 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

Newport Leisure Park Ltd is considering investing US \$135,000 in a flume ride project. The Ride has an estimated life of six years at the end of which it will be sold for US\$10,000. The projected operating net cash flows are as follows:

Year	Net Operating Cashflow (US\$)
1	14,000
2	25,000
3	35,000
4	36,000
5	30,000
6	25,000
Total	165,000

The cost of capital is 12 percent.

Required:

- (a) Calculate the payback period for this project. [3marks]
- (b) Calculate the NPV of this project. [5 marks]
- (c) Calculate the IRR of this project. [5 marks]
- (d) Calculate the Profitability index of the project. [3 marks]
- (e) Assuming depreciation of US\$20.833 on a straight-line basis for each year is the only operating expense, calculate the ARR of the project. [5 marks]
- (f) Based on your calculations in (a) to (e) above, what is your advice to Newport Leisure Park Ltd? [4 marks]

### Question 3

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 the ES, EF, LS, LF and Slack for each activity **(8 marks)**
- (iv) Identify the critical path through the network diagram. **(2 marks)**
- (v) What is the earliest time that the project may be completed? **(3 marks)**
- (vi) Identify burst activities and merge activities on the network diagram. **(2 marks)**

### Question 4

Feasibility studies are essential in ensuring that projects are viable, sustainable, and aligned with organizational objectives. Critically evaluate the role of feasibility studies in project management, analysing how different types of feasibility assessments influence project decision-making. Using relevant examples, apply your knowledge to assess how organisations can effectively integrate feasibility study findings into project selection, planning, and execution to enhance project success.

**(25 marks)**