



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF GOVERNANCE AND MANAGEMENT SCIENCES

QUALIFICATION: BACHELOR OF BUSINESS MANAGEMENT HONOURS	
QUALIFICATION CODE: 07BBMA	LEVEL: 7
COURSE CODE: BEP712S	COURSE NAME: SME Projects
SESSION: NOVEMBER 2024	PAPER: THEORY (PAPER 1)
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION	
EXAMINER(S)	Ms. B. NDUNGAUA Mr. V. SINALUMBU
MODERATOR	MR. KANDJIMI

INSTRUCTIONS
1. Answer ALL the questions. 2. This paper comprises of FIVE questions. 3. Read all the questions carefully before answering. 4. Number the answers clearly

PERMISSIBLE MATERIAL

CALCULATOR

THIS QUESTION PAPER CONSISTS OF _4_ PAGES (Including this front page)

QUESTION 1**[16 Marks]**

Develop a project Network diagram using the below information.

Project name: Automated Warehouse Order Picking System		
Activity	Description	Preceding Activity
A	Define requirements	None
B	Assign Team	A
C	Design Hardware	A
D	Code Software	B
E	Build and Test hardware	C
F	Develop Patent Request	C
G	Test Software	D
H	Integrate systems	E,F,G

QUESTION 2**[22 Marks]**

You are required to select one of two appealing project proposals. Using the below information, which project proposal should be selected?

Project A requires an investment of N\$350,000 with an expected annual cash inflow of N\$95,500 for five years while **Project B** requires an investment of N\$485,000 with an expected annual cash inflow of N\$150,000 for five years as well. The expected rate of return is 15%. The company has a policy that only projects with a payback period of 2 years and 6 months and less should be selected for consideration.

- 1) Determine the payback period for each of the projects. (4 marks)
- 2) Which of the two projects should be selected based on the payback period method? Explain your decision. (2 marks)
- 3) Determine the Net Present Value (NPV) of each of the projects. (14 marks)
- 4) Which of the two projects should be rejected based on the NPV? Explain your decision. (2 marks)

QUESTION 3**[20 Marks]**

With the aid of practical example narrate possible discussions that happen during the post project evaluation meeting.

QUESTION 4

[19 Marks]

Project A has a duration of 20 weeks and with a total budget allocation of N\$350,000. During a project implementation review done at week 11, it was established that N\$220,000 was spent and only 50% of the work was completed.

Determine the following:

1. What is the earned value at week 11? (3 marks)
2. What is the cost variance at week 11? (3 marks)
3. What is the cost performance index of this project at week 11? (3 marks)
4. Calculate the forecasted cost at completion at week 20. (3 marks)
5. In order to complete the project on budget, what is the To-Completion Performance Index? (3 marks)
6. Elaborate how/what should be done in order to improve the project's Cost Performance Index (CPI)? (4 marks)

QUESTION 5

[23 Marks]

- a) Calculate the Early Start (ES), Early Finish (EF), Latest Start (LS) and Latest finish (LF) times respectively. Will this project finish in 80 days? [16 marks for start and finish times]. Present your answers in a project schedule.
- b) Calculate slack for each activity and identify the critical path. [2 marks for slack and 2 marks for the critical path]
- c) Assuming activity H's actual completion is delayed by 8 days, when will activities J's and K's earliest start be? [3 Marks]

