

FACULTY/COLLEGE	College of Business and Economics	
SCHOOL	School of Management	
DEPARTMENT	Transport and Supply Chain Management	
CAMPUS(ES)	APK	
MODULE NAME	Logistics Project Management	
MODULE CODE	LMA8X05	
SEMESTER	Second	
ASSESSMENT OPPORTUNITY,	Supplementary Summative Assessment	
MONTH AND YEAR	Opportunity	
	January 2021	

ASSESSMENT DATE	January 2021	SESSION	
ASSESSOR(S)	Prof C Marnewick		
MODERATOR(S)	Mr W Niemann		
DURATION	3 hours (180 min)	TOTAL MARKS	120

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)	4

INFORMATION/INSTRUCTIONS:

- Answer all the questions
- · Question papers must be handed in.
- This is an OPEN book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly
- Structure your answers by using appropriate headings and subheadings.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.

QUESTION 1 (20 Marks)

You have been tasked to organise the building of a pedestrian bridge between UJ and Campus Square. Create a high-level WBS highlighting the following:

- 10 x activities
- One resource per activity
- Cost per hour of each resource
- Duration of each activity
- Cost of each activity
- Total cost of the project

Use the following table as an example.

#	Activity	Resource	Cost/hour	Duration	Total
1					
2					
10					

QUESTION 2 (15 Marks)

Map the various types of project audits to the project lifecycle. Make use of a diagram.

QUESTION 3 (20 Marks)

You are the head of the project selection team at Gupta's Fast Freight. You are considering three different projects. Based on past history, you are expecting a rate of return of 20%. Given the following information for each project, which one should be Gupta's Fast Freight first priority? Should you fund any of the other projects? If so, what should be the order of priority based on return on investment?

Project: Dust Devils

Year	Investment	Revenue Stream
1	R500 000	R0
2		R50 000
3		R250 000
4		R350 000

Project: Ospry

Year	Investment	Revenue Stream
1	R250 000	R0
2		R75 000
3		R75 000
4		R75 000
5		R50 000

Project: Voyagers

Year	Investment	Revenue Stream
1	R75 000	R0
2		R15 000
3		R25 000
4		R50 000
5		R50 000
6		R150 000

QUESTION 4 (10 Marks)

Industrial Building, Inc., has two project teams installing virtually identical, 4-story commercial buildings for a customer in two separate cities. Both projects have a planned daily cost of 100 and a planned daily earned value of 100. The first six days for each team have progressed as follows:

Day	Team A: Earned Value	Team B: Earned Value	A: Cost	B: Cost
1	90	90	95	95
2	92	88	98	94
3	94	95	101	102
4	98	101	106	109
5	104	89	116	99
6	112	105	126	118

Compare the two projects in terms of general progress and according to critical ratios. Make a recommendation for future monitoring.

QUESTION 5 (15 Marks)

Given the following information, what is the status of this 18-month project and what will be the final outcome of the project?

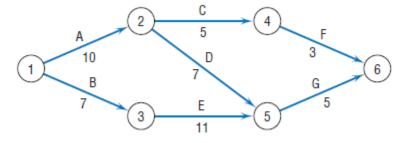
Planned Value: R32 000 Earned Value: R40 000 Actual Cost: R30 000

Budget at Completion: R150 000

QUESTION 6 (20 Marks)

Given the diagram below, find:

- 1. The critical path.
- 2. How long it will take to complete the project.
- 3. Find the ES, LS, EF, and LF for each activity.
- 4. Find the slack for each activity.



QUESTION 7 (20 Marks)

The Umtata Iron & Steel Company is expanding its operations to include a new drive-in weigh station. The weigh station will be a heated/air-conditioned building with a large floor and a small office. The large room will have the scales, a 3 meter counter and several display cases for its equipment. Before erection of the building, the project manager evaluated the project using AON analysis. The activities with their corresponding times are recorded in the table. Using AON analysis, find the path with the longest duration and the expected completion time of the project.

#	Activity	Duration (weeks)	Preceding Task
1	Lay foundation	10	-
2	Dig hole for scale	6	-
3	Insert scale bases	15	2
4	Erect frame	12	1,3
5	Complete building	20	4
6	Insert scales	5	5
7	Insert display cases	3	5
8	Put in office equipment	6	7
9	Finishing touches	3	6,8