DIPLOMA IN LOGISTICS MANAGEMENT

PROJECT MANAGEMENT FOR LOGISTICS (LPMLMY3)

PART A – 30 MARKS

MULTIPLE-CHOICE QUESTIONS

- **Multiple-choice answer sheet included on the last page of the assessment script (answer book)**
- **Mark your answer with a cross (x) in the block**
- **No mark will be given if more than one answer has been crossed.**

1. Jolene is a project manager responsible for a logistics _____, as it can be described as a very large investment project, and with a very large investment.

A. megaproject
B. project
C. programme
D. portfolio

2. Basetsana is the project manager responsible for a logistics project, which differs in the sense that it has an ongoing nature and is therefore more strategic in nature, which is better known as a -

A. megaproject
B. project
C. programme
D. portfolio

3. The PMBOK has been developed into nine knowledge areas and offers a comprehensive knowledge database. Jafta is considering _____, which is the establishing of all the work and only the work needed to complete the project – it consists of authorisation, scope planning, scope definition, scope change management and scope verification.

A. Project Scope Management
B. Project Time Management
C. Project Risk Management
D. Project Procurement Management

4. The PMBOK has been developed into nine knowledge areas and offers a comprehensive knowledge database. Faizah is considering _____, which includes the processes needed to ensure proper generation, collection and dissemination of project information.

A. Project Cost Management
B. Project Quality Management
C. Project Human Resource Management
D. Project Communications Management

5. Each project phase is marked by completion of one or more outcomes, better known as _____, which is seen as a tangible, verifiable work product, such as a feasibility study, a detailed design, or a working prototype.

A. deliverables
B. life cycle
C. parameter
D. project destination

6. The typical project life cycle follows the shape of an S-curve. Which one of the following statements is not a typical characteristic when viewing the project completion illustrated over time?

A. The project has a slow start
B. The project has a quick finish
C. The project has a slow finish
D. Quick momentum is typical halfway

7. Considering the four-stage project life cycle, Thomas and his project management team would focus on risk identification, resourcing and budgeting, during project _____ stage.

A. initiation
B. planning
C. execution
D. closure

8. Wanda is analysing the impact of project constraints while initiating a new project for her logistics organisation. Wanda would consider _____ as project constraint when she is looking at what she and her project team is expecting to deliver to the client, once the project is completed.

A. cost
B. time
C. quality
D. scope

9. The process of allocating resources includes three basic activities. _____ is the process of evening out resource demands over the duration of the project, by shifting activities forward and backward within their allowable slack.

A. Resource allocation
B. Resource loading
C. Resource levelling
D. Resource elimination

10. Financial accounting provides stakeholders of an entity such as an organisation or business unit with information and has a/an _____ financial focus.

A. internal
B. middle management
C. external
D. operational management

11. Which value is represented by A in the NPV formula, when calculating the net present value of a project?

A. The net cash inflow for period
B. The initial cash investment
C. The interest rate for period
D. The project lifetime

12. Which one of the following calculations can be used to determine the interest rate required to make the present value of the cash flows in the project equal to zero?

A. NPV
B. IRR
C. ARR
D. PP

13. The project final report needs to include detailed information and should preferably feature the following tasks/learning units -

i) project performance
ii) organisational structure and future projects
iii) administrative performance, project and administrative teams
iv) project performance and organisational structure

A. i) and iv)
B. iii) and iv)
C. i), iii) and iv)
D. i), ii) and iii)

14. A project audit can be performed at any level in the organisation. A _____ audit is normally most constrained by time and resources and is usually a brief review of the project.

A. technical
B. general
C. detailed
D. financial

15. The main purpose of compiling a/the _____, which describes the life and times of the project, is to identify the successes as well as problems that have been experienced during the project.

A. project life cycle
B. project final report
C. project risk schedule
D. critical path

16. _____ uses sequential network logic and a weighted average duration estimate to calculate project duration.

A. PERT
B. WBS
C. CPM
D. Simulation

17. When considering the formula for calculating the expected time of an activity in a network, the value "*b*" refers to -

A. expected time
B. optimistic time
C. pessimistic time
D. most likely time

18. At which stage of the project life cycle will risk be the highest?

A. Implementation
B. Initiation
C. Planning
D. Termination

19. Which one of the following would not typically be an advantage of a project organisational structure?

A. High levels of communication
B. Simple structure
C. Rapid response time
D. Limited authority

20. A _____ provides an overall picture of all project activities and tasks to be completed and associated costs.

A. work breakdown structure
B. programme
C. deliverable
D. goal

21. _____ control refers to systems that take the form of testing, to determine whether some precondition has been met. Most of the control in project management falls in this category, since for most facets of the project it is enough to know that the predetermined specifications of the project have been met.

A. Cybernetic
B. Post
C. Go/no-go
D. Risk

22. To provide useful information for the project manager and other managers involved in the project, costs are to be classified or coded correctly. Total costs can be classified in several ways. Businesses or projects can be split into various departments or centres, and their costs can be classified in accordance with these departments or centres, thereby, classifying cost by -

A. behaviour of cost
B. type of cost
C. nature of resource
D. function

23. During the project, _____ reports are those reports issued on a regular basis – these project reports should include management information and are compiled more frequently towards milestone dates.

A. special analysis
B. exception
C. routine
D. quality

24. There are two fundamentally different strategies for data gathering used in compiling a budget. The one strategy is based on the judgement and experience of senior management on the project and utilises past data available on similar activities to compile the budget, better known as _____ budgeting.

A. top-down
B. bottom-up
C. zero-based
D. iterative

25. In the following calculation, the value 0.11 represents the -

NPV = -R6800 000 + R925 000(1/(1 +0.11)1 +1/(1 +0.11)2+1/(1 +0.11)3)

A. project lifetime
B. interest rate
C. net cash flow
D. initial cash investment

26. The termination process basically involves three steps: firstly, is the _____ the project, followed by the second step and finally the third step which aims to compile the final project report, for future reference.

A. decision to terminate
B. scheduling of the termination of
C. implementation of the termination of
D. control of the termination of

27. _____ is an appraisal of the progress and performance of a project compared to its planned progress and performance, or compared to the progress and performance of other, similar, projects.

A. Project evaluation
B. Project closure
C. Project auditing
D. Project controlling

28. Project _____ is collecting, recording, and reporting information concerning aspects of project performance that project managers or others in the organisation wish to know.

A. reporting
B. controlling
C. monitoring
D. scaling

29. Logistics projects yielding a _____ average rate of return for each rand invested, are more _____ than those with a lower value.

A. higher; uneconomical
B. lower; desirable
C. higher; desirable
D. lower; economical

30. In the following NPV calculation, the value of -R1 775 000 represents the -

NPV = -R1 775 000 + R465 000(1/(1 +0.1)1 +1/(1 +0.1)2+1/(1 +0.1)3)

A. project lifetime
B. interest rate
C. net cash flow
D. initial cash investment

Turn over for Part B/…

PART B – 70 MARKS

NARRATIVE AND DESCRIPTIVE QUESTIONS

ANSWER ALL THE QUESTIONS

QUESTION 1 **[15 MARKS]**

Project "Happy-days" has an initial investment value of R12 750 000 covering expenses such as new technology, equipment, and infrastructure needed to finance the new warehouse in Pietermaritzburg, KZN.

Scenario 1:
Project "Happy-days" is expected to generate cash inflows of R3 750 000 per year over the next four years. At the end of the period, the technology and equipment will have a zero total salvage value. The investment has a discount rate of 9.75% per annum.

Scenario 2:
Project "Happy-days" is expected to generate cash inflows of R3 500 000; R2 500 000; R4 000 000 and R2 750 000, annually over the next four years. At the end of the period, the technology and equipment will have a zero total salvage value. The investment has a discount rate of 6% per annum.

Provide the correct formula and indicate all calculations as well as the final value/s. Clearly structure your answer for each question considering the scenario and which calculation are done.

1.1 Calculate the payback period of project "Happy-days" for scenario 1. (3)

1.2 Calculate the payback period of project "Happy-days" for scenario 2. (5)

1.3 Calculate the net present value of the project "Happy-days" for scenario 2. (7)

Note: Round all Rand values in the calculation to the second decimal e.g., R123 456.798654 becomes R123 457.80

QUESTION 2 **(14 MARKS)**

Use the following information to establish the relevant values needed to answer the following questions based on a network schedule for project Global Warehousing. Only answer the questions – no illustration required.

ID	Estimated duration (months)	Predecessor(s)
A	4	None
B	5	A
C	6	A, B
D	7	A, C
E	3	C, D
F	1	D, E
G	2	B, E, F

Answer the following questions:

2.1 What is the total slack for the network schedule of project Global Warehousing? (2)

2.2 What is the LF value for activity D in the network schedule of project Global Warehousing? (2)

2.3 What is the EF value for activity C in the network schedule of project Global Warehousing? (2)

2.4 What is the LS value for activity G in the network schedule of project Global Warehousing? (2)

2.5 What is the LF value for activity B in the network schedule of project Global Warehousing? (2)

2.6 What is the ES value for activity E in the network schedule of project Global Warehousing? (2)

2.7 What is the total value of the critical path of project Global Warehousing? (2)

QUESTION 3 **(12 MARKS)**

When constructing a network schedule, the project manager needs to know all the tasks that must be completed to finalise the project. Once these tasks are plotted, activity durations are calculated before the project team can determine early and late starting times, slack for each activity, project completion date and the critical path.

3.1 Provide the required formula used to calculate the expected time for an activity.

(2)

3.2 Give the key/solution explaining the meaning of each element of the formula provided in 3.1.

(4)

3.3 Calculate the expected time considering the information available on project Fast-courier.

- b = 20 weeks
- m = 12 weeks
- a = 16 weeks

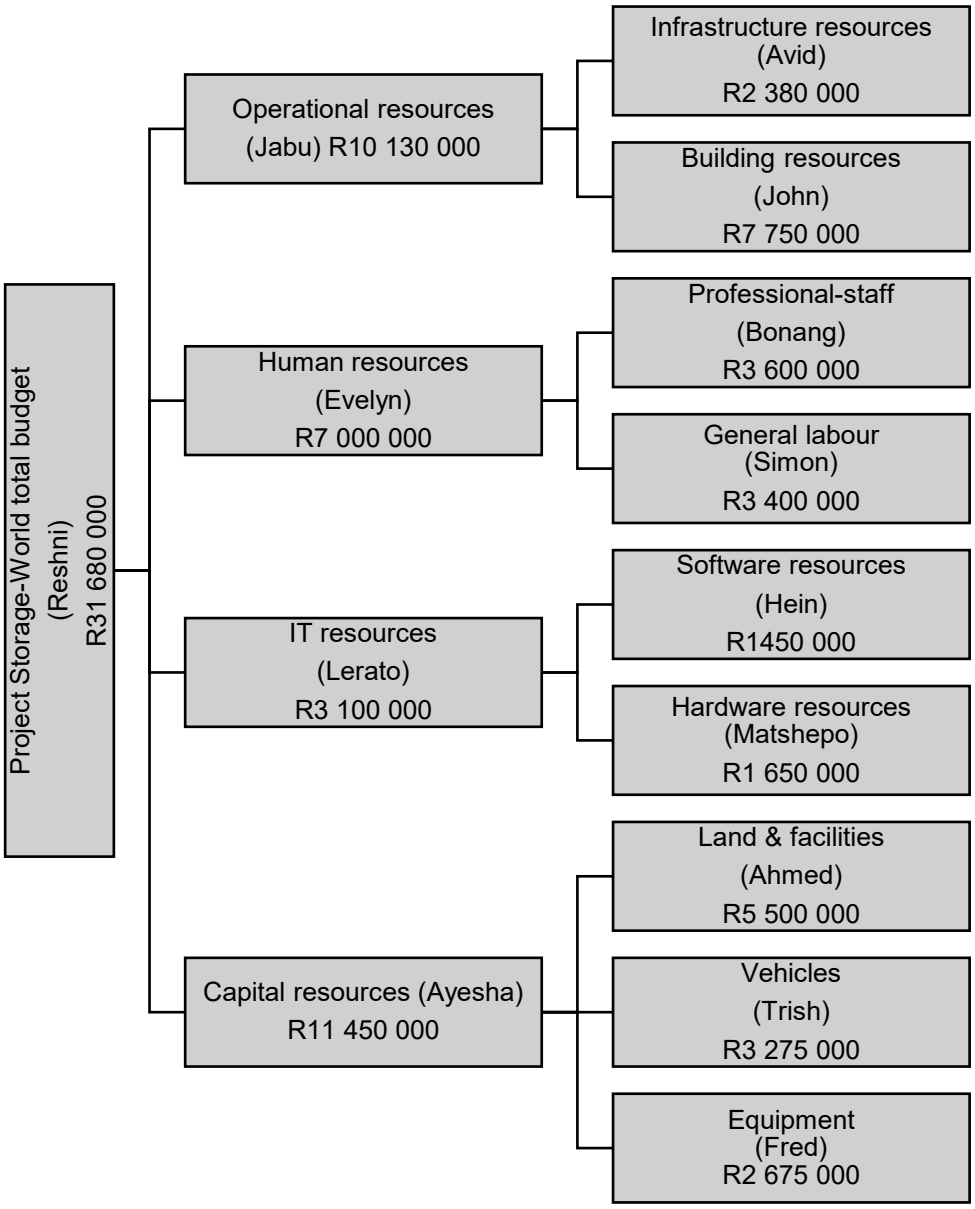
(6)

Clearly structure your answer, indicating the relevant formula and calculations.

QUESTION 4 **[15 MARKS]**

Consider the following work-breakdown structure (WBS) constructed for Project Storage-World for period 1. The WBS for the 2nd period requires revision and several updates are to be affected. Answer the questions considering the WBS given for project Storage World and incorporate the updates for the 2nd period.

WBS for Project Storage World – period 1
(1 July 2021 – 30 June 2022)



Consider the revised updates and make the relevant updates to establish the values for a revised Work-breakdown Structure (WBS) for Project Storage World for the 2nd period.

Only answer the questions (no illustration required), taking the following changes into account:

- Due to current completion levels of the project, the building resources are re-calculated at 50% of the original budgeted amount for the 2nd period.
- Due to theft and damages, equipment needs for additional replacement items, result in a 12% increase for the 2nd period.
- Land and facilities are adjusted for the 2nd period to include an additional R71 000,00 for unforeseen municipal expenses.
- General labour is maintained at the current budgeted amount for the 2nd period.
- Software resources are expanded with a 40% budget increase for the 2nd period, due to the roll-out of required technology.
- Taking into account the milestones already met to date, the infrastructure resources are only allocated at 45% of the original budgeted amount, for the 2nd period.
- Additional professional staff are required bringing a 20% increase on the budgeted amount, for the 2nd period.
- Hardware resources budget items are revisited and updated with a 14% increase, for the 2nd period.
- The budget for vehicles is adjusted to include minor maintenance expenses resulting in a 4% increase, for the 2nd period.

Answer the following questions:

4.1 What is the revised value for the 2nd period for Capital resources budgeted for Project Storage World?

(3)

4.2 What is the revised value for the 2nd period for Operational resources budgeted for Project Storage World?

(3)

4.3 What is the revised total budget value for the 2nd period for Project Storage World?

(3)

4.4 What is the revised value for the 2nd period for IT resources budgeted for Project Storage World?

(3)

4.5 What is the revised value for the 2nd period for Human resources budgeted for Project Storage World?

(3)

Clearly indicate the formula, calculation, and final answer for each question.

QUESTION 5 **[8 MARKS]**

Project termination of a failing project is based on six typical reasons. Consider the following scenarios to present the suitable reason why the project is terminated.

To answer the question, only write the number (5.1 – 5.8) and appropriate answer, as required in the last column.

	Scenario	Reason for termination
5.1	Ronald had to terminate the logistics project because the project does not offer enough advance over current technology applied.	5.1
5.2	Agnes had to terminate the logistics project because top management is not enthusiastic enough to support its implementation any further.	5.2
5.3	Ayesha had to terminate the logistics project because the project is no longer aligned with the organisation's goals.	5.3
5.4	Lebu had to terminate the logistics project because the project is inconsistent with the organisation's current financial capacity.	5.4
5.5	Vanesh had to terminate the logistics project because of poor management resulting the project team delivering poor quality service and product.	5.5
5.6	Matshepo realised that she had to terminate the logistics project because the project did not realise, as it indicated a better way for the team to achieve the customer's wants.	5.6
5.7	Elvin had to terminate the logistics project because their customer changed their mind and wanted a substantially different outcome, thus the initial project would no longer be successful.	5.7
5.8	Paul had to terminate the logistics project because they far exceeded the budget.	5.8

QUESTION 6 **[6 MARKS]**

You are required to analyse each of the following statements (6.1 - 6.2) regarding project selection. Salim is the logistics manager at the E-car rental company. He and his team need to decide between several possible upcoming projects.

a. Assess the statements to establish which criteria they should consider when evaluating and selecting a suitable project selection model for the organisation. (2)

b. Identify which selection models are considered by Salim and the team. (2)

c. Classify the identified selection models as numeric or non-numeric. (2)

To answer the question, duplicate the following table template in your answer book, to answer the question. Only list the statement number and complete the rest of the table.

Statement		a. Criteria	b. Selection model	c. Numeric vs non-numeric
6.1	Salim is verifying whether the selection model is easy and convenient to use for gathering and storing information on their database, and to manipulate data using standard software. Salim decides to use the selection model, which discounts all cash flows to the present time using a common interest rate, thus acknowledging time value of money.	6.1.1	6.1.2	6.1.3
6.2	Salim is verifying whether the selection model will reflect the reality of his decision-making situation, including the objectives of his department and that of the E-car rental company. Salim decides to use the selection model which allow for the developing of new products/services which supports the existing product offering provided by E-car rental company.	6.2.1	6.2.2	6.2.3

END OF PAPER