NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Faculty of Computing and Informatics

DEPARTMENT OF INFORMATICS

QUALIFICATION: Bachelor of Informatics, Bachelor of Computer Science	
QUALIFICATION CODE: 07BACS, 07BAIF	LEVEL: 7
COURSE: Project Management	COURSE CODE: PTM721S
DATE: January 2020	SESSION: 2
DURATION: 3 Hours	MARKS: 100

SUPPLEMENTARY/SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Dr Jude Osakwe Mr. Nkululeko Mthembo Ms. Irja Shaanika
MODERATOR:	Mr. Nabot Natanael

THIS QUESTION PAPER CONSISTS OF 7 PAGES
(Excluding this front page)

INSTRUCTIONS

1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers clearly.

SECTION A: MULTIPLE CHOICE QUESTIONS   **[20 marks]**

1.   Which of the following is not a potential advantage of using good project management?
   a. Shorter development times
   b. Higher worker morale
   c. Lower cost of capital
   d. Higher profit margins

2 . Personnel in an organizational structure often report to two or more bosses.
   a. functional
   b. project
   c. matrix
   d. hybrid

3. The following are all attributes of a project except?
   a. projects are unique
   b. projects are developed using progressive elaboration
   c. projects have a primary customer or sponsor
   d. projects involve little uncertainty

4. Project work is most successful in an organizational culture where all of the following characteristics are important except.
   a. member identity
   b. group emphasis
   c. risk tolerance
   d. control

5 Which of the following is not an example of a project?
   a. Mission to send a cat to the moon
   b. Cleaning of computer labs every morning before classes start
   c. Evacuating a city before a major rain storm
   d. Building a soccer stadium in Oshakati.

6. Which of the following is not part of the triple constraint of project management?
   a. meeting scope goals
   b. meeting time goals
   c. meeting communications goals
   d. meeting cost goals

7. A is a product or service, such as a technical report, a training session, or hardware, produced or provided as part of a project.
   a. deliverable
   b. product
   c. work package
   d. tangible goal

8. Which of the following statements is false?
   a. An analysis project life cycle is a collection of project phases.
   b. A product life cycle is the same as a project life cycle.
   c. The waterfall approach is an example of a predictive life cycle model.
   d. Agile is an example of an adaptive life cycle model.
9. Which of the following outputs is often completed before initiating a project?
   a. stakeholder register
   b. business case
   c. project charter
   d. kick-off meeting

10. Initiating involves developing a project charter, which is part of the project _____ management knowledge area
    a. integration
    b. scope
    c. communications
    d. risk

11. _____ensures that all the elements of a project come together at the right times to complete a project successfully.

    a. Management plan
    b. Integration
    c. Change control
    d. Project charter

12. Which of the following methods is NOT a technique for selecting IT projects in organisations

    a) Categorizing IT projects.
    b) Performing net present value or other financial analyses
    c) Implementing a balanced scorecard.
    d) IT strategy .

13. A_____ is a formal group of people responsible for approving or rejecting changes to a project.

a) Change control board.
b) Steering committee.
c) Change control system.
d) Board of Directors.

14. Which of the following is NOT part of the three main objectives of integrated change control

a) Managing actual changes as they occur.
b) Managing changes that are positive only.
c) Determining that a change has occurred.
d) Influencing the factors that create changes to ensure that changes are beneficial.

15. _____ refers to all the work involved in creating the products of the project and the processes used to create them.

a. Work breakdown structure.
b. Project Integration.
c. Project baseline .
d. Scope.

16. Which process has an output of a scope baseline?

a. Defining a scope.
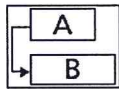b. Creating a WBS.
c. Validating a scope.
d. Collect requirements .

17. _____is a significant event that normally has no duration

a. Strategic objectives.
b. Project Objectives .
c. Milestone.
d. Activities Goals.

18. _____dependencies are inherent in the nature of the work being performed on a project.

a. Soft logic.
b. Mandatory .
c. Discretionary .
d. External .

19. This diagram illustrates which type of task dependency?

a.   Start-to-start (SS)
b.   Finish-to-finish (FF)
c.   Start-to-finish (SF)
d.   Finish-to-start (FS)

20. --------------------------------_is a means for considering schedule risk on projects.

a. Critical path analysis.
b. A Gantt chart.
c. PERT analysis.
d. Critical chain scheduling.

4

SECTION B: STRCUTURED QUESTIONS [80 marks]

Question One [20 marks]

The table below depicts the activities, duration and their dependency for phase one of the project.

Activity	Duration (days)	Dependency
A	2	
B	15	A
C	10	A
D	13	A
E	18	A
F	15	C,D
G	10	B,F
H	5	E,G

    a) Calculate the (early start, early finish, late start and late finish) for each activity of the project using the forward pass and backward method. (16 marks)

    b) Determine the project critical path and calculate its length (4 marks)

Question Two [25 Marks]

The National University wants to develop a web based Online Registration Portal as a solution to the problems of the students registration currently in the institution. Portals provide a way for enterprises to provide a consistent look and feel with access control and procedures for multiple applications and databases, which otherwise would have been different entities altogether. The university argues that the online solution is aimed to solve challenges such as:

- The registration problem due to some manual means of operations which easily lead to misplacement or loss of student information.
- The manual pre-assessment of student registration system is very slow and consumes a lot of time which causes the delay in completing the entire enrolment process.
- Consume time and human effort due to long queue in the process of paying money in the bank and registration processes.
- Due to manual means of generating report, such report can easily be misplaced or loss.

a) Discuss the benefits of constructing a WBS when carrying out a Project.

(5 marks)

b) Develop a possible Work Breakdown Structure (WBS) for the above project, your WBS must include at least FIVE summary tasks as well as subtasks.

(20 marks)

Question Three [25 marks]

a) Analyse the importance of Human project management processes and describe the typical activities carried out in each process. (15 marks)

b) Recently, you promoted your star programmer, Sam, to lead the development team. Sam was a fantastic software coder, and you thought the promotion would mean that he could now share his expertise with the other development team members. However, you are surprised to learn that the promotion is now causing some conflicts in the team.

(10 marks)

Question Four [10 marks]

Imagine you have been recently employed to be part of a Project Team. The Surveyor Pro project which has a concept for developing a sophisticated information system that includes expert systems, object-oriented databases, and wireless communications. The system should provide instant, graphical information to help government surveyors do their jobs. For example, after a surveyor touches a map on the screen of a handheld device, the system should prompt the surveyor to enter the type of information needed for that area. This system should help in planning and implementing many projects, from laying fiber-optic cable to installing water lines.

Your task allocated to you is to DEVELOP a cost estimate for this project
Required

Design a possible Cost Estimate Plan assuming the university has a budget of $N1.5million

(10 marks)

[THE END]