



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology Second Year, First Semester Examination – 2020 HNDIT 2302 IT Project Management

Instructions for Candidates:

Answer any 04 Questions

All questions carry equal marks.

Only non-programmable calculators are allowed.

No. of questions : 05

No. of pages : 03

Time : Two (02) hours

Q1)

- i. What is meant by Project Management? ^A (03 Marks)
- ii. What are the quadruple constraints of a project? ^{S.T.C.} (04 Marks)
- iii. Project management is accomplished through the use of the processes. Mention those five processes? ^{Initiation, Planning, Execution, Monitoring, Closure} (05 Marks)
- iv. Write two advantages of Using Formal Project Management? ^{High Profit, High Quality} (05 Marks)
- v. Project life cycle and Product life cycle are different things. Do you agree with this statement? Justify your answer? ^{Project Life cycle part of the product life cycle.} (08 Marks)
- [Total 25 Marks]

Q2)

- i. List three process in project integration management? (03 Marks)
- ii. What did you understand by Interface Management? (04 Marks)
- iii. A project management plan is a document used to coordinate all project planning documents and help guide a project's execution and control. Mention four Common elements of a Project Management Plan? ^{P.A.D.I.M.S. Implementation} (05 Marks)
- iv. Assume that ABC Inc is considering two projects namely Project X and Project Y and wants to calculate the NPV for each project. Both project X and project Y is a four-year project and cash flows of both the projects for four years are given below:

Year	Project X cash flows	Project Y cash flows
1	5000	1000
2	4000	3000
3	3000	4000
4	1000	6750

13000

14000

$$\frac{10000}{10} \times 100$$

$$10000 \times \frac{10}{100}$$

$$10000 \times \frac{100}{10}$$

The firm's cost of capital is 10% for each project and the initial investment amount is 10,000. Calculate the NPV of each project and determine in which project the firm should invest. (07 Marks)

- v. Pravin Raaghav is considering acquiring a manufacture plant. The purchase price of plant is Rs. 1 236 100.00. The owners believe the plant will generate net cash inflows of Rs. 309 025.00 annually. It will have to be replaced in eight years. Use the payback method to determine whether Pravin Raaghav should purchase this plant? Justify your answer? (06 Marks)

$$\frac{309025 \times 100}{1236100.00}$$

[Total 25 Marks]

Q3)

- What did you understand by Project Scope Management? (03 Marks)
- Name four approaches to develop Work Breakdown Structures? (04 Marks)
- Mention five Suggestions for Improving User Input in Project Scope Management? (05 Marks)
- Describe the four kinds of task dependencies using diagram? (05 Marks)
- Assume that you are the project manager of KSNTG Pvt Ltd and have drawn up an outline plan for the fabrication of a hardware component project.
 - Draw the precedence diagram/ Activity on Node (AON) network diagram for the given fabrication of a hardware component project. On the diagram, compute Early Start (ES), Early Finish (EF), Late Start (LS) and Late Finish (LF) time estimates and Total Float (TF) for each activity. (05 Marks)

Activity	Description	Preceded By	Duration (in weeks)
A	Preliminary design	4
B	Evaluation of design	A	3
C	Contract negotiation	A	2
D	Preparation of fabrication plant	C	5
E	Fabrication of hardware product	B, D	2

- Find the critical path and project duration. (03 Marks)

$$\frac{10}{10000} \times 1000$$

$$\frac{10}{25000} \times 1000$$

[Total 25 Marks]

Q4)

- i. List three phases in Project Cost Management Process? (03 Marks)
- ii. Mention two typical Problems with IT Cost Estimates? (04 Marks)
- iii. Six Sigma is "a comprehensive and flexible system for achieving, sustaining and maximizing business success". Six Sigma projects normally follow a five-phase improvement process. Name those five phases? (05 Marks)
- iv. What is the goal of Quality Assurance and Mention two techniques used in Quality Assurance? (05 Marks)
- v. The size of a development project is 35 000 Line of Codes. Find the value for Average Staff and Productivity for Embedded mode using basic COCOMO model.
(hint: $E = 3.6 \times (\text{size})^{1.26}$ $TDEV = 2.5 \times (E)^{0.32}$) (08 Marks)

[Total 25 Marks]

Q5)

- i. What is meant by Project Human Resource Management? (03 Marks)
- ii. Briefly explain the following in Project Human Resource Management? (04 Marks)
 - a. Staff Acquisition
 - b. Resource loading
- iii. Mention five habits that project managers can apply to improve effectiveness on projects according to the Covey's 7 Habits? (05 Marks)
- iv. List five Suggestions for Improving Project Communications? (05 Marks)
- v. Risk is the "possibility of loss or injury" and understanding the risk is the responsibility of Project Manager.
 - a. Mention the four risk identification tools and techniques? (04 Marks)
 - b. What are the process responsibilities of project manager? (04 Marks)

[Total 25 Marks]