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 – 2015
HNDIT2302- IT Project Management

Instructions	No. of questions : 05
Answer any four (04) questions.	No. of pages : 04
Calculators are allowed to use.	Time : Two hours

Question 01 (Total = 25 Marks)

Your ATI plans to establish an *Automated Library Management System (ALMS)* to extend functionalities and work efficiently. Suppose that you have been appointed as the project manager of this "*ALMS*" project team.

  (i.)   Briefly explain the term project management.   (04 Marks)

  (ii.)   List three special characteristics of ALMS project.   (03 Marks)

  (iii.) What are the project management processes needed to deliver a successful project outcome and list two main tasks accomplished under each process?   (10 Marks)

  (iv.)   State phases of project life cycle and mention at least one deliverable of each phase.   (08 Marks)

Question 02 (Total 25 Marks)

  (i.)   What is project Integration Management?   (02 Marks)

  (ii.)   Name three Integration Management processes.   (03 Marks)

  (iii.) Why is it important to work according to the defined project scope? (03 Marks)

  (iv.)   State three items that must be included in a stakeholder analysis document.

                                                                             (03 Marks)

  (v.)   Briefly explain three methods for selecting IT projects.   (06 Marks)

(vi.) Consider the following two projects

Years	Project A Cash Flow	Project B Cash Flow	Discount Factor 10%
0	-200000	-100000	1.000
1	50000	50000	0.909
2	200000	200000	0.826
3	200000	200000	0.751
4	300000	300000	0.683

    a. Assume the company uses 10% as the discount rate and calculate the Net Present Value of each project. (06 Marks)

    b. Which is the best project? Give reasons to prove your answer. (02 Marks)

Question 03   (Total = 25 Marks)

(i.) Name three major processes in developing the project time schedule. (03 Marks)

(ii.) Consider the following data regarding an IT development project. The main tasks have been identified and durations assessed as follows:

Activity	Duration Weeks	Dependancy on Activity
A	1	-
B	3	A
C	2	A
D	2	C
E	4	C
F	1	D
G	3	E
H	3	F,G
I	1	B
J	7	H,I

HNDIT 2302 IT Project Management 2015 1ˢᵗ Semester

K	2	B.J

    a. Draw the network diagram for this project. Use week numbers as the time units.

                                   (06 Marks)

    b. Find the critical path   (05 Marks)

    c. Find critical activities and non critical activities   (03 Marks)

(iii.)   Name three cost estimating tools and techniques   (03 Marks)

(iv.)   Your company is growing rapidly and has decided to buy in and install a new software to replace the existing manual system. Assume that the software product has been estimated to be 30,000 lines of source code and evaluated as being simple. The average salary of software engineers will be Rs. 35,000/- per month. Determine the effort required to develop the software product and the nominal development time.

                                                     (05 Marks)

Hint :

Effort = a^1 x $(size)^{a2}$ PM

Tdev = b^1 x $(Effort)^{b2}$ Months

Where,

size is the estimated size of the software product expressed in Kilo Lines of Code.

Tdev is the estimated time to develop the software, expressed in months,

Effort is the total effort required to develop the software product, expressed in person months (PMs).

$a^1 = 2.4$

$a^2 = 1.05$

$b^1 = 2.5$

$b^2 = 0.38$

Question 04   **(Total = 25 Marks)**

(i.)   "Our culture does not portray IT professionals as being good communicators. It is a greatest threat to many project"

    a. Describe the processes of communication management in IT projects.

                                              (06 Marks)

b. Give suggestions to improve communications among the projects. (03 Marks)

(ii.) Different experts and organizations define the term "quality" in different ways.

    a. What is meant by "quality " in project management (03 Marks)

    b. Give three quality management processes and briefly describe them.

                                                   (09 Marks)

(iii.) State four cost categories related to quality. (04 Marks)

Question 05   **(Total = 25 Marks)**

i. List five (05) skills required by a project manager for managing projects. (05 Marks)

ii. Briefly explain the project risk management process. (12 Marks)

iii. Define the term 'Outsourcing'. (03 Marks)

iv. List five advantages of outsourcing for a project. (05 Marks)