



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 Civil Engineering
3rdYear, First Semester Examination – 2016
(CE - 3118) Management of Civil Engineering Construction

Instructions for Candidates:
Answer any five (05) questions

No. of questions:06
No. of pages : 03
Time : **Three (03) hours**

- Q1. (a) Define the following terms.
- i. A project (02 Marks)
 - ii. Project Manager (02 Marks)
 - iii. Project Management (02 Marks)

(b) “It is extremely important for project managers to have interpersonal skills, because directly or indirectly the result of a project will depend on it”. Write down any five interpersonal skills that a project manager needs. (05 Marks)

(c) Briefly describe any three (03) skills noted in part (b). (09 Marks)

(Total Marks 20)

Q2. (a) Distinguish the difference between change management and project management. (04 Marks)

(b) Some businesses find change challenging due to inertia. Explain three possible causes of inertia that may hinder change in a business. (06 Marks)

(c) Why is change management important in an organization? (10 Marks)

(Total Marks 20)

Q3. (a) What does ‘human resource management’ mean? (02 Marks)

- (b) Job analysis is one of the functions to be followed in order to accomplish the goals and the objectives of HRM.
- i) What do you understand by the term “Job analysis”? (02 Marks)
- ii) Give five specific uses of job analysis and briefly explain them. (10 Marks)
- (c) “An incentive is a special reward that drives an employee to perform beyond the normal level of performance”. Give three advantages of employee incentive programmes. (06 Marks)

(Total Marks 20)

- Q4. (a) Define the terms,
- i. Delegation, (02 Marks)
- ii. Empowerment, (02 Marks)
- iii. Motivation (02 Marks)
- (b) Delegation is a key tool in the effective management of time, people and resources yet managers are often reluctant to delegate. Why? (03 Marks)
- (c) What are the five sources of power in an organization? (05 Marks)
- (d) Explain any three given in part (c). (06 Marks)

(Total Marks 20)

- Q5. (a) What does circular flow model explain in economics? (04 Marks)
- (b) “Society faces a short-run tradeoff between inflation and unemployment” Explain. (06 Marks)
- (c) Following data give you marginal cost (MC), marginal revenue (MR) and the fixed cost (FC) of a firm’s production at a particular period.
 $FC = \text{Rs. } 240$, $MC = 4x - 6$ and $MR = 66 - 2x$, where x is the production and no revenue at $x = 0$. Find the maximum profit. (10 Marks)

(Total Marks 20)

- Q6. (a) Write down any five planning techniques available for project planning. (05 Marks)
- (b) The activity descriptions, inter-relationships and normal activity durations of a construction project are given below.

Activity	Normal Duration (days)	Can Commence
A	16	At project start
B	20	At project start
C	10	At project start
D	12	At project start
E	15	After A
F	20	After B
G	15	After B
H	12	After G & C
I	8	After G & C
J	12	After E, F & H

The project ends with activities D, J and I.

- (i) Draw the network diagram (04 Marks)
- (ii) What is the total project duration? (02 Marks)
- (iii) Calculate Earliest Start Time (EST), Earliest Finish Time (EFT), Latest Start Time (LST), Latest Finish Time (LFT), Total Float (TF) and Free Float (FF) of the project. (08 Marks)
- (iv) Indicate the critical path. (01 Marks)

(Total Marks 20)