Reg. No. : | | | | | | | | | | | |

R 3175

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2007.

Sixth Semester

Civil Engineering

CE 1353 — CONSTRUCTION PLANNING AND SCHEDULING

(Regulation 2004)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — ($10 \times 2 = 20$ marks)

1. Define construction planning.

2. What do you mean by precedence relationship?

3. What is constraint in scheduling?

4. Define total float and independent float.

5. Define a project budget.

6. What is project cash flow?

7. What is the difference between health and safety?

8. What is the importance of quality control in a construction project?

9. List the types of project information in respect of a construction project.

10. What are the advantages and disadvantages of centralized database management system?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the procedure for formulating an activity network.

Or

(b) Explain the method of determining the critical path in an activity network.

12. (a) Write briefly about project cash flows.

Or

(b) What are the various costs involved in a construction project.

13. (a) For the data given below of a construction project schedule determine the critical path and all floats.

Activity	Predecessor	Duration
A	–	6
B	A	7
C	A	1
D	–	14
E	B	5
F	C,D	8
G	C,D	9
H	D	3
I	H	5
J	F	3
K	E, J	4
L	F	12
M	G, I	6
N	G, I	2
O	L, N	7

Or

(b) Determine the critical path and estimate the minimum project duration for the project data given below

Activity	t_o	t_m	t_p
A	3	4	5
B	2	3	5
C	6	8	10
D	5	7	8
E	6	9	14
F	10	12	14
G	2	2	4
H	4	5	8
I	4	6	8

14. (a) Explain the method of quality control by statistical method and method of sampling with attributes.

Or

(b) What are the causes of accidents? What are the precautions taken to prevent an accident?

15. (a) Explain in detail about the various sets of information collected in regard to construction project management.

Or

(b) Briefly explain about the computerized organization and use of information in a project.