MANIPAL UNIVERSITY

EIGHTH SEMESTER B. ARCH. DEGREE EXAMINATION – JULY 2017

SUBJECT: ELECTIVE I - PROJECT MANAGEMENT AND VALUATION (ARC-406.2)

(2010 SCHEME)

Tuesday, July 11, 2017

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

✍ **Answer any FIVE of the following questions:**

1. Bring out the importance of planning, scheduling and controlling of projects in a detailed manner.

    (10 marks)

2A. Explain the following terms in brief:
      i)   Activity and event
      ii) Resource Leveling

2B. Differentiate between-CPM and PERT Networks.

    (5+5 = 10 marks)

3A. Enlist the role of project manager in a project.

3B. Write short note on relevance of 'crashing of project'.

    (5+5 = 10 marks)

4. The duration of a project and their sequencing of operation of activities are given below:

Activity	1-2	1-3	1-4	2-7	3-4	4-5	4-7	5-6	5-7	5-8	6-8	7-8
Activity Time	8	10	5	6	3	7	0	4	3	6	5	5

4A. Draw the network diagram for the activities.

4B. Find slack for each activity and prepare a table showing the CPM schedule.

4C. Determine the critical path and total project duration.

    (3+5+2 = 10 marks)

5. A project has the following activities, precedence relationships and time estimates in weeks:

Activity	A	B	C	D	E	F	G
Immediate Predecessor	-	-	A	B	B	E	D
Optimistic Time	15	8	25	15	22	15	20
Most Likely Time	20	10	30	15	25	20	20
Pessimistic Time	25	12	40	15	27	22	22

5A. Calculate the expected time or duration for each activity.

ARC-406.2

5B. Construct the network diagram.

5C. Tabulate the values of ES,EF,LS,LF and slack for each activity.

5D. Identify the critical path and the project duration.

(4+2+2+2 = 10 marks)

6A. Briefly explain the various methods for valuation of land and buildings.

6B. What is sinking fund? How is it accounted?

(5+5 = 10 marks)