

**MANIPAL UNIVERSITY**  
**FOURTH SEMESTER M.ARCH (URBAN DESIGN & DEVELOPMENT)**  
**DEGREE EXAMINATION – JULY 2017**

**SUBJECT: PROJECT MANAGEMENT FOR URBAN DEVELOPMENT (ARM 726)**

Wednesday, July 12, 2017

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

- ✍ Answer any FIVE full questions.
- ✍ The answers should be supported with examples and sketches wherever necessary.
- ✍ Any missing data can be assumed suitably.

1A. Define project and project management.

1B. Elaborate on characteristics of a Project.

(5+5 = 10 marks)

2A. Differentiate between CPM and PERT techniques.

2B. Elaborate on Project Manager's roles and responsibility.

(5+5 = 10 marks)

3A. A construction project consists of the following important activities to be followed with their expected duration of time.

Activities	Duration (days)
0-1	4
1-3	14
1-2	5
2-3	8
2-5	12
3-4	6
4-5	2

Draw the network diagram and identify the critical path.

3B. What is Scheduling? What are the advantages of scheduling in project management?

(5+5 = 10 marks)

4. The project consists of the following activities and their time estimates are given below-

Activity	Time (in days)		
	Optimistic ( $t_o$ )	Most Likely ( $t_m$ )	Pessimistic ( $t_p$ )
1-2	1	3	4
2-3	4	5	8
1-3	2	4	5

1-4	6	8	9
2-4	3	7	12
3-5	7	9	15
4-5	2	5	9
4-6	1	4	5
5-7	4	5	10
6-7	2	7	13

- 4A. Draw the network diagram.  
 4B. Calculate Slack time for each event.  
 4C. Determine the critical path of the activity.

(3+5+2 = 10 marks)

- 5A. Discuss the need for conducting Social Cost Benefit Analysis.  
 5B. Explain the UNIDO approach to conduct Social Cost Benefit Analysis.

(5+5 = 10 marks)

- 6A. What is Entrepreneurship?  
 6B. What is the need and importance of entrepreneurship in economic development?

(4+6 = 10 marks)

