DEPARTMENT OF CIVIL ENGINEERING, NIT HAMIRPUR
CPM and PERT (CE 306)

Assignment 1

1. Represent on GANTT Chart the Following Project, The Activities and their Durations being as indicated
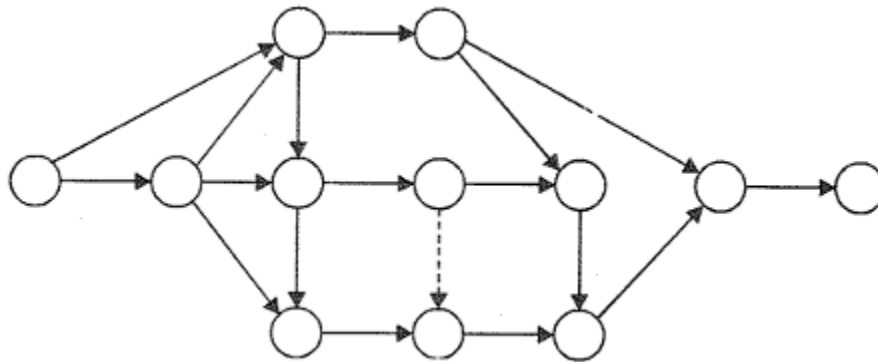
CONDUCTING AN EXAMINATION

No.	ACTIVITY	DURATION
1	Answer Questionaire	1 DAY
2	Print Question Paper	2 DAYS
3	Design Questionnaire	7 DAYS
4	Declare the result	1 DAY
5	Distribute to various centers	4 DAYS
6	Collect Answer Books at main office	2 DAYS
7	Allot the marks and grades	1 DAY
8	Check the answer sheets	7 DAYS

2. Q-Draw a Network diagram for the project having 9 activities, with the following inter-relationships:

    - C follows D but precede F.
    - C follows B but precedes H.
    - G follows F but precedes I.
    - E follows A but precedes I.
    - D follows A.
    - H and I terminate at the same time.
    - A and B start at the same time.

3. Draw a network for a house construction project. The sequence of activities with their predecessors are given in Table below.

Table 8.1: Sequence of Activities for House Construction Project

Name of the activity	Starting and finishing event	Description of activity	Predecessor	Time duration (days)
A	(1,2)	Prepare the house plan	--	4
B	(2,3)	Construct the house	A	58
C	(3,4)	Fix the door / windows	B	2
D	(3,5)	Wiring the house	B	2
E	(4,6)	Paint the house	C	1
F	(5,6)	Polish the doors / windows	D	1

4. Using the Fulkerson rule, number the events of the network shown in Fig.

5. A construction project consists of 12 activities. The predecessor relationships are identified by their node numbers as indicated below. Draw the network diagram.

Activity	Identification	Activity	Identification
A	(1, 2)	G	(4, 6)
B	(2, 4)	H	(5, 6)
C	(2, 3)	I	(5, 7)
D	(2, 7)	J	(7, 8)
E	(3, 4)	K	(6, 8)
F	(3, 5)	L	(8, 9)

6. Write specifications, determine plan breakdown and complete by numbering the network for a "Budgeting Project" of a large manufacturing firm.