

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
TEST -1 EXAMINATION -2015  
M.TECH I / B.TECH VII SEMESTER

COURSE CODE: 10M11CE113

MAX. MARKS: 15

COURSE NAME: CONSTRUCTION PLANNING &amp; CONTROL

COURSE CREDITS: 03

MAX. TIME: 1 HR

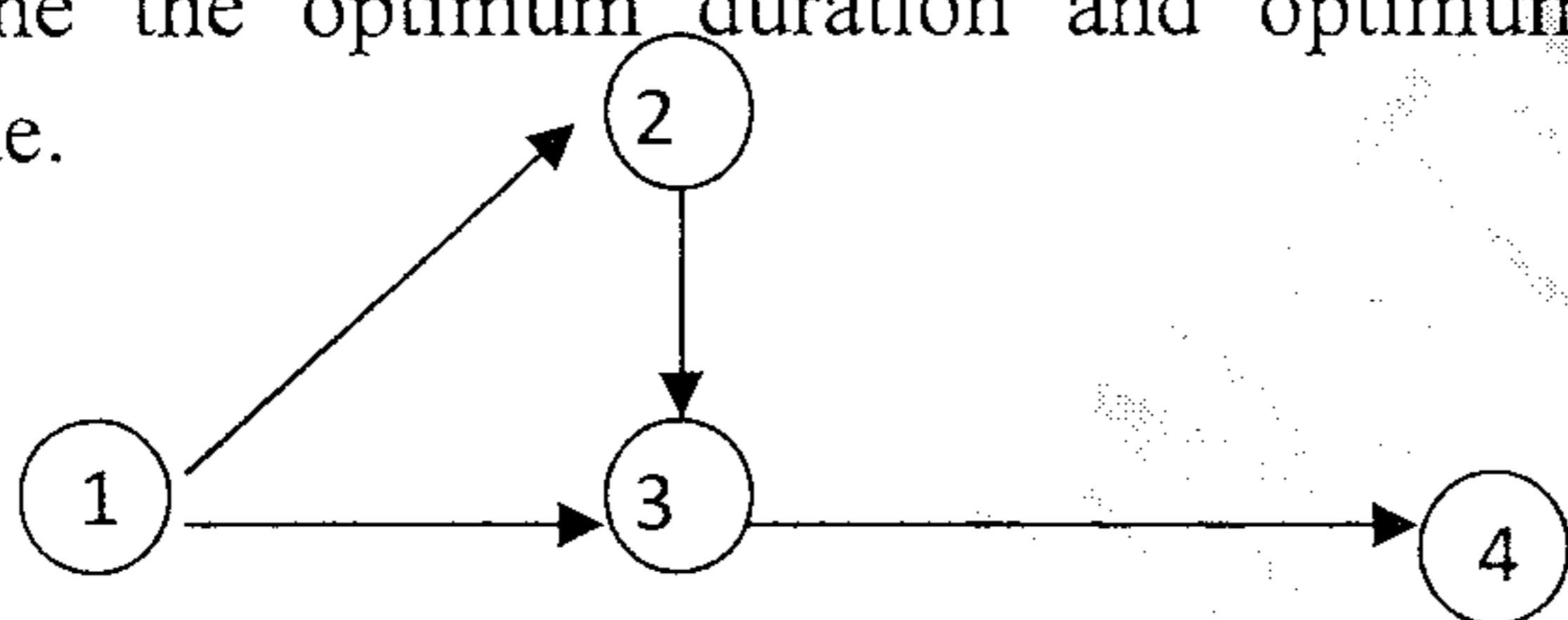
**Note:** All questions are compulsory. Draw figures and sketches to illustrate your answers.

Assume missing data suitably if required. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Write short notes on-

- (i) Beta distribution curve
- (ii) Expected time of an activity
- (iii) Free float of an activity

2. The following table gives the data for the duration and costs of each activity of a project network shown in figure below. The indirect cost of the project is Rs 1000/day. Determine the optimum duration and optimum cost of the project using Crashing technique.



Activity	Normal Duration (weeks)	Normal Cost (Rs.)	Crash Duration (weeks)	Crash Cost (Rs.)
1-3	8	6000	4	12000
1-2	4	2000	2	14000
2-3	10	4000	4	8000
3-4	6	4000	4	8000

3. For the given A-O-A network shown in figure, draw A-O-N network and find

- a) EST, EFT, LST, LFT, TF of each activity b) Critical path and critical duration

