

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
Test-1 EXAMINATION- March 2018

M.Tech.(ECE), 4<sup>th</sup> Sem

COURSE CODE: 11M1WEC433

COURSE NAME: Fault-Tolerant Systems

COURSE CREDITS: 03

MAX. MARKS: 15

MAX. TIME: 1 hr.

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q1. Define and explain the following terms with example of each:

- (i) Graph, (ii) Path, (iii) Loop, (iv) Circuit, (v) Connectedness, (vi) Degree of node

(3)

Q2. Explain the method of evaluating reliability and capacity related reliability using the method of exhaustive state enumeration

(4)

Q3. Write and explain the following algorithms for finding the shortest distance in a network:

- (i) Dijkstra algorithm  
(ii) Bellman-Ford algorithm

Give the comparison also.

(4)

Q4. What is difference between routing algorithm and routing protocol? Develop the following routing based on criteria: (a) min. delay max. reliability, (b) min. delay max. bandwidth

(4)