JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT **TEST-3 EXAMINATION- MAY 2019** B.Tech (ECE/CSE/IT/BI) VIII Semester

COURSE CODE: 11B1WCI836

MAX. MARKS: 35

COURSE NAME: Network Management

COURSE CREDITS: 3

MAX. TIME 2

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

Q.1. [5 Marks. Each part is one mark]

a) Why does ATM use the cell of small and fixed length?

b) List different types of DSL technologies.

- c) What are characteristics of a well managed telephone network?
- d) What is the channel capacity for direct digital transmission of 3Khz bandwidth at 30 db S/N ratio?
- e) Give an expression for average packet delay for data communication network.
- Q.2. [6 marks] Describe the architecture of SNMP RMON for management of a remote LAN. Also explain the RMON-1 and RMON-2 functionalities.
- Q.3. [6 marks] What is TMN? Explain the TMN conceptual model.
- Q.4. [6 marks] Service management is a major network management function in ATM. Explain the ATM services and how QoS is realised through proper network management.
- Q.5. [6 marks] Explain the User based Security Model(USM) in SNMPv3.
- Q.6. [6 marks] Write short notes on the following.
 - a) Network management functional model.
 b) Broadband HFC network management.

 - c) Message architecture in SNMPv1