## JAYPEE UNIVERSITY OF INFORMATRION TECHNOLOGY, WAKNAGHAT

## **TEST-1 EXAMINATION-2015**

## B.Tech VI Semester

COURSE CODE: 10B11EC611 MAX. MARKS: 15 COURSE NAME: telecommunication Networks **COURSE CREDITS: 4** MAX. TIME: 1 HR Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Q1. a) Elaborate the functions performed by Data link and transport layer. (3) b) Determine the maximum bit rate for a channel having bandwidth of 3100 Hz and S/N ratio **(2)** of 10dB. Q2. a) A sender transmits information through a channel (guided or unguided), what are various transmission impairments the signals will encounter in the network? (3) b) Give the significance of layered architecture in view of layers, services and protocols. **(2)** Q3. a) Generate CRC code for the data word 110101010 using the generator divisor 10101. (3) b) This code after transmission is received as 110010010111. Check if there is an error in the code word. **(2)**