JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

T-1 EXAMINATION (SEPTEMBER 2018)

M.Tech 1st Sem. & B.Tech 7th Sem. (ECE)

COURESE CODE: 10M11EC113

MAX. MARKS: 15

COURSE NAME: Advanced Telecommunication Networks

COURSE CREDITS: 3

MAX. TIME: 1 Hrs.

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

Q 1. A packet switch has to be designed. With the help of a suitable diagram, discuss the various components of a packet switch in detail. Discuss some switching fabrics. **(5)**

Q 2. a) Differentiate between circuit switching and packet switching.

Q2. b) Differentiate between frequency hopping spread spectrum (FHSS) and direct sequence spread spectrum (DSSS). **(2.5+2.5 = 5)**

Q 3. a) Discuss the working of Checksum method with an example. **(2)**

Q3. b) Given the dataword **1101011011** and the divisor **10011**,

i. Show the generation of the codeword at the sender site.

ii. Show the checking of the codeword at the receiver site (assume no error). **(2+1=3)**