

JAYPEE UNIVERSITY OF INFORMATRION TECHNOLOGY, WAKNAGHAT

END SEMESTER EXAMINATION- February 2018

B.Tech (BI) II Semester

COURSE CODE: 10B11BI411

MAX. MARKS: 15

COURSE NAME: Molecular Genetics

COURSE CREDITS: 04

MAX. TIME: 1 HRS

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

1. Describe three major areas of genetics? 1
2. What is a test cross? Give its significance. 2
3. What are sense and non-sense mutations, discuss with examples? 2
4. What are forward and reverse mutations? 2
5. Draw structure of a chromosome and label its various parts. Discuss various types of chromosomes based on position of centromere. 2
6. How the genetic variations are produced by crossing over? 2
7. Discuss prophase-I. 2
8. Draw genetic map based on 2

Gene pair	Recombination frequency (%)
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A and D	8
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B and D	13
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C and D	23
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