

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

TEST -I EXAMINATION- FEB-2024

M.Tech -2nd Sem (BT)

COURSE CODE(CREDITS):21M1WBT231(3)

MAX. MARKS: 15

COURSE NAME: Plant Biotechnology

COURSE INSTRUCTORS: Dr Hemant Sood

MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

- Q1. How you would like to produce intraspecific hybrids of mango for good taste and yellow color? Explain the methodology for its development and validation. (3)
- Q2. Conceptualize a strategy for the development of transgenic red berries by using npt11 as selectable for the transfer of FRR gene for enhancing flavonoid production. Explain the complete protocol. (3)
- Q3. Which Plant biotechnological intervention is contributing to very rapid and diverse genetic transformation? What is the significance and drawbacks of the technique for the development of transgenic plants?(3)
- Q4. Which is the most effective and rapid methodology for the production of clones of strawberries having red color and high anthocyanins? If one shoot apices produce 10 shoots, how you would produce 1000 plantlets? Explain it. (4)
- Q5. Write short notes on the production of Artificial seeds and Haploid plants with their one significant character. (2)