

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-3 EXAMINATION- FEBRUARY -2017

B.Tech/ M.Tech 8th, 4th Semester

COURSE CODE: 14I1WBT531

MAX. MARKS:35

COURSE NAME: Plant Biotechnology

COURSE CREDITS: 03

MAX. TIME: 2 Hrs

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

Q.1

- a. What is molecular farming? Enlist different type of target products.
- b. What is TrypZean?
- c. Why phytase is important in animal and poultry diet?
- d. Why metabolic engineering of fatty acid biosynthetic pathways is necessary in order to increase industrial use of fatty acids?

4x2=8

Q.2 What are advantages and challenges of production of vaccines in transgenic plants?

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Q.3 Why monounsaturated fatty acids are industrially important. Discuss development of super high oleic acid safflower and high erucic acid brassica through metabolic engineering.

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Q.4 Avidin can be produced commercially in transgenic plants. Argue the case on basis of cost of production and regulatory concern aspects.

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Q.5 What is hirudin? Discuss its production and oleosin facilitated purification in plants.

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Q.6 What is chloroplast biotechnology? Discuss the advantages of chloroplast engineering, limitations and possible solution in details.

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