

S.Y.B.SC. SEM – IV (2014 Course) : WINTER - 2018
SUBJECT: BOTANY: PLANT BIOTECHNOLOGY (B-41)

Day: Monday
Date: 22/10/2018

W-2018-0819

Time: 03.00 PM TO 05.00 PM
Max. Marks: 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
-

Q.1 Attempt any **TWO** of the following: **(10)**

- a) What are the advantages of tissue culture?
- b) Explain the principles of biological waste water or sewage treatment.
- c) What is role of microorganism in mining?

Q.2 Attempt any **TWO** of the following: **(10)**

- a) Give definition and concept of biotechnology.
- b) Give scope and importance of biotechnology.
- c) Give outline of technique in genetic engineering.

Q.3 Attempt any **TWO** of the following: **(10)**

- a) Describe process of isolation in *Rhizobium*.
- b) Give account of petro crops.
- c) Explain need of protein in human diet.

Q.4 Attempt any **FIVE** of the following: **(10)**

- a) Define fermentation. Give with suitable examples.
- b) Enlist conditions required for growth and production of yeast biomass.
- c) Give requirements for growth of *Spirulina*.
- d) What are the biological fuels or biofuels?
- e) What are degradative plasmids?
- f) What do you mean by genetic engineering?
- g) Give types of bio fertilizer?

* * * *