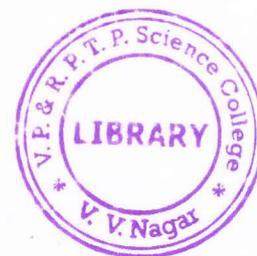


V P and R P T P Science College
Internal test ,2019
BOTANY, US06CBOT05
Plant Biotechnology



Day: Monday
Time: 10-12 O'Clock

Date: 11.03.2018
Marks: 50

Q.1 Multiple choice questions. Attempt all.

08

- (I) Somatic embryogenesis is a technique of raising ?
(a) Polyploid plants (b) Haploid plants (c) Diploid plants
(d) All of these
- (ii) Which part of the plant will be the most practicable for the isolation of Protoplast for a culture experiment ?
(a) Stem (b) Petals (c) tender leaves (d) Anther wall
- (iii) Endonuclease is a enzyme originally collected from ?
(a) Bacteria (b) Protozoa (c) Lichens (d) marine algae
- (iv) PCR requires ?
(a) Heating only (b) Cooling only (c) Both (d) Constant temperature
- (v) Which one of the following is required for gene construct?
(a) PCR (b) DNA of choice (c) Both
(d) Descending chromatography
- (vi) Which one of the following is a source of vectors in the field of transgenics?
(a) Bacteria (b) *E.coli* (c) *Alternaria* sp. (d) None of these
- (vii) What are super bugs?
(a) Bacteria (b) Genetically modified bacteria
(c) Amoeba (d) All of these
- (viii) Which is claimed to be a genetically modified produce ?
(a) IR 8 rice (b) Golden rice (c) Jaya rice (d) None of these

Q.3 Short answer questions. Attempt any five only.

08

- (i) Explain the importance of sterilization in a plant tissue culture Lab.
(ii) Explain the utility of protoplast fusion.
(iii) What is genetic engineering?
(iv) What is a genome?
(v) What is primer?
(vi) Describe the utility of plant transformation techniques.
(vii) Enlist a few industrial applications of modern Biotechnology.
(viii) Biotechnology is important in agriculture -----justify

Q.3 Describe the technique of plant tissue culture on brief. 08
OR

Q.3 Describe the method of isolation of protoplasts. 08

Q.4 Write short notes on: 08

(a) Application of Gel electrophoresis

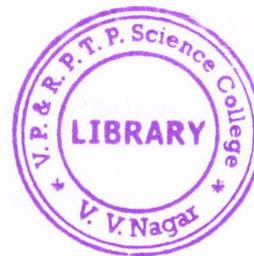
(b) Polymerase chain reaction

OR

Q.4 Write short notes on: 08

(a) Scissors

(b) DNA amplification



Q.5 Show your acquaintance with gene construct. 08

OR

Q.5 What is plant transformation? Describe 08

Q.6 Show how modern biotechnology is useful in agriculture. 08

OR

Q.6 Explain 08

(a) stress resistant plants

(b) Genetically modified cotton plant

XXXXXXXXXXXXXXXXXXXX