

P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI

Internal Examination

B. Sc. Semester - V

[Mark : 40

26-9-2016]

Biotechnology - 503

[2 hours

Principles of Biotechnology Applied to Plants

Q-1. Attend all questions. 10

- (1) an explants isolated in size.
(a) 7-4 cm (b) 0.2-0.4 mm (c) 2-5 mm (d) 4-5 inch
- (2) MS medium formulated in year which is mostly used.
(a) 1965 (b) 1974 (c) 1962 (d) 1990
- (3) HEFA filter spore size is
(a) 0.45 um (b) 45 um (c) 0.22 um (d) 22 um
- (4) Haploid plant produce
(a) Pollen (b) anther (c) a + b (d) andro
- (5) Protoplast
(a) plant cell (b) cell without wall
(c) cell with wall (d) None of them
- (6) X and Y if these are plant varieties what is X + Y
(a) Cybrid (b) Hybrid
(c) Heterokariyons (d) Homokariyons

Match the followings.

- | | |
|---------------|--------------|
| (7) Osmticum | (a) 6 BAP |
| (8) Cytokines | (b) IAA |
| (9) Axium | (c) Cotton |
| (10) BXN | (d) sorbitol |

Q-2. Answer any four questions. 20

- (1) Explain cell totipotency.
- (2) Describe 4 pathways of pollen culture.
- (3) Draw a diagram of ptc lab and list out instruments.
- (4) Explain cell suspension culture
- (5) Explain callus and differentiation

Q-3. Answer any on question. 10

- (1) Explain gene transfer methods and application.
 - (2) Describe isolation, culture methods and fusion of protoplast.
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