

[53]

SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

B.Sc.Examination; V Semester

BOTANY-US05CBOT02

Structural, adaptive and reproductive biology of angiosperms

Date: 24/10/2018, Wednesday, Time: 10.00a.m.-1.00p.m.

Marks-70

Q-1 Multiple Choice Questions.

(10)

- (i) Wood rays are usually absent in _____.
(a) secondary wood (b) secondary phloem (c) primary xylem (d) none of these
- (ii) What is the function of root cap?
(a) protection (b) transpiration (c) elongation (d) none of these
- (iii) Casparian strips are found in: _____.
(a) epidermis (b) cortex (c) pericycle (d) endodermis
- (iv) _____ is the succulent xerophytes.
(a) Aloe (b) Neem (c) Tulsi (d) Adhatoda
- (v) Which protects the plant from wetting?
(a) trichomes (b) cuticle (c) epidermis (d) rhizodermis
- (vi) A culture room can be sterilized by _____.
(a) UV-light (b) dark (c) dim light (d) none
- (vii) Who is the famous plant embryologist from India?
(a) K.Easu (b) R.P.Roy (c) V.Parthsarthy (d) P.Maheshwari
- (viii) Which one of the following is a false fruit?
(a) Banana (b) Cherry (c) Apple (d) Mango
- (ix) An example for autotrophy is:
(a) Andrographis (b) Ruellia (c) both(a)&(b) (d) none of these
- (x) The seeds of Moringa are dispersed by _____.
(a) wind (b) animal (c) water (d) insects

(1)

(P.T.O.)

Q-2 Short answers questions. (Any ten).

(20)

- (i) Explain: Apical cell theory.
- (ii) Explain: Data-base.
- (iii) What are raphides?
- (iv) Define: meristem?
- (v) Write the functions of vascular cambium.
- (vi) Why xylem and phloem are known as complex tissues?
- (vii) What is parthenocarpy? What are its advantages?
- (viii) Write importance of pollen viability in fertilization.
- (ix) What are the applications of embryo culture.
- (x) Write the symptoms of pollen allergy.
- (xi) What is embryo rescue?
- (xii) Define: Incompatibility.

Q-3 Give a brief account of the ergastic substances in plants.

(10)

OR

Q-3 Describe secondary growth in roots.

(10)

Q-4 Write notes on: (a) Structure and functions of cuticle.

(05)

(b) Mesophyte.

(05)

OR

Q-4 Write a comparative account of anatomical adaptations of hydrophytes and xerophytes.

(10)

Q-5 Explain in detail: Methods of embryo-culture.

(10)

OR

Q-5 Write notes on : (a) Induced parthenocarpy.

(05)

(b) Control of fertilization.

(05)

Q-6 Explain the importance of pollen-pistil interaction and the factors influencing it.

(10)

OR

Q-6 Write notes on: (a) Dispersal of fruits.

(05)

(b) Dispersal of seeds.

(05)

—X—
②