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SARDAR PATEL UNIVERSITY

T.Y. B.Sc. 5th SEMESTER

BOTANY-US05CBOT-02(Structural, Adaptaive and Reproductive biology of angiosperms)

13/11/2019, Wednesday, 10.00 a.m.-1.00p.m., Marks-70

Q-1 Multiple Choice Questions. (10)

(1)Which one of the following is a principal food conducting tissue?

(a)pholem (b)wood (c)cortex (d)endodermis

(2)In Bombax ceiba the secondary pholem functions for:

(a)more than one season (b)one season

(c)more than 20 years (d)none of these

(3)Casparian strips are found in_____.

a)cortex (b)epidermis (c)endodermis (d)pericycle

(4)Vivipary is most commonly seen in_____.

(a)hydrophytes (b)xerophytes (c)mesophytes (d)halophytes

(5)In which of the following plant secondary growth in roots does not occur?

(a)Royal palm (b)Fizi fan palm (c)Areca nut (d)none of these

(6)Who for the first time injected aq.solution of Belvitan into the ovaries of Petunia?

(a)Goodwin (b)Yasuda (c)Jorgensen (d)Gates

(7)A culture room can be sterilized by:

(a)red-light (b)green light (c)uv-light (d)all of these

(8)Exine proteins of the pollen grains are synthesised in:

(a)pollen chamber (b)endothecium(c)middle layer (d)Tapetum

(9)Pappus is a modification of:

(a)calyx (b)corolla (c)stamens (d)pistil

(10)In a culture medium which one of the following is a source of carbon?

(P.T.O)

(a)solid carbon (b)sucrose (c)thiamin (d)all of these

Q-2Attempt any ten short answer questions. (20)

(1)Explain:Apical cell theory with diagram.

(2)Write the applications of plant anatomy in forensic.

(3)What are the functions of quiescent centre.

(4)What are raphides?

(5)What is function of cuticle?

(6)Give four examples of succulent xerophytes.

(7)Name any four famous plant embryologists.

(8)Write importance of pollen viability in fertilization.

(9)Write the advantages of parthenocarpy.

(10)Explain: pollen-pistil interaction.

(11)What are fruits?

(12)List the adaptations shown by seeds and fruits for dispersal by wind.

Q-3Write notes on: Root-cap, Rhizodermis and Cortex. (10)

OR

Q-3What is secondary growth? Describe detail in dicot root. (10)

Q-4Write the internal structure of root,leaf and stem of hydrophytes. (10)

OR

Q-4(a)Briefly describe the structure of cambium. (05)

(b)Describe: Mesophyte. (05)

Q-5Write notes on: (a)Method of embryo culture. (05)

(b)Contributions of the scientist P.Maheshwari. (05)

OR

Q-5Give a brief account on: Control of fertilization. (10)

Q-6Write about: (a)Dehiscent fruits. (05)

(b)Pollen allergy. (05)

OR

Q-6Describe the structure of pericarp in legumes. (10)

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