

Seat Number

--	--	--	--	--	--

Nov-2015



कांजी - 021

BOTANY PAPER - I : BOT- 241
Plant Anatomy
(24145)

P. Pages : 3

Time : Two Hours

Max. Marks : 40

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Figures to the right indicate full marks.
6. Draw neat labelled diagrams wherever necessary.

1. Solve any eight :

8

- a) In monocot leaf vascular bundles are -----
 - i) Conjoint, amphicribal
 - ii) Radial
 - iii) Conjoint collateral and closed.
 - iv) None of these
- b) When stoma remain surrounded by three subsidiary cells of which one is much smaller than the other two, the stoma is of ---- type.
 - i) anisocytic
 - ii) paracytic
 - iii) anomocytic
 - iv) Diacytic
- c) Deposition of lignin on epidermis is called as
 - i) cutinization
 - ii) suberization
 - iii) lignification
 - iv) None of these
- d) Nectaries belongs to ----- tissue system.
 - i) mechanical
 - ii) secretory
 - iii) epidermal
 - iv) None of these

कांजी - 021

- e) In sunflower stem V.B. are ----- type.
- Radial
 - Conjoint collateral and open
 - Conjoint collateral and closed
 - Concentric amphivasal
- f) During secondary growth in dicot root cork cambium is formed from -----
- Endodermis
 - Cortex
 - Xylem
 - Pericycle
- g) Branched tree like epidermal outgrowth are called as -----
- Stellate
 - Dendroid
 - Peltate
 - All of these
- h) In ----- collenchyma, wall thickenings are deposited around inter cellular spaces.
- Lacunar
 - Angular
 - Lamellar
 - All of these.
- i) ----- arises from epiblema.
- Glandular trichomes
 - Stellate hairs
 - Dendroid trichomes
 - Root hairs
- j) Water conducting element in plant is -----
- phloem
 - Xylem
 - Sclerenchyma
 - Collenchyma

2. Attempt any four.

8

- Describe Secretory tissue.
- Define Simple tissue.
- Define Stoma.
- Describe vascular bundle in sunflower leaf.
- Define plant anatomy.
- Define epidermis.

3. Solve any two : 8
- a) Sketch and label T.S. of sunflower stem.
 - b) Explain types of meristems based on their position.
 - c) Explain principle of inflexibility.
4. a) Solve any two : 6
- i) Distinguish between dicot leaf and monocot leaf.
 - ii) Explain digestive glands.
 - iii) Explain primary structure of sunflower root.
- b) Describe graminaceous types of stoma. 2
5. With the help of neat labelled diagram describe primary structure of monocot root. 8

OR

With the help of labelled sketch explain secondary growth in dicot (sunflower) stem.
