

## NEET ANATOMY OF FLOWERING PLANTS — PERMANENT TISSUES: COMPLEX (XYLEM, PHLOEM) — PYQS

Max. Marks: 52

Questions: 13

### Section A (MCQ) — 13 questions

**Q.1** Which one of the following is not found in Gymnosperms? [RE-NEET (UG) 2024]

- (1) Sieve cells (2) Albuminous cells  
(3) Tracheids (4) Vessels

Scan or tap for the full solution 

**Q.2** Which of the following helps in maintenance of the pressure gradient in sieve tubes? [RE-NEET (UG) 2024]

- (1) Albuminous cells (2) Sieve cells  
(3) Phloem parenchyma (4) Companion cells

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**Q.3** Given below are two statements :

**Statement-I:** Endarch and exarch are the terms often used for describing the position of secondary xylem in the plant body.

**Statement-II:** Exarch condition is the most common feature of the root system.

In the light of the above statements, choose the correct answer from the options given below:

[NEET (UG) 2023]

- (1) Both Statement-I and Statement-II are false  
(2) Statement-I is correct but Statement-II is false  
(3) Statement-I is incorrect but Statement-II is true  
(4) Both Statement-I and Statement-II are true

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**Q.4** Phloem in gymnosperms lacks: [NEET (UG) 2019]

- (1) Companion cells only  
(2) Both sieve tubes and companion cells  
(3) Albuminous cells and sieve cells  
(4) Sieve tubes only

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**Q.5** Tracheids differ from other tracheary elements in :

[AIPMT 2014]

- (1) being imperforate  
(2) having Casparian strips  
(3) lacking nucleus  
(4) being lignified

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**Q.6** Gymnosperms are also called softwood spermatophytes because they lack

[AIPMT 2012 (Prelims)]

- (1) Cambium (2) Thick-walled tracheids  
(3) Phloem fibres (4) Xylem fibres

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**Q.7** Companion cells are closely associated with

[AIPMT 2012 (Prelims)]

- (1) Sieve elements (2) Trichomes  
(3) Vessel elements (4) Guard cells

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**Q.8** Transport of food material in higher plants takes place through -

[AIPMT 2010 (Mains)]

- (1) Sieve elements (2) Transfusion tissue  
(3) Companion cells (4) Tracheids

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**Q.9** The chief water conducting elements of xylem in gymnosperms are :

[AIPMT 2010 (Prelims)]

- (1) Fibres (2) Transfusion tissue  
(3) Vessels (4) Tracheids

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**Q.10** The annular and spirally thickened conducting elements generally develop in the protoxylem when the root or stem is -

[AIPMT 2009]

- (1) Maturing (2) Widening  
(3) Elongating (4) Differentiating

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**Q.11** A common structural feature of vessel elements and sieve tube elements is-

[AIPMT 2006]

- (1) Enucleate condition
- (2) Presence of p-protein
- (3) Thick secondary walls
- (4) Pores on lateral wall

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full solution



**Q.12** Which of the following statements is true ?

[AIPMT 2002]

- (1) Tracheids are unicellular and with wide lumen
- (2) Tracheids are multicellular and with narrow lumen
- (3) Vessels are multicellular and with wide lumen
- (4) Vessels are unicellular and with narrow lumen

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**Q.13** Vessels are found in:

[AIPMT 2002]

- (1) Most of the angiosperms and a few gymnosperms
- (2) All angiosperms and some gymnosperms
- (3) All pteridophyta
- (4) All angiosperms, all gymnosperms and some pteridophyta

Scan or tap for the  
full solution



### ANSWER KEY

| Ques. | 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------|----|----|---|---|---|---|---|---|---|----|----|
| Ans.  | 4  | 4  | 3 | 2 | 1 | 4 | 1 | 1 | 4 | 3  | 1  |
| Ques. | 12 | 13 |   |   |   |   |   |   |   |    |    |
| Ans.  | 3  | 1  |   |   |   |   |   |   |   |    |    |