UIIA	(SEGT			
1	In mustard plant, roots are	6	Pneumatophore is a modification of roots	
••	(A) Tap root system.	0.		
	(B) Adventitious root system.		TOF	
	(C) Fibrous root system.		(A) Support.	
	(D) All except (T).		(B) Storage.	
2.	Which of the following is/are the		(C) Respiration.	
	function(s) of the typical root system?		(D) Moisture absorption.	
	(a) Absorb water and minerals from soil (b) Provide anchorage to plant parts			
	(c) Store reserve food material	7.	Prop roots	
	(d) Synthesise plant growth regulators		a. Arise from lower node of stem.	
	(A) Only (a) and (b) (B) Only (a) (b) and (c)		b. Provide support as they hang from	
	(C) Only (a), (c), and (d)	l	branches.	
	(D) All (a), (b), (c), and (d)		c. Are present in banyan tree.	
			d. Help in gaseous exchange.	
3.	(A) Position (B) Function		Choose correct option. (A) (c) and (c)	
	(C) Internal structure. (D) Place of origin.		(A) (a) and (c) (b) (b) and (c) (C) (a) and (d) (D) (b) and (d)	
4.	Very fine delicate unicellular thread-like	8.	The main function of stem in most plants is	
	that is proximal to		(A) Storage of food and photosynthesis.	
	(A) Region of maturation.		(B) Conduction of water and minerals form	
	(B) Region of cell elongation.		leaves to root.	
	(D) Region of cell differentiation.		(C) Spreading out branches bearing	
			(D) Vegetative propagation and synthesis	
5.	The given figure shows the region of root		of PGR	
tip with labelling A, B, and C. Identify the correct labelling. Root hair				
		9.	The axillary bud of stems is modified into	
			woody straight and pointed structure in	
			(A) Bougainvillea. (B) Citrus.	
Root hair			(C) Opuntia. (D) All except (3)	
			The androssium of Malyassas is	
B		10.	(A) Didynamous	
			(B) Tetradynamous	
			(C) Diadelphous	
	Root cap		(D) Monadelphous	
	A B C	11.	The underground stem of some plants	
	maturation elongation meristemat		such as grasses, strawberry is concerned	
	(D) Deging of Deging of D		with	
	differentiat cell division meristemat		(a) Perennation.	
	ion ic activity		(b) vegetative propagation.	
	(C) Region of Region of Region of elongation differentiati		(d) Food assimilation	
	on division		(e) Spread to new niches	
((D) Region of Region of Regionof		(A) (a), (b), and (e) (B) (b). (c), and (e)	
	ceil elongation maturation		(C) (a), (e), and (d) (D) All except (d)	
		<u> </u>		

- 12. All of the following are adventitious roots that perform a vital function, except (A) Stilt root.
 - (B) Haustoria.
 - (C) Hygroscopic roots.
 - (D) Photosynthetic roots.
- The region of root a few millimetres above the root cap possessing very small cells with thin walls and dense protoplasm is (A) Region of meristems.
 - (A) Region of elemention
 - (B) Region of elongation.
 - (C) Region of differentiation.
 - (D) Root hair zone.
- **14.** Select the incorrect statement about leaves.
 - (A) Leaf develops at the node.
 - (B) Leaves originate from shoot apical meristem.
 - (C) Leaves bear a bud in its axile.

(D) Leaves are arranged in basipetal order.

- The presence of sheathing leaf base covering the stem partially or wholly is the characteristic of certain

 (A) Monocots.
 (B) Fern.
 - (A) Monocots. (B) (C) Cycas. (D)
 - (D) <mark>Legumes</mark>
- **16.** Most important character of Brassica campesteris is
 - (A) False septum
 - (B) Parietal placentation
 - (C) Ebracteate
 - (D) Imbricate aestivation
- **17.** In pea, the leaf is modified into special structure to
 - (A) Be defensive in nature.
 - (B) Provide support to the plant in climbing.
 - (C) Store food.
 - (D) Perform photosynthesis.
- **18.** Root hairs develop from
 - (A) Region of maturation.
 - (B) Region of elongation.
 - (C) Region of cell division.
 - (D) Meristematic zone.
- **19.** Select the incorrectly matched pair.
 - (A) Palmately compound leaf-Alstonia
 - (B) Pinnately compound leaf-Neem
 - (C) Whorl phyllotaxy-Nerium
 - (D) Fleshy leaves Garlic

- 20. Which of the following represents the condition seen in the family composite

 (A) Superior ovary, syngenesious, single basal ovule
 (B) Inferior ovary, monoadelphous, basal placentation
 (C) Inferior ovary, syngenesious, axile, placentation
 (D) Syngenesious, basal placentation and epigynous
- **21.** In cymose inflorescence,

(a) The main axis terminates into flower.(b) Flowers are born in acropetal manner.(c) Young flowers are present towards the base and older at the apex.(A) Only (c) is correct.

- (B) Only (a) and (c) are correct.
- (C) Only (a) is correct.
- (D) Only (a) and (b) are correct.
- **22.** Identify the given diagram and choose the incorrect option.



(A) The main axis terminates into a flower.

- (B) Flowers are basipetally arranged.
- (C) Growth of the peduncle is determinate.
- (D) The main axis continues to grow.
- 23. Verticillaster is a type of __A__ which is found in __B___.

	Α	В
(A)	Fruit	Ocimum
(B)	Inflorescence	Ocimum
(C)	Fruit	Ficus
(D)	Flower	Salvia

24. A flower is a modified shoot because(A) Certain flowers have well-developed nodes and internodes.

(B) It arises in the axile of bracts.

(C) The growing point of thalamus may give rise to shoots

- (D) All of these
- **25.** Mark the correct statement for Gramineae
 - (A) The carpel has two styles
 - (B) Spikelets are always in pairs
 - (C) Palea is the bracteole
 - (D) Awn is an appendage of the palea

26. Mark the mismatched pair with respect to modification of stem. (A) Rhizome-Turmeric (B) Corm-Banana (C) Bulb-Onion (D) Phylloclade-Euphorbia 27. may be tubular, bell shaped, funnel shaped, or wheel shaped (B) Perianth (A) Calyx (C) Corolla (D) Stamen 28. In which of the following type 0 aestivation, the largest posterior petal overlaps the two lateral petals? (A) Imbricate (B) Vexillary (C) Valvate (D) Twisted 29. In silk cotton trees (A) Incision of lamina is absent. (B) Leaflets are present on the lateral side of leaves. (C) Leaflets are attached at the tip of petiole. (D) Bud is absent in the axile of leaves. 30. In family Gramineae, the inflorescence is (A) Capitulum (B) Verticellaster (C) Hypanthodium (D) Spike of spikelet 31. The mode of arrangement of sepal or petals in the floral bud with respect to other members of the same whorl is known as (A) Placentation (B) Venation. (C) Aestivation. (D) Phyllotaxy. 32. Axile and free central placentation are similar in having (A) Unicellular ovaries. (B) Placenta or ovules born on central axis. (C) Syncarpous and inferior ovaries. (D) Bilocular ovaries due to the formation of a false septum called replum. 33. The placentation develops at the base of ovary and a single ovule is attached to it. Such a placentation is known as (A) Basal. (B) Marginal. (C) Parietal. (D) Axile.

34. Aggregate fruit develops from (A) Monocarpellary ovary. (B) Multicarpellary syncarpous ovary. (C) Multicarpellary apocarpous ovary. (D) Entire inflorescence. 35. A crop plant which can grow well even in nitrogen deficient soil is (A) Helianthus annuus (B) Gossypium herbaceum (C) Brassica campesteris (D) Cajanus cajans (SECTION-B) 36. Match the following columns. Column I Column II a. Berrv (i) Apple b. Siliqua (ii) Tomato c. Pome (iii) Orange d. Hesperidium (iv) Mustard (A) a (iv), b (ii), c (i), d (iii) (B) a (ii), b (i), c (iii), d (iv) (C) a (iv), b (ii), c (i), d (iii) (D) a (ii), b (iv), c (i), d (iii) 37. Syconus fruits which develop from inflorescence? (A) Hypanthium (B) Spike (C) Spadix (D) Catkin 38. The large and shield-shaped cotyledon in maize seed is (A) Coleoptile. (B) Scutellum. (C) Epiblast. (D) Coleorhiza. 39. Which of the following are not characteristic features of fabaceae (A) Tap root system, compound leaves and receme inflorescence (B) Flowers actinomorphic, twisted aestivation and gamopetalous (C) Stamens 10, introrse, basifixed, dithecous (D) Monocarpellary, ovary superior and bent stigma 40. Which of the following floral features is not represented by symbols in the floral formula of a plant family? (A) Symmetry of flower (B) Aestivation of calyx and corolla (C) Cohesion and adhesion between floral whorls (D) Relative position of ovary with respect to other parts

41. (9) 47. Consider the following features (I to III) Name the family having +1 arrangement of stamens and select the plant associated with them. (A) Solanaceae (B) Asteraceae (D) Fabaceae (I) Flowers with bilateral symmetry (C) Liliaceae (II) Superior ovary 42. In the floral formula, K_(n) denotes (III) Diadelphous condition of stamens (A) Polysepalous. (A) Lupin (B) Petunia (B) Gamosepalous. (C) Gloriosa (D) Belladonna (C) Epis (D) Epiphyllous. 48. Which type of placentation is found in 43. Persistent calyx is the character of plants tomato and Argemone, respectively? belonging to the family (A) Axile and free central (A) Cruciferae (B) Liliaceae (C) Fabaceae (D) Solanaceae (B) Axile and parietal (C) Parietal and axile 44. Families with syncarpous, superior ovary and similar type of placentation are (D) Marginal and parietal (A) Cruciferae and Cucurbitaceae (B) Solanaceae and Fabaceae (C) Liliaceae and Solanaceae 49. To which family the following flower is (D) Fabaceae and Malvaceae related? 45. Select the incorrectly matched pair. (A) Petunia C(5)A5 (B) Brassica K_{2+2} (C) Sesbania A₍₉₎₊₁ (D) Gloriosa G₍₂₎ (A) Fabaceae (B) Solanaceae 46. When a shoot tip transforms into a flower, (C) Cruciferae (D) Liliaceae it is (A) Always solitary. Brightly coloured bracts are found in 50. (B) Always racemose. (A) Bougainvillea. (B) Banana. (C) Always cymose. (C) Maize. (D) Palins (D) May be racemose or cymose