1.

The endosperm is not present in the mature seeds of

1. Bean, gram
2. Pea, cucumber
3. Castor, cucumber
4. More than one option is correct

2.

Floral formula of the mustard plant is

1. $\% \, ♀ \, K_{(5)} \, C_{1+2+(2)} \, A_{(9)+1} \, G_{1}$
2. $\oplus \, ♀ \, K_{2+2} \, C_{\times 4} \, A_{2+4} \, \underline{G}_{(2)}$
3. $\oplus \, ♀ \, K_{(5)} \, \overset{\frown}{C_{(5)}} \, A_{5} \, \underline{G}_{(2)}$
4. $\oplus \, ♀ \, \overset{\frown}{P_{3+3}} \, A_{3+3} \, \underline{G}_{(3)}$

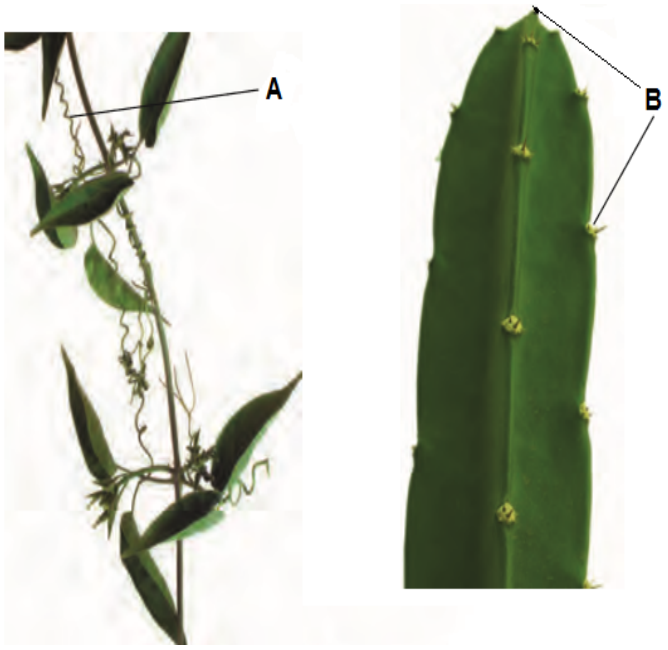
3.

Solanum tuberosum and Allium cepa are similar in the presence of

1. Axile placentation
2. Epipetalous condition
3. Versatile anther
4. Obliquely placed ovary

4.

Below labeled structures (A and B) in the diagram represent a modification of



1. A - Stem B - Leaf
2. A - Bud B - Leaf
3. A - Leaf B - Leaf
4. A - Leaf B - Leaf

5.

Which is incorrect w.r.t. pneumatophore?

1. They are found in all aquatic plants
2. They are also known as respiratory roots
3. They bear small pores lenticels
4. They have corky layer in lower part

6.

Select incorrect statement w.r.t. racemose inflorescence

1. The main axis continues to grow
2. Peduncle bears flowers in basipetal/centrifugal manner
3. The main axis is not terminated into flower
4. It is an indeterminate inflorescence

7.

Choose correct pair

	Placentation		Example
1.	Marginal	-	Dianthus, Silene
2.	Axile	-	Pea, Acacia
3.	Parietal	-	Lemon, Petunia
4.	Basal	-	Triticum, Sunflower

8.

Position of ovary is superior in

1. Hypogynous flower
2. Perigynous flower
3. Epigynous flower
4. Mesogynous flower

9.

Drupes are also called as stone fruits because

1. The seeds are stone like
2. Endocarp is always hard and stony
3. Pericarp is undifferentiated and sclerified
4. The mesocarp is edible in most fruits

10.

The pitcher in pitcher plant is a modification of

1. leaf base
2. Petiole
3. Lamina
4. Leaf apex

11.

Coleoptile and coleorhiza are absent in

1. Zea mays seed
2. Triticum turgidum seed
3. Gram seed
4. More than one option is correct

12.

Underground modification of stem occurs for following special functions, except

1. Storage of food
2. Vegetative propagation
3. Assimilation
4. Perennation

13.

In which type of placentation ovary is one chambered and the placenta bearing ovules develop on the inner wall of the ovary and, the number of placenta corresponds to the number of carpels?

1. Marginal
2. Parietal
3. Axile
4. Free central

14.

Which one of the following combinations of floral characters is shown by potato family?

1. Actinomorphic, bicarpellary and axile placentation with swollen placenta
2. Zygomorphic, pentamerous, gamopetalae with endospermous seed
3. Actinomorphic, hypogynous and monocarpellary
4. Zygomorphic, polypetalae and parietal placentation

15.

Select the correct match

	Plants	Stamens	Placentations
1.	Pea	Diadelphous	Basal
2.	China rose	Monadelphous	Parietal
3.	Tomato	Epipetalous	Axile
4.	Lemon	Polyadelhous	Free central

16.

Photosynthetic organ originates from _____ meristem and arranged in _____ order.

1. Lateral, basipetal
2. Root apical, acropetal
3. Shoot apical, acropetal
4. Intercalary, acropetal

17.

Veins of leaf in addition to acting as channels of transport of water, minerals and food materials also

1. Determine the extent of incision of the lamina
2. Provide rigidity to the leaf blade
3. Hold the leaf blade to light
4. Flutter the leaf in wind thus, helping in cooling of leaf and bringing fresh air

18.

Choose the correct option w.r.t. Solanaceae

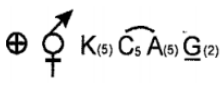
a. Alternate, Stipulate, cauline leaves

b. Bisexual actinomorphic flowers

c. Five persistent calyx

d. Epipetalous, diadelphous condition

e. Axile placentation with swollen placenta

f. Floral formula 

1. a, b, d, e, f
2. a, b, c
3. b, c, e
4. b, c, d, f

19.

In Australian Acacia plant, the

1. Leaves are small and long-lived
2. Petiole carries out the functions of the lamina
3. leaves are modified into pitchers
4. Petioles are called as cladophyll after modification

20.

The type of placentation in plants in which ovary is unilocular but it becomes two-chambered due to the formation of the false septum is

1. Free central
2. Basal
3. Parietal
4. Marginal

21.

Select the incorrect statement w.r.t. family Liliaceae

1. Fruit is generally berry
2. Flower is bisexual and actinomorphic
3. Seed is endospermous
4. Ovary is trilocular with many ovules

22.

Characters like a hypogynous and pentamerous flower, gamopetalous, superior ovary with axile placentation and epipetalous condition are shown by angiospermic family _____

1. Fabaceae
2. Solanaceae
3. Asteraceae
4. Liliaceae

23.

Half superior-half inferior ovary is found in the perigynous flower of

1. Peach
2. China rose
3. Mustard
4. Sunflower

24.

In which plant, petals in a whorl just touch one another at the margin, without overlapping in the floral bud?

1. Cassia
2. Calotropis
3. China rose
4. Trifolium

25.

Match the Column-l with Column-ll

Column-l	Column-ll
a. Marginal placentation	i. Single ovule is present in unilocular ovary
b. Axile placentation	ii. Replum may be present
c. Parietal placentation	iii. Placenta forms a ridge along the ventral suture of ovary
d. Basal placentation	iv. Tomato, Lemon

1. a(iii), b(v), c(iv), d(ii)
2. a(ii), b(v), c(iv), d(i)
3. a(iii), b(v), c(ii), d(i)
4. a(iii), b(v), c(iii), d(ii)

26.

In mango and coconut plants, the fruit

1. Has hard and stony endocarp
2. Is developed from a polycarpellary superior ovary
3. Is developed from the apocarpous ovary
4. Is multi seeded

27.

Modified aerial stem with the branching of unlimited growth as the photosynthetic structure is

1. Flattened in Opuntia and Euphorbia
2. Fleshy and cylindrical in Euphorbia
3. Cylindrical in Opuntia
4. Cylindrical in Euphorbia and Opuntia

28.

Swollen leaf base in the leguminous plants is called as

1. Phyllode
2. Pulvinus
3. Cladode
4. Phylloclade

29.

Pinnately compound leaves have all the following features except

1. leaflets are attached to rachis or its branches
2. Possess a bud in the leaf axil
3. Leaflets attached at the tip of the petiole
4. Stipules may be present at the base of the rachis

30.

Choose the incorrect statement w.r.t. racemose inflorescence

1. Acropetally arranged flowers
2. Growing point or shoot apex is consumed
3. Centripetal anthesis
4. Flowers may be unisexual or bisexual

31.

Select the correct match

1. Lily - Epiphyllous stamen
2. Argemone - Axile placentation
3. Tomato - Apocarpous ovary
4. China rose - Staminode present

32.

Which among the following is a characteristic of pea and bean?

1. Monadelphous stamens
2. Marginal placentation
3. Twisted aestivation
4. Endospermic seed

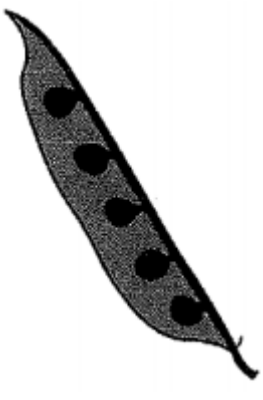
33.

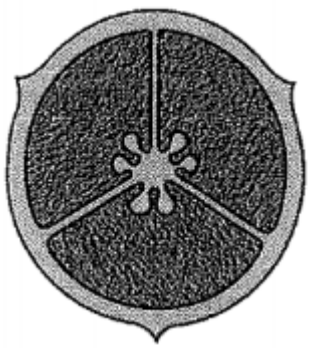
Which of the following zone of the root has thin cell wall, dense cytoplasm and large nucleus?

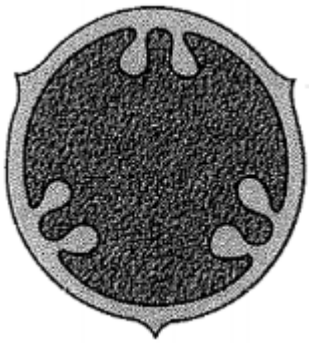
1. Region of maturation
2. Region of elongation
3. Region of root hair
4. Region of meristematic cells

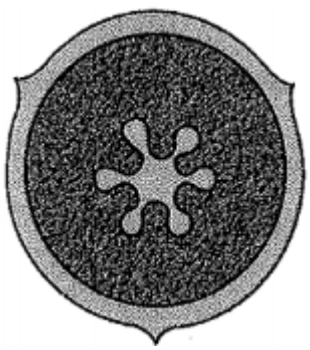
34.

Which of the following type of placentation is found in Dianthus?

a. 

b. 

c. 

d. 

1. a
2. b
3. c
4. d

35.

If gynoecium is situated in the centre and other floral parts are located on the rim of the thalamus almost at the same level, then the flower is said to be

1. Perigynous
2. Epigynous
3. Hypogynous
4. Protogynous

36.

Floral formula of Solanum nigrum represents

1. Epitepalous condition
2. Epipetalous androecium
3. Polyserpalous calyx
4. Tricarpellary gynoecium

37.

Which of the given figures represents the aestivation of corolla in Gulmohur and Cassia?

1. 
2. 
3. 
4. 

38.

The cells proximal to the merismatic zone in root tip represents

1. Zone of cell elongation
2. Zone of deacceleration
3. Zone of differentiation
4. Zone of maturation

39.

Scar present on seed coat through which the developing seeds were attached to fruit is called

1. Micropyle
2. Hilum
3. Funicle
4. Stalk

40.

Which of the features given below are correct for coconut fruit?

a. Developed from monocarpellary ovary

b. Fibrous mesocarp

c. Formed from inferior ovary

d. Hard stony endocarp

e. Edible mesocarp

1. a, c & d
2. c, d & e
3. b, c & d
4. a, b & d

41.

In which of the given plant's placenta develops at the base of the ovary and a single ovule is attached to it?

1. Tomato, Lemon
2. Mustard, Argemone
3. Dianthus, Primrose
4. Sunflower, Marigold

42.

Androecium of Citrus and Bombax plants is

1. Synandrous
2. Monadelphous
3. Polyadelphous
4. Diadelphous

43.

Developing on position of calyx, corolla and androecium w.r.t. the ovary on thalamus the flowers are divided into how any categories?

1. Two
2. Three
3. Four
4. Five

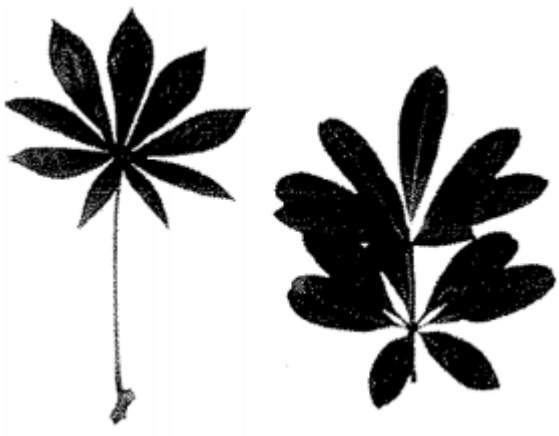
44.

Select a correct match

1. Staminode - Solanaceae
2. Actinomorphic flower - Cassia, Bean, Gulmohur
3. Zygomorphic flower - Chilli, Tomato
4. Inferior ovary - Cucumber, Guava

45.

Choose the correct identification for given below plants respectively



1. Whorled phyllotaxy, Palmately compound leaf
2. Pinnately compound leaf, Whorled phyllotaxy
3. Palmately compound leaf, Whorled phyllotaxy
4. Alternate phyllotaxy, Palmately compound leaf

46.

Thorn is

1. Modification leaf
2. Axillary bud modified
3. Climbing structure
4. Always non-woody

47.

Select the odd one out w.r.t. veins

1. Provide rigidity to the leaf blade
2. Act as channels of transport for water and minerals
3. Veins are filled with parenchyma
4. Middle prominent vein is mid-rib

48.

In a racemose inflorescence the flowers

1. Are only pistillate
2. Open centrifugally
3. Are arranged basipetally
4. Are arranged acropetally

49.

Pneumatophores are a modification of

1. Prop root for exchange of gases
2. Taproot for retention of moisture
3. Adventitious root for breathing
4. Taproot for respiration

50.

Bougainvillea and Citrus plants are protected from browsing animals as

1. Adventitious buds get modified into thorns
2. Axillary buds get modified into spines
3. Lateral buds get modified into pointed structures
4. Apical buds get modified into thorns

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