

# QB365 Question Bank Software Study Materials

## Botany - Asexual and Sexual Reproduction in Plants 50 Important 1 Marks Questions With Answers (Book Back and Creative)

12th Standard

Biology

Total Marks : 50

### Multiple Choice Question

50 x 1 = 50

- 1) Choose the correct statement from the following
- (a) Gametes are involved in asexual reproduction (b) Bacteria reproduce asexually by budding  
(c) Conidia formation is a method of sexual reproduction **(d) Yeast reproduce by budding**
- 2) An eminent Indian embryologist is \_\_\_\_\_.  
(a) S.R.Kashyap **(b) P.Maheswari** (c) M.S. Swaminathan (d) K.C.Mehta
- 3) Identify the correctly matched pair.  
(a) Tuber - Allium cepa (b) Sucker - Pistia **(c) Rhizome - Musa** (d) Stolon - Zingiber
- 4) Size of pollen grain in Myosotis \_\_\_\_\_.  
**(a) 10 micrometer** (b) 20 micrometer (c) 200 micrometer (d) 2000 micrometer
- 5) First cell of male gametophyte in angiosperm is \_\_\_\_\_.  
**(a) Microspore** (b) megaspore (c) Nucleus (d) Primary Endosperm Nucleus

- 6) Match the following

I)	External fertilization	i)	pollen grain
II)	Androecium	ii)	anther wall
III)	Male gametophyte	iii)	algae
IV)	Primary parietal layer	iv)	stamens

(a)	<b>(b)</b>	(c)	(d)
I II III IV	<b>I II III IV</b>	I II III IV	I II III IV
iv i ii iii	<b>iii iv i ii</b>	iii iv ii i	iii i iv ii

- 7) Arrange the layers of anther wall from locus to periphery  
(a) Epidermis, middle layers, tapetum, endothecium (b) Tapetum, middle layers, epidermis, endothecium  
(c) Endothecium, epidermis, middle layers, tapetum **(d) Tapetum, middle layers endothecium epidermis**
- 8) Identify the incorrect pair  
(a) sporopollenin - exine of pollen grain (b) tapetum - nutritive tissue for developing microspores  
**(c) Nucellus - nutritive tissue for developing embryo** (d) obturator - directs the pollen tube into micropyle
- 9) **Assertion(A)** : Sporopollenin preserves pollen in fossil deposits  
**Reason (R)**: Sporopollenin is resistant to physical and biological decomposition  
(a) assertion is true; reason is false (b) assertion is false; reason is true (c) Both Assertion and reason are not true  
**(d) Both Assertion and reason are true.**
- 10) Choose the correct statement(s) about tenuinucellate ovule.  
**(a) Sporogenous cell is hypodermal** (b) Ovules have fairly large nucellus (c) sporogenous cell is epidermal

- (d) ovules have single layer of nucellus tissue
- 11) Which of the following represent megagametophyte?
- (a) Ovule (b) **Embryosac** (c) Nucellus (d) Endosperm
- 12) In *Haplopappus gracilis*, number of chromosomes in cells of nucellus is 4. What will be the chromosome number in Primary endosperm cell?
- (a) 8 (b) 12 (c) **6** (d) 2
- 13) Transmitting tissue is found in \_\_\_\_\_.
- (a) Micropylar region of ovule (b) Pollen tube wall (c) **Stylar region of gynoecium** (d) Integument
- 14) The scar left by funiculus in the seed is \_\_\_\_\_.
- (a) tegmen (b) radicle (c) epicotyl (d) **hilum**
- 15) A Plant called X possesses small flower with reduced perianth and versatile anther. The probable agent for pollination would be \_\_\_\_.
- (a) water (b) **air** (c) butterflies (d) beetles
- 16) Consider the following statement(s)
- i) In Protandrous flowers pistil matures earlier  
 ii) In Protogynous flowers pistil matures earlier  
 iii) Herkogamy is noticed in unisexual flowers  
 iv) Distyly is present in *Primula*
- (a) i and ii are correct (b) **ii and iv are correct** (c) ii and iii are correct (d) i and iv are correct
- 17) Coelorrhiza is found in \_\_\_\_\_.
- (a) **Paddy** (b) Bean (c) Pea (d) *Tridax*
- 18) Parthenocarpic fruits lack \_\_\_\_\_.
- (a) Endocarp (b) Epicarp (c) Mesocarp (d) **seed**
- 19) In majority of plants pollen is liberated at \_\_\_\_\_.
- (a) 1 celled stage (b) **2 celled stage** (c) 3 celled stage (d) 4 celled stage
- 20) The unit of reproductive structure used in vegetative propagation is called as \_\_\_\_\_
- (a) Diplospores (b) Aplanospores (c) **Diaspores** (d) Conidiospores
- 21) Innermost layer of anther wall is \_\_\_\_\_
- (a) Endothecium (b) Endothecum (c) Endothelium (d) **Tapetum**
- 22) Name the person who discovered the pollen tube?
- (a) E. Strasburger (b) Hofmeister (c) Nehemiah Grew (d) **G.B.Amici**
- 23) Which of the following characters does not exist in Ornithophilous flowers?
- (a) Huge sized flowers (b) Bright coloured (c) **Scented flowers** (d) Nectar is secreted in large
- 24) Statement 1: Primary sporogenous cell functions as megaspore mother cell.  
 Statement 2: Megaspore mother cell undergoes mitotic division producing megaspores.
- (a) **Statement 1 is correct and statement 2 is incorrect.** (b) Statement 1 is incorrect and statement 2 is correct.  
 (c) Both the statements 1 and 2 are correct. (d) Both the statements 1 and 2 are incorrect.
- 25) Identify the incorrect statement regarding vegetative reproduction.

(a) Only one parent is required for propagation. **(b) New individuals are genetically dissimilar.**

(c) Easy mode of reproduction (d) Variation does not exist.

26) Identify the mismatched pair:

(a) Epidermal layer - Protective infunction (b) Eridothecium layer - Helps in dehiscence of anther

**(c) Middle layer - Persistent layer** (d) Tapetum - Nutritive in function

27) Assertion (A): Carica papaya is a dioecious plant.

Reason (R): Both male and female flowers are borne on same plant.

**(a) A is correct R is incorrect.** (b) R explains A. (c) Both A and R are incorrect.

(d) Both A and R are correct. R does not explain A.

28) Assertion (A): Anemophilous pollination occurs by animals.

Reason (R): Pollen grains are sticky for easy attachment on animals.

(a) A is correct R is incorrect (b) R explains A. **(c) Both A and R are incorrect.**

(d) Both A and Rare correct.R does not explain A.

29) Assertion (A): Androecium and Gynoecium are essential whorls of flower

Reason (R): Androecium and Gynoecium assist the reproduction.

**(a) A is correct R is incorrect** (b) R explains A (c) Both A and R are incorrect

(d) Both A and R are correct. R does not explain A

30) Statement 1: Flower is a highly condensed shoot for reproductive purpose.

Statement 2: A complete flower possesses four whorls.

(a) Both the statements are incorrect. (b) Statement 1 is correct and Statement 2 is incorrect.

**(c) Both the statements are correct** (d) Statement 1 is incorrect and statement 2 is' correct.

31) Identify the incorrect statement.

(a) One seeded fruit of paddy is caryopsis. **(b) Primitive root is called coleorhiza.**

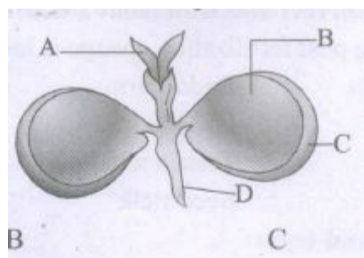
(c) Sctellum is a part of mono cot seed. (d) Embryonic axis above the cotyledon is epicotyl.

32) The egg apparatus is made up of \_\_\_\_\_

(a) 1 egg cell and 2 antipodals (b) 1 egg cell and 2 polar nuclei (c) 1 egg cell and 1 secondary nuycleus

**(d) 1 egg cell and 2 synergids**

33) Observe the diagram and select the correct option mentioning the parts A, B, C and D



(a)

A	B	C	D
Radicle	Cotyledon	Testa	Plumule

**(b)**

A	B	C	D
<b>Plumule</b>	<b>Cotyledon</b>	<b>Testa</b>	<b>Radicle</b>

(c)

A	B	C	D
Cotyledon	Testa	Plumule	Radicle

(d)

A	B	C	D
Plumule	Radicle	Testa	Cotyledon

34) Identify the correct matched pair.

**(a) Sucker - Chrysanthemum** (b) Offset - Agave (c) Stolon - pistia (d) Bulbil - Mentha

35) The sub aerial modification in Centella Asiatica is said to be

- (a) Stolon (b) Offset **(c) Runner** (d) Sucker
- 36) The fertility or sterility of the pollen grains is controlled by which wall layer of the anther:  
 (a) Epidermis (b) Endothecium (c) Middle layers **(d) Tapetum**
- 37) How many pollen grains will be formed after meiotic divisions in ten microspore mother cells?  
 (a) 10 (b) 20 **(c) 40** (d) 50
- 38) In angiosperms, pollen tubes liberate their male gametes into the  
 (a) Central cell (b) Antipodal cell (c) Egg cell **(d) Synergids**
- 39) Female gametophyte of angiosperms is represented by  
 (a) Ovule (b) Megaspore mother cell **(c) Embryo sac** (d) Nucellus
- 40) The paddy grain has an embryo with a shield-shaped cotyledon known as  
 (a) Coleorhiza (b) Coleoptile **(c) Scutellum** (d) plumule
- 41) Find out the number of correct statements with regard to hollow style.  
 1. Hollow style is common among monocots  
 2. A hollow canal running from the stigma to the base of the style is present.  
 3. The canal is lined by transmitting tissue  
 4. The pollen tube grows through the hollow canals  
 5. The canal is filled with secretions which serve as nutrition for growing pollen tube  
**(a) Four** (b) Three (c) Two (d) Five
- 42) Starting from the innermost part, the correct sequence of parts in an ovule are  
 (a) egg, nucellus, embryo sac, integuments **(b) egg, embryo sac, nucellus, integuments**  
 (c) embryo sac, nucellus, integuments, egg (d) egg, integuments, embryo sac, nucellus
- 43) Find the odd one  
 (a) Seed Coat - Testa, Tegmen (b) Pollen grain - exine, intine (c) Main inflorescence - Tassel, cob  
**(d) Lythrum - Pin, Thrum-eyed flowers.**
- 44) Which one of the following is a dioecious plant?  
 (a) Coconut (b) Bitter melon (c) Pea plant **(d) Date Palm**
- 45) Pollination in water hyacinth and water lily is brought about by the agency of  
**(a) insects or wind** (b) birds (c) bats (d) water
- 46) In a cereal grain the single cotyledon of the embryo is represented by  
 (a) coleorhizae **(b) scutellum** (c) prophyll (d) coleoptiles
- 47) Which statement is correct?  
**(a) Asexual reproduction is the common method of reproduction in organisms that have simple organization**  
 (b) Asexual reproduction is the common method of reproduction in organisms that have complex organization.  
 (c) Sexual reproduction is the common method of reproduction in organisms that have simple organization  
 (d) Asexual reproduction is the method of reproduction by Algae & fungi during unfavourable conditions
- 48) The most common type of ovule in the flowering plants is  
 (a) syncarpous ovule **(b) anatropous ovule** (c) apocarpous ovule (d) pterocarpous ovule
- 49) Endosperm is formed during the double fertilization by

**(a) two polar nuclei and one male gamete** (b) one polar nuclei and one male gamete (c) ovum and male gametes

(d) two polar nuclei and two male gametes

50) Caruncle develops from

(a) funicle (b) nucellus **(c) integument** (d) embryo sac