

PLANT REPRODUCTION-2

JEE SPECIAL

- Which one is not correctly matched?
A) Autogamy = pollination in the same flower.
B) Xenogamy = pollination between different flower of genetically different plant.
C) Geitonogamy = pollination between different flower of genetically same plant.
D) Allogamy = Geitonogamy+Autogamy.
- Which of the following is self pollination?
A) Geitonogamy (found in *Cucurbita*) B) Autogamy C) Xenogamy D) a and b
- Direct pollination is found in-
A) Angiosperms B) Gymnosperms C) Pteridophyta D) Bryophyta
- Homogamy (maturation of anther and stigma and the same time) is found in-
A) *Catharanthus* B) *Vinca* C) *Gardenia* D) A. O. T.
- Bud pollination (a contrivances for self pollination) is found in-
A) *Commelina* B) *Mirabilis* C) *Viola* D) *Rice*
- Fail-safe device (self pollination in failure of cross pollination) is found in-
A) Potato B) sunflower (*Helianthus*) C) 4 O' clock (*Mirabilis*) D) A. O. T.
- Cleistogamy (a devices for self pollination) found in *Commelina* means-
A) Bud pollination B) Opening of flower C) Flowers don't open D) inconspicuous flower
- Which one is not a abiotic pollinator (not polleniser)?
A) Water B) Wind C) Rain D) *Nectarine afra* (sun bird)
- Which one of the following is not contrivances for cross pollination?
A) Heterosyly (different types of height of style and stamens, di and triheterostyly) in Jasmine and *Oxalis*.
B) Herkogamy (arrangement of antehar and stigma to prevent self pollination) in *Calotropis* and *Aristolochia*.
C) Monocliny in *Datura*.
D) Dichogamy (anther and stigma mature at different time, protoandry and gyny) in Rose.
- Protandry (maturation of anther before stigma) found in-
A) *Magnolia* B) *Mirabilis* C) *Plantago* D) *Helianthus*
- Herkogamy may occurs due to-
A) Extrorse anthers B) exposed stigma C) exposed anthers D) A. O. T.
- In dimorphic heterostyly found in jasmine flowers with long style and short stamens are called-
A) Pin eyed B) Thrum eyed C) both D) N. O. T.
- Pollinia a special sac like structure is found in-
A) China rose B) Rose C) Sunflower D) *Calotropis*
- Cross pollination increases-
A) Heterozygosity B) Heterosis C) Pest and weather resistance D) A. O. T.
- Self pollination increases-
A) Heterozygosity B) Heterosis C) Pest and weather resistance D) Homozygosity
- Which one is more economical and with most chances of success?
A) Autogamy B) Xenogamy C) Geitonogamy D) Allogamy

17. Match the following.

- | | |
|---------------------------------------|------------------------------|
| I. Anemophily in grass | i. water (below the surface) |
| II. Ornithophily in <i>Bignonia</i> | ii. air |
| III. Entomophily in <i>Calotropis</i> | iii. Hummingbirds in America |
| IV. Hypohydrophily in <i>Zostera</i> | iv. most commonly honey bee. |

A. I-ii, II-iii, III-iv, IV-i B. I-i, II-iii, III-iv, IV-ii C) I-ii, II-iv, III-iii, IV-I D. N. O. T.

18. Which one is not the character of anemophilic flower?

- A) Colourless, nectarless, odourless small flower with reduced tepals.
- B) Exposed versatile anther and hairy stigma.
- C) Dry powdery, numerous pollens with smooth surface.
- D) Pistillate flower is relatively more than the staminate flower.

19. Which one is not the character of ornithophilic flower?

- A) Brightly coloured odourless large strong flower with huge sugary nectar.
- B) Corolla funnel shaped.
- C) Dry powdery, numerous pollens with smooth surface.
- D) Stigma sticky.

20. Which one is not the character of entomophilic flower?

- A) Pollens sticky due to presence of pollenkit.
- B) Stigma sticky.
- C) Flowers with landing platforms and honey guides (*Viola*).
- D) Flowers without colour, odour and nectar.

21. Bract is coloured in-

- A) Rose B) *Bougainvillea* C) Aaioids D) *Callistemon*

22. Honey bee don't visit due to UV vision-

- A) Yellow B) Red C) Blue D) Violet flower

23. Foul odour of *Rafflesia* and arum generally attracts-

- A) Butterfly B) Honey bee C) Carrion flies D) A. O. T.

24. One pollinator may visits a flower for-

- A) Nectar and pollens B) Shelter C) Laying eggs D) A. O. T.

25. Which one is not the character of hydrophilic flower?

- A) Unwetttable, sticky, long pollens with mucilage and without exine.
- B) Long stalked pistillate flower with long, sticky and unwetttable stigma which can coil down in *Zostera*
- C) Male flowers are sailed boat-like which can be detached to float in *Vallisneria*..
- D) Flowers are with nectar, colour and odour.

26. Which one is not correctly matched?

- A) *Salvia*-lever or turn-pipe mechanism
- B) *Urtica*-gun-powder mechanism
- C) *Calotropis*-pollinia and rostellum
- D) *Aristolochia*-pit fall flowers

27. In solanaceae, which type of intra-specific compatibility is found?

- A) GSI B) SSI C) Morphological D) Physiological

28. After the successful pollen-pistil interaction, solution secreted by the stigma contains-

- A) Sugar B) PGR C) Minerals D) A. O. T.

29. Which of the following comes out through the germ pore as pollen tube?

- A) Generative cell B) Vegetative cell C) Exine D) Intine

30. Siphonogamy (male gametes carried to the egg by pollen tube) 1st discovered by Strasburger 1st observed in-
- A) Gymnosperm B) Angiosperm C) Pteridophyta D) Bryophyta
31. Pollen tube produces-
- A) Pectinases B) Cellulases C) Hydrolytic enzymes D. A. O. T.
32. The growth of the pollen tube towards the embryo sac by the secretion of filiform apparatus of synergids is-
- A) Chemotactic B) Chemotropic C) Chemonastic D) N. O. T.
33. Which one is not correctly matched?
- A) Porogamy-via micropyle
 B) Chalazogamy-via chalaza
 C) Mesogamy-via integuments
 D) N. O. T.
34. Polysiphonogamy is found in-
- A) *Hibiscus* B) *Luffa* C) *Althea* D) A. O. T.
35. Function of synergid is-
- A) Secretes chemotactically active substance.
 B) Draw nutrition from nucellus.
 C) Shock absorber of ingrowing pollen tube.
 D) A. O. T.
36. Which is true for double fertilization?
- A) Discovered by Nawaschin (1898) in Angiosperms.
 B) 1st generative fertilization to produce zygote and 2nd vegetative fertilization to produce PEC.
 C) Zygote produce diploid embryo and PEC produce triploid endosperm.
 D) Double fertilization has no role in conversion of the ovary into fruit.
37. In vegetative fertilization which fuses?
- A) 1 sperm and 1 egg
 B) 2 sperm and 1 egg
 C) 1 sperm and synergids
 D) 1 sperm and secondary nucleus
38. In helobial type of endosperm development, which occurs?
- A) 1 karyokinesis and 1 cytokinesis alternately
 B) Continuous karyokinesis then cytokinesis
 C) 1 karyokinesis and 1 cytokinesis followed by continuous karyokinesis
 D) 1 cytokinesis and 1 karyokinesis alternately
39. Water of coconut is-
- A) Endosperm B) Nucellus C) Integuments D) Embryo sac
40. Helobial type of endosperm development is found in-
- A) Coconut B) *Datura* C) *Asphodelus* D) Rice
41. Endosperm development in Angiosperm is-
- A) Xenic B) Metaxenic C) Axenic D) Hyperxenic