

## Pollination

1. **Hydrophily and incomplete flowers are present in** ( )  
 1) *Bignonia*    2) *Colocasia*                      3) *Vallisnaria*                      4) *Helianthus*
2. **Example for dicliny is** ( )  
 1) *Hibiscus*    2) *Commelina*                      3) *Acalypha*                      4) *Abutilon*
3. **True statement regarding pollination is** ( )  
 I: All bisexual flowers undergo only autogamy.  
 II: All unisexual flowers undergo only Xenogamy.  
 III: All geitonogamous flowers are not unisexual.  
 1) I & II                      2) Only III                      3) II & III                      4) Only I
4. **Assertion A: Geitonogamy & Xenogamy can take place in Cocos** ( )  
**Reason R: Cocos is monoecious plant. Pollen may be from same or different plant.**  
 1) Both A and R are true and R is the correct explanation of A.  
 2) Both A and R are true but R is not the correct explanation of A.  
 3) A is true, R is false  
 4) A is false, R is true
5. ***Scrophularia* is an example for** ( )  
 1) Self sterility                      2) Pollen prepotency                      3) Protogyny                      4) Dicliny
6. **Pollination in hypanthodium inflorescence is** ( )  
 1) Direct pollination                      2) Self pollination  
 3) Cleistogamy                      4) Cross pollination
7. **Assertion A: In *Commelina* always self pollination takes place.** ( )  
**Reason R: *Commelina* shows cleistogamous flowers.**  
 1) Both A and R are true and R is the correct explanation of A.  
 2) Both A and R are true but R is not the correct explanation of A.  
 3) A is true, R is false  
 4) A is false, R is true
8. **In *Passiflora* self pollination is prevented by** ( )  
 1) Pollen pre potency                      2) Self sterility                      3) Triheterostyly                      4) Herkogamy

9. In *Lythrum* plants flowers show ( )  
 1) Two different lengths of styles                      2) Male and female flowers  
 3) Wide angles between stamens and stigma        4) Three different lengths of styles
10. Self pollen grains are poisonous for stigmas of ( )  
 1) Asteraceae            2) Orchidaceae            3) Fabaceae            4) Solanaceae
11. In *Martynia* and *Mimulus* ( )  
 1) Stigmas are shorter than stamens            2) Stigmas mature later than stamens  
 3) Stigmas are sensitive                            4) Stigmas are absent
12. All flowers with heterostyly also exhibit ( )  
 I : Dichogamy            II : Sensitive stigmas    III : Herkogamy            IV : Self sterility  
 1) I & III                    2) II & III                    3) I & IV                    4) I & II
13. In *Oxalis* the flowers are ( )  
 1) Dimorphic            2) Trimorphic            3) Polymorphic            4) Homogamous
14. Safety mechanism in Asteraceae ensures ( )  
 1) Cross pollination in unisexual flowers    2) Self fertilization in unisexual flowers.  
 3) Self pollination in bisexual flowers.    4) Cross pollination in bisexual flowers.
15. In *Commelina benghalensis* ( )  
 1) Cleistogamous flowers are aerial  
 2) Both cleistogamous & chasmogamous flowers are aerial.  
 3) Cleistogamous flowers are underground and chasmogamous flowers are aerial.  
 4) Chasmogamous flowers are absent.
16. In *Helianthus* contrivances for cross pollination is ( )  
 1) Herkogamy & Heterostyly            2) Heterostyly & Pollen per potency  
 3) Herkogamy & Protandry            4) Protandry and safety mechanism
17. Match the following ( )

**List - A**                      **List - B**

- |                         |                   |
|-------------------------|-------------------|
| A. <i>Streptocarpus</i> | I. Dichogamy      |
| B. <i>Clerodendron</i>  | II. Herkogamy     |
| C. <i>Passiflora</i>    | III. Cleistogamy  |
| D. <i>Hibiscus</i>      | IV. Dicliny       |
|                         | V. Self Sterility |

- |    |     |   |   |    |    |     |     |    |   |
|----|-----|---|---|----|----|-----|-----|----|---|
|    | A   | B | C | D  |    | A   | B   | C  | D |
| 1) | IV  | I | V | II | 3) | III | I   | II | V |
| 2) | III | I | V | II | 4) | II  | III | IV | V |

18. Even though Herkogamy and Dichogamy is present self pollination is guaranteed in ( )  
1) *Gloriosa*      2) *Helianthus*      3) *Clerodendron*      4) *Solanum*
19. Homogamy is ( )  
1) All flowers opening at the same time on a plant  
2) All flowers pollinating at the same time on a plant.  
3) In a flower both male & female sex organs maturing at same time.  
4) In a flower both male & female sex organs look alike.
20. Pollination in which maximum genetic variations are seen is ( )  
1) Geitonogamy      2) Autogamy      3) Xenogamy      4) Cleistogamy
21. Pollination by bats is seen in ( )  
1) Sausage tree      2) Night queen      3) Sun flower      4) Glory-lily
22. Dicliny is a contrivance for preventing ( )  
1) Autogamy      2) Xenogamy      3) Geitonogamy      4) Cross pollination
23. In chasmogamous flowers ( )  
1) Always self pollination      2) Always cross pollination  
3) Both self & Cross pollination.      4) Neither self nor cross pollination.
24. Cross pollination that looks like a self pollination ( )  
1) Xenogamy      2) Geitonogamy  
3) Both Xenogamy & Geitonogamy      4) Homogamy
25. Closely related pollen grains cannot germinate fast on the stigma of ( )  
1) *Passiflora*      2) *Dolichos*      3) *Hibiscus*      4) *Lythrum*
26. *Hibiscus* is ( )  
1) Unisexual      2) Bisexual, Heterogamous  
3) Bisexual, cleistogamous      4) Unisexual sterile
27. *Oldenlandia* is an example for ( )  
1) Diheterostyly      2) Triheterostyly  
3) Self pollination always      4) Sensitive stigmas
28. In *Primula* flowers are ( )  
1) Dimorphic , dichogamy, heterostyly      2) Trimorphic, Homogamy, Heterostyly  
3) Herkogamy, dichogamy      4) Triheterostyly, protandry

29. In a flower of *Helianthus* 200 disc florets and 50 ray florets are present. If cross pollination fails how many fruits are possible? ( )  
1) 250                      2) 50                      3) 150                      4) 200
30. In heterostyly pollinating agent must be ( )  
1) Wind                      2) Birds                      3) Water                      4) Insects
31. Pollination in *Yucca* is by ( )  
1) Insects                      2) Wind                      3) Water                      4) Mammals
32. In *Lythrum*, each flower show ( )  
1) Two different lengths of styles                      2) Two different lengths of stamens  
3) Wide angles between stamens and stigma                      4) Three different lengths of styles
33. Gynoecium matures earlier than stamens in ( )  
1) *Solanum*                      2) *Borassus*                      3) *Passiflora*                      4) *Dolichos*
34. Assertion A: All dichogamous flowers are bisexual. ( )  
Reason R: Sometimes self pollination can take place in dichogamous flowers.  
1) Both A and R are true and R is the correct explanation of A.  
2) Both A and R are true but R is not the correct explanation of A.  
3) A is true, R is false  
4) A is false, R is true
35. Dimorphic flowers are seen in the condition ( )  
1) Protandry                      2) Herkogamy                      3) Triheterostyly                      4) Diheterostyly
36. A dichogamous flower produced seeds by autogamy. Stigma was receptive from 8 am to 3 pm. Pollen was viable from 1 pm to 7 pm. Pollination might have taken place between. ( )  
1) 8 am and 1 pm                      2) 3 pm and 7 pm                      3) 1 pm and 3 pm                      4) 7 pm and 8 am
37. Generally in plants with large simple spadix inflorescence pollinator is ( )  
1. Ant                      2. Bird                      3. Snail                      4. Wind
38. If pollination occurs beneath the surface of water, it is ( )  
1. Epihydrophily                      2. Endohydrophily                      3. Mesohydrophily                      4. Hypohydrophily
39. In *Lythrum* flower 'A' shows long style, flower 'B' shows medium style and flower 'C' shows short style. Pollination is possible between. ( )  
1. A and B                      2. B and C                      3. C and A                      4. Any two flowers

40. Wind pollinating plants show ( )

1. Fragrant flowers
2. Attractive flowers
3. Versatile stamens
4. Sessile flowers

**Pollination - Key**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	3	2	1	3	4	4	2	4	2	3	1	2	3	3	3	2	2	3	3
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	1	3	2	2	2	1	1	4	4	1	2	1	2	4	3	3	4	4	3