

DPP - Daily Practice Problems

Chapter-wise Sheets

Date :

Start Time :

End Time :

BIOLOGY

CB24

SYLLABUS : Sexual Reproduction in Flowering Plants

Max. Marks : 180

Marking Scheme : + 4 for correct & (-1) for incorrect

Time : 60 min.

INSTRUCTIONS : This Daily Practice Problem Sheet contains 45 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

- Entry of pollen tube through micropyle is
(a) Chalazogamy (b) Mesogamy
(c) Porogamy (d) Pseudogamy
- Dry indehiscent single-seeded fruit formed from bicarpellary syncarpous inferior ovary is
(a) Caryopsis (b) Cypselia
(c) Berry (d) Cremocarp
- One of the most resistant biological material is
(a) lignin (b) hemicellulose
(c) lignocellulose (d) sporopollenin
- When funiculum, chalaza, and micropyle lie in one straight line, then ovule is called –
(a) Amphitropous (b) Orthotropous
(c) Campylotropous (d) Anatropous
- Which one of the following is a fruit ?
(a) Ginger (b) Sweet potato
(c) Radish (d) Lady's finger
- Female gametophyte of angiosperms is represented by
(a) Ovule
(b) Megaspore mother cell
(c) Embryo sac
(d) Nucellus
- Which of the following pair has haploid structures?
(a) Nucellus and antipodal cells
(b) Antipodal cells and egg cell
(c) Antipodal cells and megaspore mother cell
(d) Nucellus and primary endosperm nucleus
- Polyembryony commonly occurs in
(a) citrus (b) turmeric
(c) tomato (d) potato

RESPONSE
GRID

1. (a)(b)(c)(d) 2. (a)(b)(c)(d) 3. (a)(b)(c)(d) 4. (a)(b)(c)(d) 5. (a)(b)(c)(d)
6. (a)(b)(c)(d) 7. (a)(b)(c)(d) 8. (a)(b)(c)(d)

Space for Rough Work

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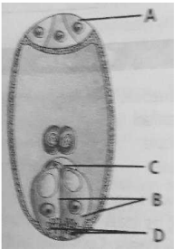
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9. Chasmogamy refers to the condition where –
(a) Flowers remains closed
(b) Flowers are absent
(c) Flowers open
(d) Flowers gamopetalous
10. In oogamy, fertilization involves
(a) a small non-motile female gamete and a large motile male gamete
(b) a large non-motile female gamete and a small motile male gamete
(c) a large non-motile female gamete and a small nonmotile male gamete
(d) a large motile female gamete and a small non-motile male gamete
11. Cotyledons and testa respectively are edible parts in
(a) walnut and tamarind
(b) french bean and coconut
(c) cashew nut and litchi
(d) groundnut and pomegranate
12. A *Polygonum* type of embryo sac is
(a) 7-celled and 8-nucleate
(b) 8-celled and 7-nucleate
(c) 7-celled and 7-nucleate
(d) 8-celled and 8-nucleate
13. In dicot embryo the radicle is formed by
(a) epibasal tier of embryo
(b) hypobasal tier of embryo
(c) hypophysis of suspensor
(d) terminal cell of suspensor
14. A drupe develops in
(a) mango (b) wheat
(c) pea (d) tomato
15. When pollen grains are not transferred from anthers to stigma in a flower, due to the barrier, it is called
(a) herkogamy (b) heterogamy
(c) cleistogamy (d) dichogamy
16. The parenchyma tissue which forms the bulk of ovule where the sporogenous tissue is produced is –
(a) Megaspore mother cell
(b) Nucellus
(c) Ovule
(d) Embryo sac
17. Unisexuality of flowers prevents
(a) autogamy, but not geitonogamy
(b) both geitonogamy and xenogamy
(c) geitonogamy, but not xenogamy
(d) autogamy and geitonogamy
18. Which one of the following represents an ovule, where the embryo sac becomes horse-shoe shaped and the funiculus and micropyle are close to each other?
(a) Amphitropous (b) Circinotropous
(c) Atropous (d) Anotropous
19. If an angiospermic male plant is diploid and female plant tetraploid, the ploidy level of endosperm will be
(a) haploid (b) triploid
(c) tetraploid (d) pentaploid
20. These plants flower and fruit only once in their life time and die after fruiting. These are
(a) monocarpic plants
(b) polycarpic plants
(c) vegetative plants
(d) reproductive plants
21. Select the mismatched pair.
(a) Microsporangium — Pollen sac
(b) Megasporangium — Nucellus
(c) Pollen grain — Male gamete
(d) Embryo sac — Female gametophyte

RESPONSE
GRID

9. (a)(b)(c)(d) 10. (a)(b)(c)(d) 11. (a)(b)(c)(d) 12. (a)(b)(c)(d) 13. (a)(b)(c)(d)
14. (a)(b)(c)(d) 15. (a)(b)(c)(d) 16. (a)(b)(c)(d) 17. (a)(b)(c)(d) 18. (a)(b)(c)(d)
19. (a)(b)(c)(d) 20. (a)(b)(c)(d) 21. (a)(b)(c)(d)

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22. A typical angiospermous ovule is attached to the placenta by means of a stalk called X. Body of the ovule fuses with X in the region called Y. Identify X and Y.
- | | |
|-------------|-----------|
| X | Y |
| (a) Funicle | Hilum |
| (b) Hilum | Funicle |
| (c) Funicle | Micropyle |
| (d) Hilum | Chalaza |
23. Which of the following options is correct?
- Transfer of pollen grains from the anther to the stigma of the same flower – Autogamy.
 - Transfer of pollen grains from the anther of one flower to the stigma of another flower of same plant – Geitonogamy.
 - Transfer of pollen grains from the anther to the stigma of a genetically different plant – Xenogamy.
 - All of these
24. Which of the following is not a water pollinated plant?
- Zostera*
 - Vallisneria*
 - Hydrilla*
 - Cannabis*
25. Identify the parts labelled A, B, C and D in the given figure and select the correct option.
- 
- | | | | |
|----------------|------------|-----|--------------------|
| A | B | C | D |
| (a) Synergids | Antipodals | Egg | Filiform apparatus |
| (b) Antipodals | Synergids | Egg | Filiform apparatus |
- (c) Antipodals Synergids Filiform Egg apparatus
- (d) Polar nuclei Antipodals Filiform Egg apparatus
26. Growth of pollen tube towards embryo sac is
- chemotropic
 - thigmotaxis
 - geotropic
 - none of these
27. The part of gynoecium that determines the compatible nature of pollen is
- stigma
 - style
 - ovary
 - synergids
28. The innermost layer of anther is tapetum whose function is
- dehiscence
 - mechanical
 - nutrition
 - protection
29. The female gametophyte of a typical dicot at the time of fertilization is
- 8-celled
 - 7-celled
 - 6-celled
 - 5-celled
30. One of the most resistant biological material present in the exine of pollen grain is
- pectocellulose
 - sporopollenin
 - suberin
 - cellulose
31. What is the function of germ pore?
- Emergence of radicle
 - Absorption of water for seed germination
 - Initiation of pollen tube
 - All of these
32. How many meiotic divisions are required for the formation of 100 functional megaspores?
- 100
 - 50
 - 25
 - 26
33. Study of pollen grains is called
- micrology
 - anthology
 - palynology
 - pomology

**RESPONSE
GRID**

- | | | | | |
|---------------------|---------------------|---------------------|---------------------|---------------------|
| 22. (a) (b) (c) (d) | 23. (a) (b) (c) (d) | 24. (a) (b) (c) (d) | 25. (a) (b) (c) (d) | 26. (a) (b) (c) (d) |
| 27. (a) (b) (c) (d) | 28. (a) (b) (c) (d) | 29. (a) (b) (c) (d) | 30. (a) (b) (c) (d) | 31. (a) (b) (c) (d) |
| 32. (a) (b) (c) (d) | 33. (a) (b) (c) (d) | | | |

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34. Which of these is a condition that makes flowers invariably autogamous?
 (a) Dioecy
 (b) Self incompatibility
 (c) Cleistogamy
 (d) Xenogamy
35. An embryo may sometimes develop from any cell of embryo sac other than egg. It is termed as
 (a) apospory (b) apogamy
 (c) parthenogenesis (d) parthenocarp
36. Endosperm is completely consumed by the developing embryo in
 (a) pea and groundnut
 (b) maize and castor
 (c) castor and groundnut
 (d) maize and pea
37. The portion of embryonal axis between plumule (future shoot) and cotyledons is called
 (a) hypocotyl (b) epicotyl
 (c) coleohize (d) coleoptile
38. Stigma of a flower is removed before pollination. The flower will
 (a) Form fruit normally
 (b) Not form fruit
 (c) Form deformed fruit
 (d) Form fruit smaller than normal size
39. In a pea flower, all petals are removed before pollination. The flower will
 (a) Form fruit normally
 (b) Not form fruit
 (c) Form smaller pod
 (d) Form deformed pod
40. A drop of glue is placed on the stigma of a flower before pollination. The flower will
 (a) Not form fruit
 (b) Form normal fruit
 (c) Form sticky fruit
 (d) Form fruit filled with glue
41. An apomictic seed contains an embryo that is
 (a) produced when two sperm fertilize one egg.
 (b) developed from one egg alone.
 (c) the result of parental self-fertilization
 (d) genetically identical to its parent.
42. The embryo is carefully taken out of pea seed and sown in the soil and watered normally. New plant will
 (a) Be healthier
 (b) Be weaker
 (c) Not be formed
 (d) Be formed normally
43. Angiospermic plant has chromosome number of 24. The number of chromosomes in pollens will be
 (a) 6 (b) 12
 (c) 24 (d) 48
44. What is the fate of the seven cells of the embryo sac?
 (a) All but one disintegrate upon fertilization.
 (b) Two become fertilized; the others disintegrate.
 (c) Two become fertilized; the others fuse to form endosperm.
 (d) All are involved in nuclear fusion events.
45. A close relation between flower and pollinating agent is best exhibited by :
 (a) *Cocos* (b) *Salvia*
 (c) *Yucca* (d) *Avena*

**RESPONSE
GRID**

34. (a)(b)(c)(d) 35. (a)(b)(c)(d) 36. (a)(b)(c)(d) 37. (a)(b)(c)(d) 38. (a)(b)(c)(d)
 39. (a)(b)(c)(d) 40. (a)(b)(c)(d) 41. (a)(b)(c)(d) 42. (a)(b)(c)(d) 43. (a)(b)(c)(d)
 44. (a)(b)(c)(d) 45. (a)(b)(c)(d)

Space for Rough Work

DAILY PRACTICE PROBLEM DPP CHAPTERWISE 24 - BIOLOGY

Total Questions	45	Total Marks	180
Attempted		Correct	
Incorrect		Net Score	
Cut-off Score	40	Qualifying Score	55
Success Gap = Net Score – Qualifying Score			
Net Score = (Correct × 4) – (Incorrect × 1)			