

EXERCISE

1. Which of the following is monocarpic plant :-
 (1) Shisham (2) Mango
 (3) *Pinus* (4) Bamboo
2. Which part of the reproductive structure produces both enzyme & hormone
 (1) Archegonium (2) Middle layer
 (3) Tapetum (4) Endothecium
3. Tapetum is :-
 (1) Parietal in origin and is the inner most layer of anther wall.
 (2) Modified endothecium of anther wall
 (3) Outer most layer of sporogenous tissue modification
 (4) Parietal in origin and is the inner most layer of ovule wall
4. Example of polyploid tissue present in an angiosperm plant is
 (1) Perisperm (2) Embryo
 (3) Tapetum (4) Placenta
5. How many cells or nuclei are present in mature male gametophyte of *Capsella*
 (1) One (2) Two
 (3) Three (4) Many
6. How many and what type of male gametes are produced by the male gametophyte of *Capsella*
 (1) One, multi ciliated
 (2) Two, biciliated
 (3) Two, multi ciliated
 (4) Two, non motile
7. Essential whorls of a flowers are
 (1) Calyx and Corolla
 (2) Corolla and Gynoecium
 (3) Androecium and Gynoecium
 (4) All of the above
8. Main function of endothecium (in anther) is :-
 (1) Mechanical (2) Nutritive
 (3) Dehiscence (4) Storage
9. Which one is female gametophyte
 (1) Embryo (2) Embryosac
 (3) Endosperm (4) Pistil
10. What type of ovule is found in *Capsella*-
 (1) Orthotropous (2) Campylotropous
 (3) Anatropous (4) Hemitropous
11. Perisperm is
 (1) Persistent nucellus in seed
 (2) Ovule wall
 (3) Ovule coat
 (4) Fossil of haustoria
12. Anatropous (Resupinate) type of ovule is :-
 (1) Straight (2) Inverted
 (3) Transverse (4) Coiled
13. Which of the following types of embryosac is mostly found in Angiosperm
 (1) Bisporic polygonum type
 (2) Tetrasporic type
 (3) Monosporic - onagrad type
 (4) Monosporic - polygonum type
14. 'Callase' enzyme which dissolve callose of tetrad of microspores to separate 4 microspores is provided by:-
 (1) Pollen grains (2) Middle layer
 (3) Tapetum (4) Endothecium
15. The primary endosperm nucleus in Polygonum type of embryosac is :-
 (1) Haploid (2) Diploid
 (3) Triploid (4) Tetraploid
16. In Angiosperms all the four microspores of tetrad are covered by a layer which is made up of :
 (1) Pectocellulose (2) Callose
 (3) Cellulose (4) Sporopollenin
17. Monotheous anther is found in which family :
 (1) Malvaceae
 (2) Liliaceae
 (3) Brassicaceae
 (4) Asteraceae
18. That haploid cell which divides by mitosis to form embryosac is :-
 (1) Megaspore mother cell
 (2) Microspore mother cell
 (3) Functional megaspore
 (4) Non functional megaspore

SEXUAL REPRODUCTION IN FLOWERING PLANTS

- 19.** Pollen grains are able to withstand extremes of temperature and desiccation because their exine is composed of :-
 (1) Cutin (2) Suberin
 (3) Sporopollenin (4) Callose
- 20.** Which structure of the ovule is diploid :-
 (1) Nucellus
 (2) Integuments
 (3) Sec. nucleus
 (4) All of the above
- 21.** Autogamy means
 (1) Transfer of pollen from anthers to stigma of the same flowers
 (2) Transfer of pollen from one flowers to another on the different plant
 (3) Occurrence of male and female sex organ in the same flowers
 (4) Germination of pollen
- 22.** Which of the following promotes pollen germination and tube growth
 (1) Starch (2) Boron
 (3) Calcium (4) Potassium
- 23.** After fertilization the outer integument of ovule changes into -
 (1) Testa (2) Tegmen
 (3) Fruit (4) Seed
- 24.** After fertilization the seed is developed from
 (1) Ovule (2) Ovary
 (3) Nucellus (4) Endosperm
- 25.** Double fertilization means
 (1) Fusion of male gamete and ovum
 (2) Fusion of two polar bodies
 (3) A male gamete fused with egg and second male gamete fused with secondary nucleus
 (4) All of the above
- 26.** The fusion product of secondary nucleus and male gamete is
 (1) Nucellus
 (2) Primary endosperm nucleus
 (3) Zygote
 (4) Secondary nucleus
- 27.** Water of coconut is
 (1) Endosperm (2) Nucellus
 (3) Endocarp (4) Mesocarp
- 28.** Adventive embryony in *Citrus* is due to :
 (1) Nucellus (2) Integuments
 (3) Zygotic embryo (4) Fertilized egg
- 29.** The aleurone layer in maize grain is specially rich in :-
 (1) Protein (2) Starch
 (3) Lipids (4) Auxins
- 30.** Anthesis is a phenomenon which refers to-
 (1) Formation of pollen
 (2) Development of anther
 (3) Opening of flower bud
 (4) Reception of pollen by stigma
- 31.** When the pollens of one flower falls on the stigma of another flower of the same plant then genetically it is known as :-
 (1) Cleistogamy (2) Allogamy
 (3) Autogamy (4) Dichogamy
- 32.** Entry of pollen tube through micropyle is called:
 (1) Porogamy (2) Syngamy
 (3) Chalazogamy (4) Mesogamy
- 33.** Endosperm of angiosperm is :-
 (1) 2n (2) 3n (3) n (4) 4n

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	3	1	3	3	4	3	3	2	2	1	2	4	3	3
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	2	1	3	3	4	1	2	1	1	3	2	1	1	1	3
Que.	31	32	33												
Ans.	3	1	2												