

BIO-BOTONY

+2

GOVERNMENT PUBLIC EXAM QUESTIONS UNITWISE



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☎ 8940548554

BIO-BOTANY

12th standard

**PUBLIC EXAM QUESTION WITH ANSWER UNITWISE
(2020 to 2023)**

SEVEN PUBLIC QUESTIONS

SEP - 2020	JULY - 2022
MAR - 2020.	MAR - 2023
AUG - 2021	JUNE - 2023
MAY - 2022	

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PG ASST IN BOTANY

8940548554

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TIME ALLOWED : 1 . 30 hr .

MARKS : 35

SECTION – 1

Note : (I) Answer all the questions. $8 \times 1 = 8$

(II) choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

1. Coleorhiza is found in _____.
(a) Paddy (b) Beans (c) Pea (d) Tridax .
2. In _____ the single gene effects multiple traits and alters the phenotype of the organism.
(a) Lethal genes (b) Epistatic (c) Pleiotropy (d) Hypostatic.
3. The bacteria responsible for inducing tumors in several dicot plant are _____.
(a) Candida utilis (b) Spirulina (c) Chlorella (d) Agrobacterium tumefaciens
4. The time duration for sterilization process by using autoclave is _____ minute and the temperature is _____.
(a) 10 – 30 minutes , 125 °C (b) 15 – 30 minutes , 121°C
(c) 15 – 20 minutes, 125°C (d) 10 – 20 minutes, 121°C..
5. In Soil water available for plants is _____.
(a) Gravitational water (b) Chemically bound water
(c) Capillary water (d) Hygroscopic water
6. Depletion of which gas in the atmosphere can lead to an increased incidence of skin cancer ?
(a) Ammonia (b) Methane (c) Nitrous oxide (d) Ozone
7. _____ are a collection of method that could increase and accelerate the development of new traits in plant breeding .
(a) NBT (b) Trichoderma (c) Bio Pesticides (d) Enzymes.
8. Observe the following statements and pick out the correct option from the following :

Statement I : the drug sources of siddha include plants , animals , Ores and minerals .

Statement II : minerals are used for preparing drug with a long self life .

- (a) Statement I is correct (b) Statement II is correct
- (c) Both Statement are correct (d) Both Statement are incorrect.

SECTION – II

Note : Answer any four questions.

4X2=8

09. Give the type of Synapsis .
10. What is C -value ?
11. Differentiate Biotope and Ecotope.
12. What is PAR ?
13. What is SLF ?

**CHAPTER WISE AS PER THE PUBLIC
QUESTIONS PAPER**

12th BIO BOTANY PUBLIC QUESTION WITH ANSWER UNITWISE

CHAPTER – 1

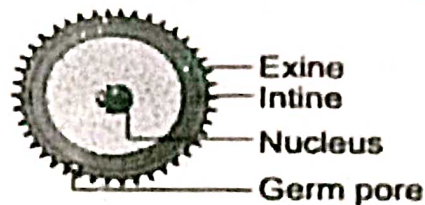
A SEXUAL AND SEXUAL REPRODUCTION IN PLANTS

ONE MARK :

1. First cell of Male gametophyte in angiosperms is :
 (a) primary endosperm (b) Microspore (c) Megaspore (d) Nucleus
2. Parthenocarpic fruits lack .
 (a) Mesocarp (b) Endocarp (c) seed (d) Epicarp
3. The first cell of male gametophyte in angiosperm is :
 (a) Nucleus (b) Microspore (c) Primary Endosperm Nucleus (d) Megaspore.
4. Coleorhiza is found in _____
 (a) Paddy (b) Beans (c) Pea (d) Tridax
5. Which of the following represent Mega gametophyte ?
 (a) Nucellus (b) Ovule (c) Endosperm (d) Embryo sac
6. The scar left by funiculus in the seed is :
 (a) tegmen (b) radicle (c) epicotyl (d) hilum.

TWO MARKS :

1. Draw and mark the part of first cell of male gametophyte.



First cell of male gametophyte

2. What is mellitophily ?

ANS : Pollination by Bees is called mellitophily.

3. What is Stomium ?

ANS : The region along the junction of the two sporangia of an anther lobe which lacks thickening is called Stomium

4. What is pollenkit ?

ANS : (i) Pollenkitt is contributed by the tapetum and coloured yellow or Orange and is chiefly made up of carotenoids flavonoids.
 (ii) it is an oily layer forming a viscous coating over pollen surface
 (iii) it attracts insects and protects damage from UV radiation

CHAPTER WISE COMPULSORY QUESTION AND ANSWERS QUESTION NUMBER 19 MAY BE COMPULSORY

**CHAPTER - 1 ASEXUAL AND SEXUAL REPRODUCTION IN PLANTS .
(TILL ASKED 2 QUESTIONS FROM THE CHAPTER)**

19. Draw the diagrammatic structure of ovule and label its parts.
19. List out the functions of tapetum.

CHAPTER - 6 PRINCIPLE OF ECOLOGY.(2 ASKED)

19. Write the three differences between Habitat and Niche.
19. Distinguish habitat and niche.(SECOND TIME)

CHAPTER - 7 ECOSYSTEM (1 ASKED)

19. Differentiate Autotrophic components from Heterotrophic components.

CHAPTER - 8 ENVIRONMENTAL ISSUES.(2 ASKED)

19. What is Green house effect ? What are the gases involved in it.
19. Write short notes on Bio - monitoring .

NOT YET ASKED CHAPTERS UPTO 2023 JUNE

CHAPTER - 2 CLASSICAL GENETICS .

CHAPTER - 3 CHROMOSOMAL BASIS OF INHERITANCE

CHAPTER - 4 PRINCIPLES AND PROCESSES OF BIOTECHNOLOGY.

CHAPTER - 5 PLANT TISSUE CULTURE.

CHAPTER - 9 PLANT BREEDING.

CHAPTER -10 ECONOMICALLY USEFUL PLANTS AND ENTREPRENEURIAL BOTANY.

BOOK BACK ONE MARKS

1 ASEXUAL AND SEXUAL REPRODUCTION IN PLANTS

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. Pollen tube was discovered by
 - a) J.G.Kolreuter
 - b) G.B.Amici
 - c) E.Strasburger
 - d) E.Hanning
5. Size of pollen grain in Myosotis
 - a) 10 micrometer
 - b) 20 micrometer
 - c) 200 micrometer
 - d) 2000 micrometer
6. First cell of male gametophyte in angiosperm is
 - a) Microspore
 - b) megaspore
 - c) Nucleus
 - d) Primary Endosperm Nucleus
7. Match the following
 - I) External fertilization
 - II) Androecium
 - III) Male gametophyte
 - IV) Primary parietal layer
 - i) pollen grain
 - ii) anther wall
 - iii) algae
 - iv)stamens
 - a) I-iv;II-i;III-ii;IV-iii
 - b) I-iii;II-iv;III-i;IV-ii
 - c) I-iii;II-iv;III-ii;IV-i
 - d) I-iii;II-i;III-iv;IV-ii
8. 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 of epidermis
9. 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

12th BIO BOTANY PUBLIC QUESTION WITH ANSWER UNIT
 SOME IMPORTANT DIAGRAMS

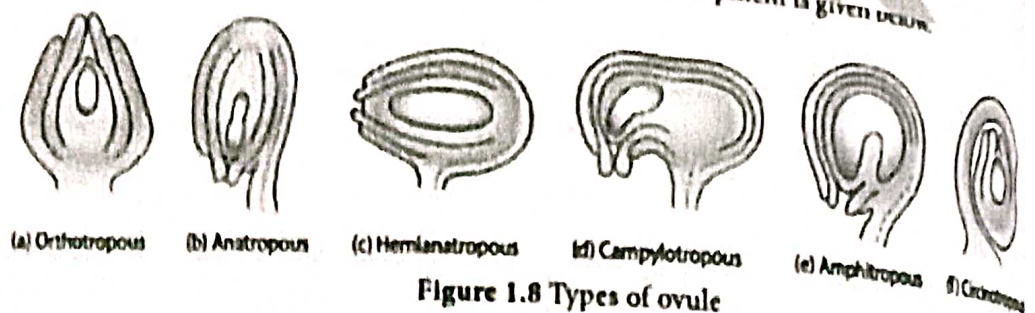
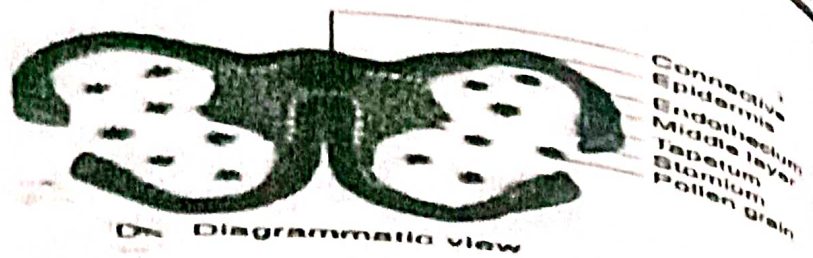


Figure 1.8 Types of ovule

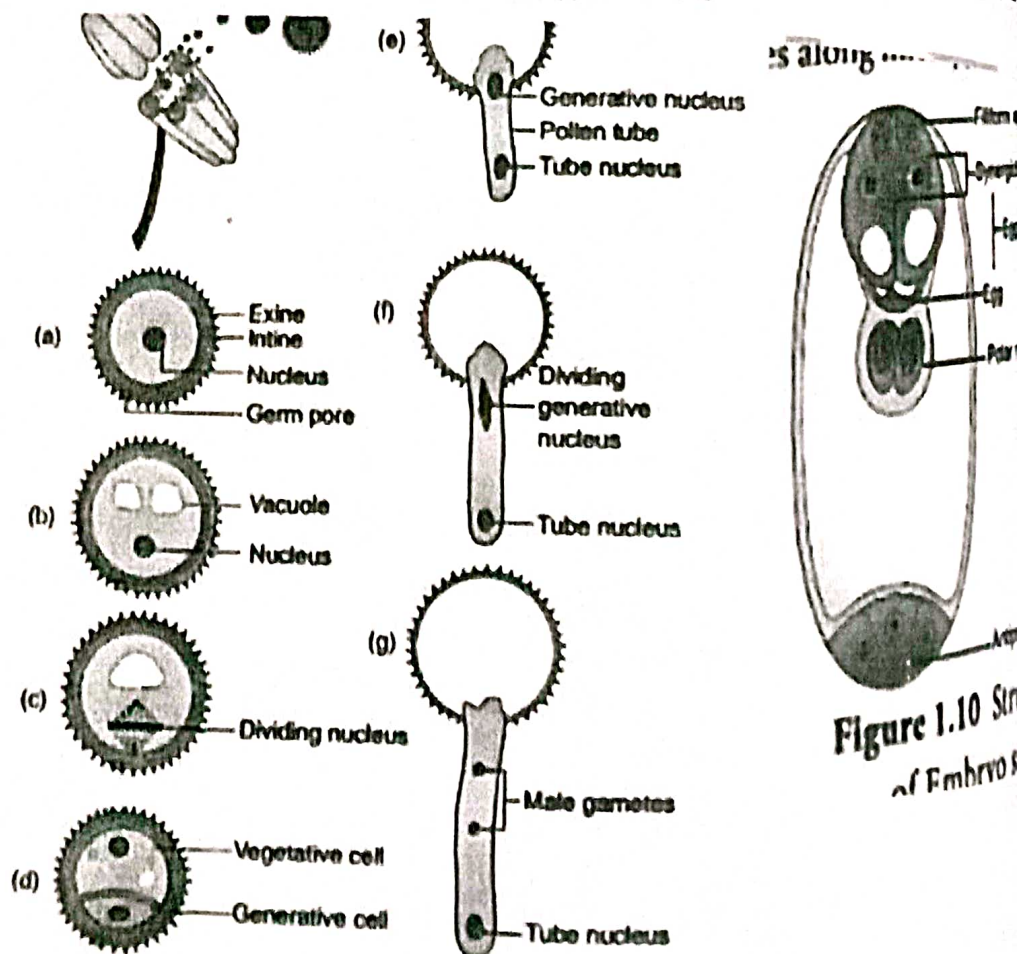


Figure 1.10 Structure of embryo

Figure 1.6 Development of male gametophyte