

**Model Question Paper**  
**Reproduction in Plants (B) - Part I**

10th Standard

**Science**

Reg.No. : 

--	--	--	--	--	--

I. Answer all the questions.

II. Use Blue pen only.

III. Question No 15 is compulsory

Time : 01:00:00 Hrs

Total Marks : 45

5 x 1 = 5

**Section-A**

- 1) The method of reproduction in unicellular organism like amoeba and bacteria in which they split into two equal halves and produce new ones is called .....  
(a) fragmentation (b) binary session (c) budding (d) spore formation
- 2) In sexual reproduction of Flowering plants, the first event involved in this .....  
(a) fertilization (b) germination (c) regeneration (d) pollination
- 3) Which of the following statement is true?  
(a) Thin-walled non-mobile spores are called zoospores. (b) A motile asexual spore produced by some algae, bacteria and fungi are Akinetes.  
(c) Uninucleate, non-motile, asexual spores produced by fungus are called conidia.  
(d) Thick-walled vegetative cells produced by algae during adverse conditions are called aplanospores.
- 4) The fertilized ovary is a fruit. The fruit that develops from a single flower with multi carpellary, apocarpous superior ovary is .....  
(a) Aggregate fruit (b) Composite fruit (c) Simple fruit (d) Multiple fruit
- 5) If a water soaked seed is pressed, a small drop of water comes out through the .....  
(a) stomata (b) lenticel (c) micropyle (d) radicle

**Section-B**

6 x 2 = 12

- 6) Write any two differences between asexual and sexual modes of reproduction.
- 7) What is vegetative propagation? Mention the vegetative propagules in: i) Bryophyllum ii) Spirogyra
- 8) Arrange the following events of sexual reproduction in plants in the correct sequential order : seed formation, pollination, dispersal of seeds, fertilization
- 9) Define pollination.
- 10) Define fertilization.
- 11) Name the agents of pollination in the following cases: i) Bright coloured flowers with scent and nectar glands. ii) No colour / scent/ nectar but pollen grains are dry, light weight and powdery. Stigma is feathery. Also mention the plants in cases (i) & (ii).

**Section-C**

5 x 5 = 25

- 12) i) Name the process by which a fruit is developed. ii) Explain the development process in brief. iii) Draw a neat, labelled diagram of that process.
- 13) Write the two events involved in the sexual reproduction of a flowering plant. i) Discuss the first event and write the types. ii) Mention the advantages and the disadvantages of that event.
- 14) i) Fruit is the product of fertilization. Is there any fruit which is formed without the act of fertilization? ii) Represent the classification of fruits in a diagrammatic sketch.
- 15) a) Compare aggregate fruits with multiple fruits and give suitable examples.  

(OR)

b) Describe the structure of a dicot seed.

\*\*\*\*\*