

PSC Botany Examination Previous Year Question Paper

Exam Name: Botany

Question Paper Code: 064/2015

Medium of Questions: English



64/2015

(Pages : 4)

Maximum : 200 marks

Time : $1\frac{1}{2}$ hours

PART - I

(Each answer shall be limited to one sentence)

A. Write the full form of the following acronyms :

1. ATP
2. ICBN
3. BSI
4. PPLO
5. JNTBGRI

B. Fill in the blanks :

6. Mendel's dihybrid phenotypic ratio is _____.
7. Sporangia which develops from a single initial is called _____.
8. In DNA, Cytosine pairs with _____.
9. Father of Indian Angiosperm Embryology is, _____.
10. Development of gametophyte from the sporophyte without the formation of spores is known as _____.
11. The source plant of Quinine is _____.
12. Removal of stamens from the flowers before anthesis is called _____.
13. Bacteria bearing flagella all over the body are called _____.
14. Juvenile state of Funaria is _____.

[P.T.O.]

15. The plant part which is used for regeneration into whole plant in tissue culture is called _____.
16. During photosynthesis, the oxygen is evolved as a byproduct. This oxygen comes from _____.
17. Genes located on Y chromosomes are called _____.
18. Vacuolar membrane is called _____.
19. Histogen theory of shoot apex was proposed by _____.
20. The botanical name of Rice plant is _____.

C. Choose the correct answer :

21. Gynobasic style is present in the family :

- | | |
|----------------|-------------------|
| (a) Annonaceae | (b) Lamiaceae |
| (c) Liliaceae | (d) Amaranthaceae |

22. Girdling leaf traces are the characteristic feature of the stem of :

- | | |
|-------------|------------|
| (a) Cycas | (b) Pinus |
| (c) Ephedra | (d) Gnetum |

23. Single trisomy is represented as :

- | | |
|--------------|--------------|
| (a) $2n + 1$ | (b) $2n - 1$ |
| (c) $2n - 2$ | (d) $2n + 2$ |

24. The age of fossils is determined by :

- | | |
|----------------------|-------------------------|
| (a) Dendrochronology | (b) Calcium deposition |
| (c) Palaeontology | (d) Radio carbon dating |

25. A GM plant is :

- | | |
|----------------------|----------------------|
| (a) Terminator plant | (b) Transgenic plant |
| (c) Translated plant | (d) Transduced plant |

26. Bacterial transformation was discovered by :
(a) Darwin (b) Leeuwenhoek
(c) Griffith (d) Robert Brown
27. "Shower of Sulphar" is associated with :
(a) Gnetum (b) Pinus
(c) Cycas (d) Equisetum
28. The movement of pollen tube towards the embryo sac is :
(a) Thermotactic (b) Thigmotactic
(c) Chemotactic (d) Phototactic
29. Inheritance of skin colour in Man is :
(a) Epistasis (b) Polygenic
(c) Monogenic (d) Trigenic
30. Mutation was first observed in :
(a) Oenothera lamarckiana (b) Pisum sativum
(c) Drosophila melanogaster (d) Nepenthes tentaculata
- (30 × 4 = 120)

PART - II

Answers shall be limited to one paragraph.

31. Cell division in Pinnularia
32. Gram staining
33. Double fertilization and triple fusion
34. Cyathium inflorescence
35. FAA

36. Hydathodes
 37. Amphiphloic siphonostele
 38. Reasons for selecting *Pisum sativum* as experimental material by Gregor Johann Mendel.
(8 × 10 = 80)
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