STATE PMT EXAMS EXERCISE

1. Which of the following part of ***Funaria,*** sporophyte is involved in the dispersal of spores ? **[UTTRANCHAL PMT 2004]**
(1) Calyptra (2) Operculum
(3) Peristome (4) Annulus

2. In ***Selaginella,*** the edaxial outgrowth, develops from the base of leaf, is called **[UTTRANCHAL PMT 2004]**
(1) ligule (2) velum
(3) rhizophore (4) glassopodium

3. In pinus, the third of embryonal cells from below is known as : **[UTTRANCHAL PMT 2004]**
(1) rosette tier (2) suspensor tier
(3) embyonal tier (4) free-nuclear tier

4. If a sporangium is derived from a single cell, it is called : **[UTTRANCHAL PMT 2004]**
(1) leptosporangiate
(2) euporangiate
(3) heterosporangiate
(4) monosporangiate

5. Which is haploid in case of Cycas ? **[UTTRANCHAL PMT 2005]**
(1) Stem (2) Root
(3) Edosperm (4) All the above

6. In which of the following pairs of geneta sporocarps are present ? **[UTTRANCHAL PMT 2006]**
(1) Marsilea and Salvinia
(2) Marsilea and Isoetes
(3) Isoetes and Salvinia
(4) Marsilea and Lycopodium

7. In Euistem stem the cavity formed by dissolution of protoxylem is known as : **[UTTRANCHAL PMT 2006]**
(1) callicular canal
(2) vascular canal
(3) cranial canal
(4) resin canal

8. Sperms of both Funaria and Dryopteris were placed near the archegonia of Dryopteris. Only sperms of Dryopteris entered the archagonia and reached the egg because of : **[WEST BENGAL JEE 2007]**
(1) less motility of Funaria sperms which
(2) Dryopteris archegonia secrete chemicals attracts dryopteris sperms only
(3) Dryopteris archegonia secrete chemical to repel Funaria sperms
(4) Funaria sperms are killed when mixed with Dryopteris sperms

9. The moss plant develops from : **[CG PMT 2004]**
(1) Diploid spores (2) Protenema
(3) Oospores (4) Anthorozoids

10. Fern plant is a : **[CG PMT 2004]**
(1) Haploid gametophyte
(2) Diploid gametophyte
(3) Diploid sprophyte
(4) Haploid sprophyte

11. How must time is generally required/taken by the pine plant from pollination to fertilization **[CG PMT 2004]**
(1) Four months
(2) Twelve months
(3) Two years
(4) Four years

12. In Pinus male and female reproductive structure occur ? **[CG PMT 2005]**
(1) On different branches of the same plant
(2) On different plants
(3) On same branch
(4) None of these

13. Stomata is Funaria are found in **[CG PMT 2005]**
(1) Capsule (2) Foot
(3) Seta (4) No where

14. Embryo is found in : **[CG PMT 2006]**
(1) ***Ulothrix*** (2) ***Spirogyra***
(3) ***Funaria*** (4) ***Chlorella***

15. In which of the following protenema stage is found **[CG PMT 2006]**
(1) ***Riccia*** (2) ***Funaria***
(3) ***Selaginella*** (4) ***Pinus***

16. Haploid structure of Funaria is **[JHARKHAND 2006]**
(1) protonema (2) calyptra
(3) apophysis (4) operculum

17. Sperm of Cycas is : **[JHARKHAND 2006]**
(1) multiflagellated and very large
(2) small and biflagellated
(3) multiflagellated and small
(4) large and biflagellated

18. Ferm gametophyte bears : **[JHARKHAND 2005]**
(1) archegonia (2) antheridia
(3) sporangia (4) both (1) and (2)

19. Spore of Funaria on germination give rise to **[JHARKHAND 2005]**
(1) protonema (2) embryo
(3) antheridia (4) archengonia

20. The number of prothallial cell in male gametophyte of Selaginella is : **[JHARKHAND 2002]**
(1) one (2) two
(3) twelve (4) numerous

21. In Funaria, the number of peristomial teeth is : **[JHARKHAND 2002]**
(1) 8 (2) 16
(3) 32 (4) 64

22. Number of peristomial teeth in moss is : **[BIHAR 2005]**
(1) 16 + 16 (2) 16 + 32
(3) 8 + 16 (4) 32 + 32

23. Turpentine oil is obtained from : **[BIHAR 2006]**
(1) Pinus longifolia (2) Azadirachata
(3) Eucalyptus (4) All of these

24. The sclerenchyma of the hypodermis in the Pinus needle helps in : **[BIHAR 2006]**
(1) increasing the absorptive surface of the cell
(2) checking transpiration
(3) mechanical support
(4) photosynthesis

25. In Cycas, the vascular bundles are arranged in the shape of inverted omega in : **[UP CPMT 2001]**
(1) Stem (2) rachis
(3) Leaflet (4) Ephedra

26. Cleavage polymbryony is found in **[UP CPMT 2001]**
(1) Cycas (2) Pinus
(3) Funaria (4) Ephedra

27. The rhizoids in ***Funria*** are **[UP CPMT 2001]**
(1) tuberculated
(2) unicellular and simple
(3) distinct, branched and coenocytic
(4) multicellular and oblique septate

28. In Funaria, stomata are present on the : **[UP CPMT 2001]**
(1) stem (2) leaves
(3) capsule (4) archegonia

29. Which of the following statement in true regarding the archegonium of ferm : **[UP CPMT 2001]**
(1) there are four neck canal cells
(2) there are three neck canal cells
(3) there is one neck canal cell with one nucleus
(4) there is one neck canal cell with two nuclei

30. Cycas revolute is popularly known as : **[UP CPMT 2002]**
(1) date palm (2) sago palm
(3) sea palm (4) royal palm

31. Protenema stage is found in **[UP CPMT 2005]**
(1) fern (2) mosses
(3) liverworts (4) fungi

32. Funaria is attached to substratum by : **[UP CPMT 2006]**
(1) roots (2) rhizoids
(3) haustoria (4) stem

33. Which of the following are formed due to germination of spores in ferns **[UP CPMT 2006]**
(1) protonema (2) prothallus
(3) thallus (4) gametophore

34. Funaria is not : **[UP CPMT 2006]**
(1) acrocarpous (2) cleistogamous
(3) monoecious (4) autoicous

35. In which of the following feature, Cycas resembles with angiosperms ? **[UP CPMT 2007]**
(1) presence of vessels
(2) circinate vernation
(3) dichotomously branched leaves
(4) pollen tube is the carrier of male gametes

36. The number of prothallial cells in male gametophyte of Pinus is : **[UP CPMT 2007]**
(1) 2 (2) 1
(3) 3 (4) 0

37. The plant of Funaria is : **[MP PMT 2001]**
(1) Monoecious (2) Dioecious
(3) Heterocious (4) none of these

38. The sprophyte of Funaria always begins development within the : **[MP PMT 2002]**
(1) Antheridium (2) Archegonium
(3) Capsule (4) Protonema

39. Trabaculae is the transformation of : **[MP PMT 2003]**
(1) pericycle (2) endodermis
(3) xylem (4) phloem

40. Meiosis in pteridophytes takes place at the time of : **[MP PMT 2003]**
(1) spore formation
(2) sexual organ formation
(3) germination of spores
(4) gamete formation

41. Pinus seed is orginated in : **[MP PMT 2002, 03]**
(1) Capsul (2) microsporophyll
(3) microsporangia (4) megasporophyll

42. The endosperm of Pinus is : **[MP PMT 2003]**
(1) haploid (2) diploid
(3) triploid (4) polypoid

43. Ferm prothallus is developed from : **[MP PMT 2003]**
(1) elaters
(2) spore mother cells
(3) spore
(4) zygote

44. The development of Funaria gametophyte always initiated from : **[MP PMT 2003]**
(1) Heterothallic
(2) Dioecious
(3) Monoecious
(4) Monoecious and dioecious

46. Winged pollen grains are found in which of the following : **[MP PMT 2002, 04]**
(1) Pinus (2) Selaginella
(3) Pteris (4) Cycas

47. Calyptra of *Funaria* arises from : **[MP PMT 2007]**
(1) capsule (2) antheridium
(3) columella (4) archegonium

STATE PMT EXAMES EXERCISE **ANSWER KEY**

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	**3**	**1**	**1**	**1**	**3**	**1**	**1**	**2**	**2**	**3**	**2**	**1**	**1**	**3**	**2**
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	**1**	**1**	**4**	**1**	**1**	**3**	**1**	**1**	**3**	**2**	**2**	**4**	**3**	**4**	**2**
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	**2**	**2**	**2**	**2**	**4**	**1**	**1**	**2**	**2**	**1**	**4**	**1**	**3**	**2**	**3**
Que.	46	47													
Ans.	**1**	**4**													