

BOTANY
MODEL TEST PAPER - 1

MTP - 1

1. Genera Plantarum was compiled by
 (a) Bentham and Hooker (b) Engler and Prantl
 (c) Hutchinson (d) Takhtajan
2. Which one of the following is main air pollutant ?
 (a) CO (b) CO₂ (c) N₂ (d) SO₂
3. A sure way to obtain haploid plant rather easily for use in hybridization experiments is
 (a) stem tip culture (b) leaf mesophyll
 (c) pollen culture (d) fertilized ovule culture
4. Development of embryo from egg cell without the act of fertilization is known as
 (a) parthenocarpy (b) parthenogenesis
 (c) polyembryony (d) none of these
5. A branched racemose inflorescence is known as
 (a) panicle (b) corymb
 (c) sorosis (d) spadix
6. Mendelian Laws of Inheritance were rediscovered by
 (a) Tschermack, deVries and Correns
 (b) Crick, Correns and deVries
 (c) Correns and deVries (d) Watson and Crick
7. Water-proof substance secreted by cork cells is
 (a) cutin (b) tannin (c) suberin (d) lignin
8. Which one of the following is a seed-borne disease?
 (a) ergot of bajra (b) smut of bajra
 (c) bacterial blight of rice (d) blast of rice
9. Objective lenses used to enhance the resolution power of electron microscope are
 (a) made up of quartz (b) made up of silicon
 (c) electromagnetic (d) electrostatic
10. Vascular cambium in roots takes origin from
 (a) pericycle (b) endodermis
 (c) conjunctive parenchyma
 (d) partly from pericycle and from conjunctive parenchyma
11. In which of the following organs, endodermis is absent ?
 (a) monocot root (b) monocot stem
 (c) dicot root (d) dicot stem
12. *Abelmoschus esculentus* belongs to family
 (a) Cruciferae (b) Malvaceae
 (c) Liliaceae (d) Solanaceae
13. Fruit softens and attains edible maturity due to
 (a) conversion of starch into glucose
 (b) loss of pectates in middle lamella
 (c) incorporation of pectates in middle lamella
 (d) jelly formation at an acidic pH
14. Approximate number of calories required by an average man to cope up with normal routine office works is around
 (a) 2400 – 2700 (b) 3000 – 3500
 (c) 2700 – 3000 (d) 3500 – 4000
15. Feulgen reaction is commonly used to localize
 (a) cytoplasmic RNA (b) nuclear DNA
 (c) nuclear proteins (d) polysaccharides of cell wall
16. In grasses, the stem elongates by the activity of which of the following meristems ?
 (a) apical meristem (b) secondary meristem
 (c) intercalary meristem (d) primary meristem
17. Which one of the following plants yields a medicine used in curing mental disorder ?
 (a) *Atropa belladonna* (b) *Rauwolfia serpentina*
 (c) *Euphorbia gerardiana* (d) *Cinchona officinalis*
18. Which one of the following is a source of non-alcoholic drink ?
 (a) *Triticum aestivum* (b) *Vertiveria zizanoides*
 (c) *Cymbopogon citratus* (d) *Dendrocalamus rambarti*
19. Which one of the following is a native of America ?
 (a) corn (b) wheat (c) rye (d) barley
20. Long fibres are known as
 (a) flint (b) lint (c) fluff (d) fur
21. For the production of which of the following, microbial action is not required ?
 (a) wine (b) curd (c) cheese (d) casein
22. Acid rain occurs due to increased concentration of
 (a) SO₂ (b) CO₂ (c) organic acid (d) NO₂
23. Greenhouse effect in the spin of century can cause global warming. This is largely due to increased levels of one of the following in the atmosphere
 (a) SO₂ (b) CO₂ (c) particulate matter (d) NO₂
24. Plants living in soil with sand and gravel are termed as
 (a) eremophytes (b) lithophytes
 (c) chaemophytes (d) psammophytes
25. Tricarpellary syncarpous inferior ovary with parietal placentation occurs in
 (a) Compositae (b) Cucurbitaceae
 (c) Curciferae (d) Cactaceae
26. Fruit developed by hypanthodium is called
 (a) sorosis (b) syconus
 (c) siliqua (d) follicle
27. A cladode is
 (a) another name of phylloclade
 (b) a flattened stem
 (c) one internode and one node of a green stem
 (d) a unit of stem comprising two nodes and one internode
28. Double fertilization was discovered by
 (a) Karls Weismann (b) P. Mahashwari
 (c) Nawaschin (d) Strasburger
29. Oat coleoptile has helped in our understanding of the role of
 (a) auxins (b) gibberellins
 (c) cytokinins (d) ABA
30. Chilgoza is derived from
 (a) *Dalbergia* (b) *Pinus*
 (c) *Acacia* (d) *Casuarina*
31. Identify the odd one in the following
 (a) cotton (b) jute (c) silk (d) hemp