

2023 MOCK 2 BIOLOGY 1

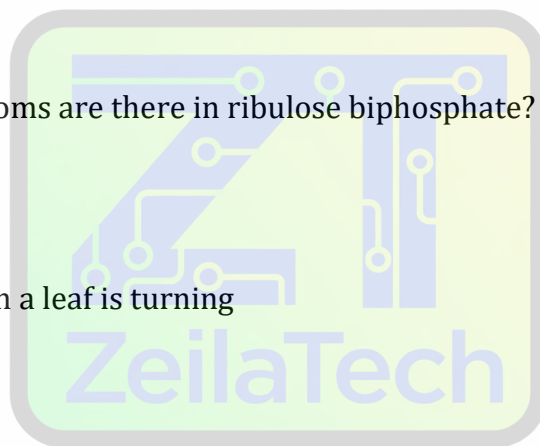
PAPER 1

OBJECTIVE TEST

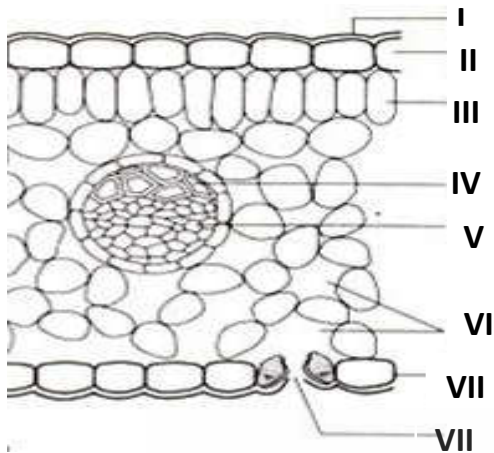
50 minutes

Answer *all* questions

- Which of the following fixes CO_2 into the leaf?
 - ADP
 - ATP
 - RUBP
 - NADP
- The hydrogen acceptor /carrier in the light stage of photosynthesis is the
 - ADP
 - NADP
 - NADPH_2
 - RUBP
- How many carbon atoms are there in ribulose biphosphate?
 - 3
 - 4
 - 5
 - 6
- Chlorosis* occurs when a leaf is turning
 - Yellow
 - Red
 - Orange
 - Violet
- The raw material for the light dependent stage of photosynthesis is
 - CO_2
 - H_2O
 - NADPH_2
 - NADP

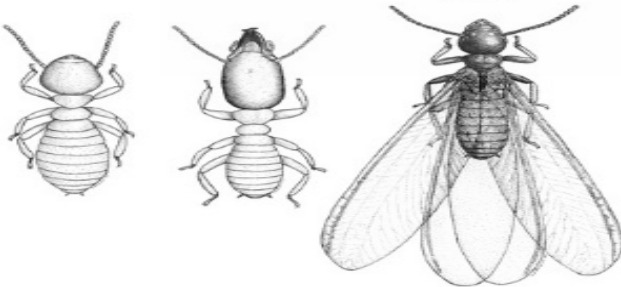


Study the diagram below and use it to answer questions 6 and 7



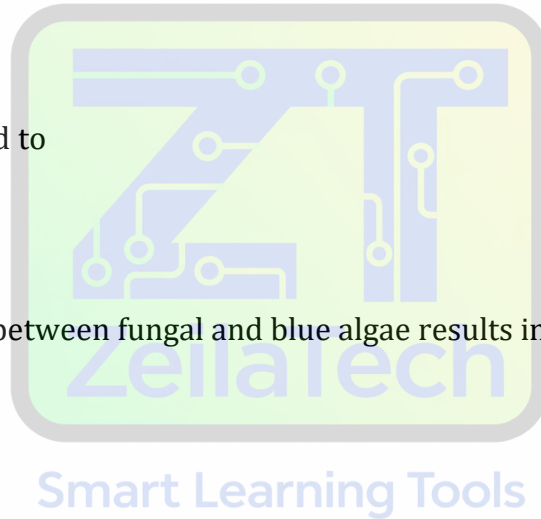
6. Oxygen leaves the leaf through the structure labelled
 - A. I
 - B. III
 - C. V
 - D. VII
7. Manufactured food is transported from the leaves through the structure labelled
 - A. III
 - B. IV
 - C. V
 - D. VI
8. The deficiency of calcium in a plant may result in
 - A. Stunted growth and poor root development
 - B. Poor growth, leaves become orange and brown
 - C. Stunted growth, slender stem and yellowing of leaves
 - D. Yellowing of leaves

The organisms below are castes of termites, use them to answer questions 11



9. They are called social insects because
 - A. They live in organised community
 - B. Live in termitarium
 - C. They have a queen
 - D. Communicate with each other

10. Which of the following resources cannot be conserved?
- A. Soil
 - B. Air
 - C. Forest
 - D. Water
11. The molecule used by most animals for long – term energy storage is
- A. Glycogen
 - B. Starch
 - C. Fat
 - D. Protein
12. Which of the following forms part of a co enzyme?
- A. Lipase
 - B. Amylase
 - C. Zn^{+2}
 - D. Vitamin B₃
13. Beri – beri is a deficiency disease brought by lack of
- A. B₁
 - B. B₂
 - C. A
 - D. C
14. Afforestation can lead to
- A. erosion.
 - B. flooding.
 - C. leaching.
 - D. windbreak
15. An association form between fungal and blue algae results in the formation of
- A. conjugants
 - B. lichens
 - C. mycorrhiza
 - D. zygosporos
16. Amensalism is a form of association in which
- A. one organism benefits while the other loses
 - B. both organisms involved benefit
 - C. one organism benefits, the other neither benefits nor loses
 - D. both organisms loss
17. Global warming is mostly caused by concentration of
- A. CO
 - B. CO₂
 - C. CFCs
 - D. NO



18. One assumption made when using the capture – mark – release recapture method in sampling Population is that.
- A. Only healthy individuals are accessible to sampling
 - B. The rate of migration is equal to the rate of emigration
 - C. The number of males captured constitute half the number of females in the habitat
 - D. The rate of reproduction is twice the rate of death
19. The adaptive significance of the production of a large number of eggs by a female toad to
- A. Ensure buoyancy of eggs
 - B. Ensure an even and a wider distribution of the offspring
 - C. Improve upon the chances of fertilization
 - D. Attract many males
20. The ecological role of an organism in a habitat is referred to as
- A. Biome
 - B. Ecosystem
 - C. Micro – habitat
 - D. Niche
21. The greenhouse effect can be prevented by
- A. Increasing atmospheric carbon dioxide
 - B. Burning more wood and fossil fuel
 - C. Decreasing the atmospheric carbon dioxide
 - D. Depleting the ozone layer
22. crabs, snails, fish and man are all placed in the Kingdom Animalia because they
- A. Are heterotrophic
 - B. Can move
 - C. Are invertebrates
 - D. Have different habitat
23. Secondary growth in plants is brought about by the activities of the
- A. Phellogen and phelloderm
 - B. Phellogen and procambium
 - C. Vascular cambium and phelloderm
 - D. Vascular cambium and phellogen
24. Wood consists mainly of
- A. Parenchyma
 - B. Fibres
 - C. Companion cells
 - D. Medullary rays
25. The following are directly involved in transmission of sound waves to the brain except
- A. Ear drum
 - B. Auditory meatus
 - C. Auditory ossicles
 - D. Eustachian tube
26. The middle ear is filled with
- A. Fluid
 - B. Air
 - C. Tissue fluid
 - D. Mucus

27. Astigmatism is caused by
- A. Uneven curvature of the cornea
 - B. A short eye ball
 - C. A long eye ball
 - D. A weak lens

28. The Part of the eye which carries wastes is the
- A. Retina
 - B. Choroid layer
 - C. Aqueous humour
 - D. Vitreous humour

29. In which of the following processes of mitosis are the chromatids arranged along the equator of the spindle?
- A. Anaphase
 - B. Interphase
 - C. Metaphase.
 - D. Telophase

30. The **two** strands that make up a single chromosome are called
- A. chromatids
 - B. chromatins
 - C. tetrads
 - D. centromeres

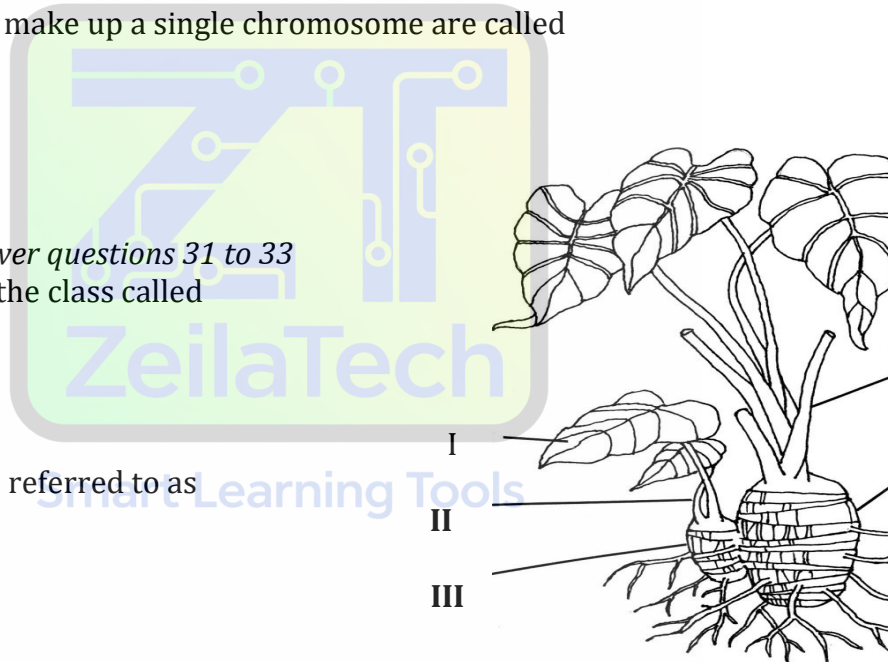
Use the diagram below to answer questions 31 to 33

31. The plant belongs to the class called
- A. monocotyledonae
 - B. dicotyledonae
 - C. Musci
 - D. hepaticae

32. The part labelled **II** is referred to as
- A. petiole
 - B. pedicel
 - C. peduncle
 - D. lamina

33. The vegetative propagation method is by the
- A. corm
 - B. rhizome
 - C. bulb
 - D. stolon

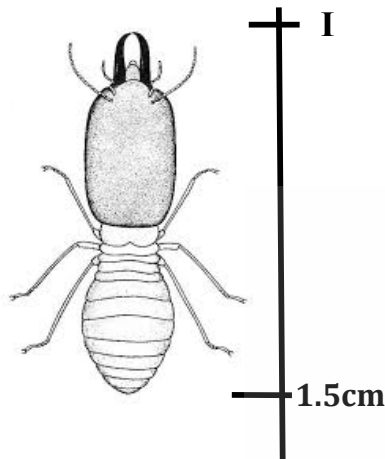
34. Which of the following is not an example of adventitious root system?
- A. stilt root
 - B. buttress root
 - C. Prop root
 - D. fibrous root



35. *Conidiophore*, an asexual reproductive structure is associated with organism in phylum called

- A. ascomycota
- B. basidiomycota
- C. zygomycota
- D. oomycote

Use the diagram below to answer question 36



36. Nkansah Ruth a form **three** science student made a drawing of the specimen in **11cm**. What will be the magnification produced?

- A. X 7.0
- B. X 7.03
- C. X 7.3
- D. X 7.4

37. When the zygote of an organism continues to grow, it produces new cells by

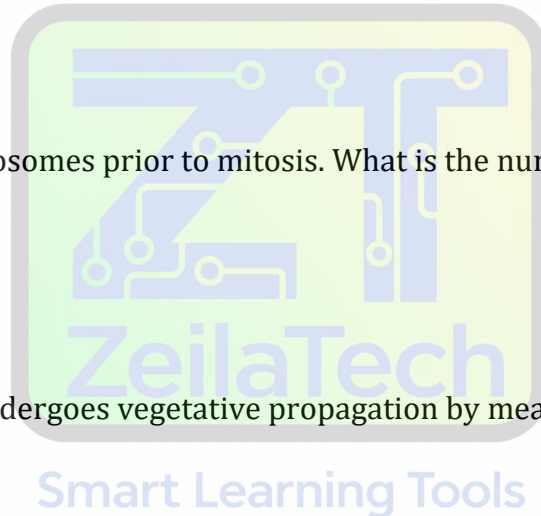
- A. meiosis
- B. crossing over
- C. gestation
- D. mitosis

Use the information below to answer questions **38** and **39**. A pupil accidentally 'watered' a potted plant with a concentrated salt solution. After some time, the plant began to wilt.

38. The wilting of the plant is due to the fact that

- A. the root hairs die off and can no longer absorb water
- B. the salt solution causes faster rate of transpiration leading to the death of the plant cells.
- C. the salt solution has caused water to be lost from the plant cells leading to loss of turgor
- D. the plant tissue has been poisoned by the salt which is absorbed by the plant

39. Which of the following activities would revive the plant?
- A. covering the plant with dark paper to prevent further water loss from its surface
 - B. leaving the plant to adapt to the condition
 - C. exposing the soil to high concentration of oxygen
 - D. adding more water to the soil
40. Which of the following is called as 'Suicidal bag'?
- A. Mesosomes
 - B. Centrosome
 - C. Peroxisome
 - D. Lysosomes
41. The branch of biology that deals with the study of tissues is called
- A. Entomology
 - B. Cytology
 - C. Histology
 - D. Zoology
42. The greatest contribution to genetic studies was made by
- A. Thomas Morgan
 - B. Gregor Mendel
 - C. Charles Darwin
 - D. Robert Hooke
43. A plant cell has 14 chromosomes prior to mitosis. What is the number of chromosomes in the daughter cells?
- A. 7
 - B. 14
 - C. 28
 - D. 56
44. A plant that commonly undergoes vegetative propagation by means of leaves is
- A. Hibiscus
 - B. Bryophyllum
 - C. Crotalaria
 - D. Spirogyra
45. The form of mating involving closely related animals in a population is referred to as
- A. cross breeding
 - B. conjugation
 - C. inbreeding
 - D. hybridization
46. The exchange of genes between homologous chromosomes is called?
- A. test cross
 - B. crossing over
 - C. back cross
 - D. mutation
47. Nitrogen may be lost from the soil through
- A. amination
 - B. deamination
 - C. nitrification
 - D. volatilization



48. the relationship between Rhizobium and Legume is

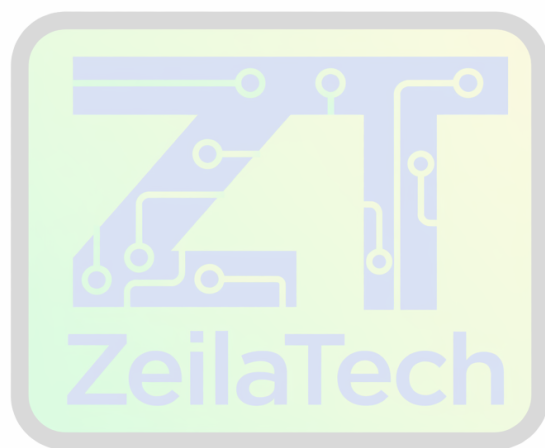
- A. Mutualistic
- B. Predatory
- C. Competitive
- D. Parasitic

49. The type of bacteria responsible for converting ammonia to nitrates is

- A. *Nitrosomonas*
- B. *Rhizobium*
- C. *E.coli*
- D. *Nitrobacter*

50. The hepatic portal vein links the liver to the

- A. stomach
- B. kidney
- C. small intestine
- D. gall bladder



Smart Learning Tools