Second Year B. Sc. (Sem. III) Examination
March / April - 2016
Botany : Paper - 302
(Plant Physiology & Plant Ecology)

Time : 2 Hours] [Total Marks : 50

सूचनाएँ / Instructions :

(1) Fill up strictly the details of signs on your answer book.

(2) All questions are compulsory.

(3) Each question carries ONE mark.

(4) Read the question carefully before selecting the correct option.

O.M.R. Sheet बरसा अंगेंी अजतगंगी सूचनाओ आणि O.M.R. Sheet-वी पाहणे घरे नि.

Important instructions to fill up O.M.R. Sheet is given on back side of the provided O.M.R. Sheet.
1. The sequence of basic unit in the study of living organism and the study of Ecology is
(A) Species-Ecosystem
(B) Individual-Population
(C) Individual-Ecosystem
(D) Population-Ecosystem

2. Not the product of anaerobic respiration
(A) Fumarate
(B) All
(C) Citrate
(D) Malate

3. The function of passage cell is
(A) To give support
(B) None of these
(C) To conduct water
(D) Division
4. Which instrument is used for the measurement of atmosphere humidity?

(A) Hygrograph
(B) None of these
(C) Anemometer
(D) Thermograph

5. Respiration in dead seed

(A) Not take place
(B) Is rare
(C) Is fast
(D) Is slow

6. What indicates this sequence Sun-producers-consumers-decomposers-treasure of inorganic nutrients?

(A) Flow of inorganic nutrients
(B) None of these
(C) Energy consumption
(D) Energy flow
7. Presence of trigger hairs in
(A) Drosera
(B) All
(C) Pitcher plant
(D) Pinguicula

8. Aerobic respiration take place at
(A) Cytoplasm
(B) Mitochondria
(C) Ribosome
(D) Chloroplast

9. Which plant with rudimentary embryo?
(A) Gynkgo biloba
(B) Every
(C) Orchid
(D) Ranunculus

10. Krab’s cycle means
(A) C₃ cycle
(B) None of these
(C) TCA cycle
(D) Anaerobic respiration
11 Passage cells are present in
(A) Rhizophora root
(B) Typha root
(C) Avicennia root
(D) Orchid root

12 Role of florigen is in plant
(A) Germination
(B) All
(C) Root growth
(D) Flowering

13 Product of aerobic respiration
(A) SO₂
(B) None of these
(C) O₂, Water, ATP
(D) CO₂, Water, ATP
14. Which plants feed on dead matter...
(A) Green plants
(B) Bacteria, fungi
(C) Primary consumers
(D) Secondary consumers

15. Which one of the following organisms is the decomposer in the ecosystem?
(A) Anemone
(B) Oxidizer
(C) Herbivore
(D) Primary consumer

16. In which plant leaf modify in a sewage canal like structure?
(A) Anthurium
(B) Tillandsia
(C) Nidularium
(D) Hiptage

Energy transfer in green plants
(A) Photo energy to bio energy
(B) Bio energy to photo energy
(C) Photo energy to chemical energy
(D) Chemical to photo energy
17. The plants which not tolerate extra salinity are
(A) Glycophytes
(B) Lithophytes
(C) Halophytes
(D) Epiphytes

18. The plant community with felted rhizoidal root apex
(A) Halophyte
(B) None of these
(C) Mangrove
(D) Lithophyte

19. Phytochromes which absorb 660 nm wavelength of light are
(A) Light green
(B) Yellow
(C) Blue green
(D) Red

20. How many calories release due to consumption of one molecule glucose in aerobic respiration?
(A) 674 calories
(B) 300 calories
(C) 128 calories
(D) 254 calories
21 Which plant need short dark period and long light period for flowering?
(A) Coffee  
(B) Tomato  
(C) Oat  
(D) Tobacco

22 Presence of pneumatophores in family
(A) Cucurbitaceae  
(B) All  
(C) Solanaceae  
(D) Rhizophoraceae

23 What is the biological unit of an ecosystem?
(A) Community  
(B) Individuals  
(C) Species  
(D) Population
24. How many molecules of oxygen need for the consumption for one glucose molecule?
   (A) 6
   (B) 4
   (C) 1
   (D) 2

25. Which is vegetation type is dominant in grassland ecosystem?
   (A) Herbs
   (B) Shrub
   (C) Tree
   (D) Climbers

26. Temperature of soil due to lack of vegetation is
   (A) Balanced
   (B) None of these
   (C) High
   (D) Low

27. The soil transported due to gravitational force is known as
   (A) Alluvial soil
   (B) None of these
   (C) Colluvial soil
   (D) Loess
28. Which substance have more adsorptive capacity than colloidal substance?
   (A) Carbonic substance and Acarbonic substance Both
   (B) None of these
   (C) Carbonic substance
   (D) Acarbonic substance

29. Which of the following is the correct sequence of the steps of cell division?
   (A) Mitosis
   (B) Apoptosis
   (C) Meiosis
   (D) Vascular bundle

30. Vernalization also known as
   (A) Chilling effect
   (B) None of these
   (C) Transpiration
   (D) Respiration
31 The respiratory quotient equation is
(A) Used O₂ / Produced CO₂
(B) None of these
(C) Produced CO₂ / Used O₂
(D) Produced O₂ / Used CO₂

32 Transpiration rate at night with compare of day
(A) More
(B) Transpiration is stop
(C) Equal
(D) Less

33 Known as pseudo pitcher plant
(A) Dicliptera rsfflesiana
(B) Sarracenia
(C) Nypenthes
(D) Darlingtonia
34 Which acid is produced during respiration?
   (A) Lactic acid
   (B) Acetyl-CoA
   (C) Oxaloacetate
   (D) Pyruvate
   Where the pyruvic acid produce during respiration?
   (A) Mitochondria
   (B) Cytoplasm
   (C) Choroplast
   (D) Nucleous

35 Which factor is responsible for soil erosion?
   (A) Deforestation
   (B) Humidity
   (C) Wind
   (D) Rain

36 Which plant from the Droseraceae family?
   (A) Pinguicula
   (B) All
   (C) Sun dew
   (D) Dionaea
37 ubsu ḫпустīk vunaspahm Pr ṭuṇṇoḏbawne
(A) utrāhe
(B) ānē pūṇa nahl
(C) āvārode
(D) ṛīmī ṭanāvne
In short day plant of flowering Pr is
(A) Excite
(B) None of these
(C) Inhibit
(D) Decrease

38 ḫvāṃtikraṇi ḫnāmējī vunaspahmō ḫvartakān
(A) sāmanvād ḫhī ḫkhān
(B) ānē pūṇa nahl
(C) ḫhānnāmī ḫkhān
(D) ḫvāmāvī ḫkhān
Life cycle of plant by vernalization
(A) Form balance
(B) None of these
(C) Form short
(D) Form long

39 ṭoṃwēṃmāmā vli bōjaṃdras ḫrōṣrō ḫhe?
(A) kumarins anē ṭeṇa ṭeṣakīrīk ṭeṣik bābhē
t(B) ānē pūṇa nahl
(C) kumarins
(D) ṭeṇa ṭeṣakīrīk ṭeṣik
Which germination inhibitor given below?
(A) Kumarins and Para ascorbic acid Both
(B) Not any
(C) Kumarins
(D) Para ascorbic acid

40 ṭeḷeṇmān ṭeṇiṃṇu ḫwar
(A) ṭāṇāmān vāna ṭenāw wibhaw
(B) ṭeḷeṇmān ṭeṇa ṭēj ṭhōṇḍaw
(C) ṭāpa ṭāpa ṭeṇiṃṇu
(D) ṭoṃst fís ṭhōṇḍaw
The role of Vallamen tissue
(A) Remove extra salt
(B) Absorb moisture from air
(C) Support
(D) Storage of food
41  The natural cleaners are
(A) Consumers
(B) Symbiont
(C) Producers
(D) Decomposers

42  Chemically phytochrome is
(A) Bilirubin
(B) None of these
(C) Bili protein
(D) Bili vardine

43  Insectivorous plant, with a hinge like structure in leaf
(A) Dionaea
(B) Pitcher plant
(C) Utricularia
(D) Droceria
The sequence of plant community development stages
(A) Aggregation-ecesis-reaction-stabilization-migration
(B) Ecesis-migration-aggregation-reaction-stabilization
(C) Migration-ecesis-aggregation-reaction-stabilization
(D) Migration-aggregation-ecesis-reaction-stabilization

45 Numbers of guard cells in stomata are:
(A) Three
(B) Four
(C) One
(D) Two

46 Not hypogeal germinating plant
(A) Sunflower
(B) Paperomia
(C) Coconut
(D) Chick pea

47 Which is not appropriate?
(A) Mesogeal-Paperomia
(B) Hypogeal-Onion
(C) Vivipary-Avicennia
(D) Epigeal-Mustard
In plants, loss of water by drop is
(A) Guttation
(B) Dew
(C) Transpiration
(D) Hydathode

Which is not proper given below?
(A) Pseudo epiphyte-Tinospora
(B) Nest epiphyte-Hiptage
(C) Hemi epiphyte-Ficus
(D) Tank epiphyte-Tillandisia

Role of transformers
(A) Transfer small particles into acarbonic and carbonic component and Food formation Both
(B) None of these
(C) Transfer small particles into acarbonic and carbonic component
(D) Food formation