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

Time : 2 Hours] [Total Marks : 50

यूनिवर्सिटी / Instructions :

(1) Fill up strictly the details of signs on your answer book.
Name of the Examination:
Second Year B. Sc. (Sem. III)
Name of the Subject:
Botany 302 : (Plant Physiology & Plant Ecology)
Subject Code No.: 3 0 1 1
Seat No.:  

(2) अभ्यास प्रश्नों करेंगे।
All questions are compulsory.

(3) दरेड़ प्रश्न एक गुण वर्ग छ।
Each question carries ONE mark.

(4) दरेड़ प्रश्नों का पूर्णांक अब्ज्यास करी साथों निकल पसंद करो।
Read the question carefully before selecting the correct option.

O.M.R. Sheet बरता अध्येतानी अवस्थानी सूचना आपेक्ष
O.M.R. Sheet का पाजी आपेक्ष छ।
Important instructions to fill up O.M.R. Sheet
is given on back side of the provided O.M.R. Sheet.
1 Which plant need short dark period and long light period for flowering?
(A) Tobacco
(B) Coffee
(C) Tomato
(D) Oat

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

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

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

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

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

9 Transpiration is regulate by
(A) Vascular bundle
(B) Mesophyll tissue
(C) Epidermis
(D) Stomata

10 Vernalization is also known as
(A) Respiration
(B) Chilling effect
(C) None of these
(D) Transpiration
11  the respiratory quotient equation is
(A) Produced $O_2$ / Used $CO_2$
(B) Used $O_2$ / Produced $CO_2$
(C) None of these
(D) Produced $CO_2$ / Used $O_2$

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

13  known as pseudo pitcher plant
(A) Darlingtonia
(B) Dischidia rsfflesiana
(C) Sarracenia
(D) Nypenthes
14 Where the pyruvic acid produced during respiration?
   (A) Nucleus
   (B) Mitochondria
   (C) Cytoplasm
   (D) Chloroplast

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

16 Which plant from droserace family?
   (A) Dionaea
   (B) Pinguicula
   (C) All
   (D) Sun dew
17. The flowering plant of Pr is
(A) Decrease
(B) Increase
(C) None of these
(D) Inhibit

18. Life cycle of plant by vernalization
(A) Form long
(B) Form balance
(C) None of these
(D) Form short

19. Which germination inhibitor given below?
(A) Para ascorbic acid
(B) Kumarins and Para ascorbic acid Both
(C) Not any
(D) Kumarins

20. The role of Vallamen tissue
(A) Storage of food
(B) Remove extra salt
(C) Absorb moisture from air
(D) Support

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21  कुछत्रतना सहाय कामकाजो
(A) विभट्टी
(B) उपभोक्ता
(C) संबंधीयो
(D) उत्पादकी
The natural cleaners are
(A) Decomposers
(B) Consumers
(C) Symbiont
(D) Producers

22  रासायनिक रीते क्षायरोबोम
(A) बीही वार्डन
(B) बीहीगनर
(C) एक पूरा नाड
(D) बीली प्रोटीन
Chemically phytochrome is
(A) Bili vardine
(B) Bilirubin
(C) None of these
(D) Bili protein

23  पृष्ठावर्ग मिज़जारा हेवी स्त्रा भरावती हीटाहाई वनस्पती
(A) द्रोसेरा
(B) भुजीपाष
(C) क्षेत्रपर्वा
(D) इंटिपर्वा
Insectivorous plant, with a hinge like structure in leaf
(A) Drosera
(B) Dionaea
(C) Pitcher plant
(D) Utricularia
24 The sequence of plant community development stages
(A) Migration-aggregation-ecesis-reaction-stabilization
(B) Aggregation-ecesis-reaction-stabilization-migration
(C) Ecesis-migration-aggregation-reaction-stabilization
(D) Migration-ecesis-aggregation-reaction-stabilization

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

26 Not Hypogeal germinating plant
(A) Chick pea
(B) Sunflower
(C) Paperomia
(D) Coconut

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

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

30. Role of transformers
(A) Food formation
(B) Transfer small particles into acarbonic and carbonic component and Food formation Both
(C) None of these
(D) Transfer small particles into acarbonic and carbonic component
31 The sequence of basic unit in the study of living organism and the study of Ecology is
(A) Population-Ecosystem
(B) Species-Ecosystem
(C) Individual-Population
(D) Individual-Ecosystem

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

33 The function of passage cell is
(A) Division
(B) To give support
(C) None of these
(D) To conduct water
34 Which instrument is used for the measurement of atmosphere humidity?
(A) Thermograph
(B) Hygrograph
(C) None of these
(D) Anemometer

35 Respiration in dead seed
(A) Is slow
(B) Not take place
(C) Is rare
(D) Is fast

36 What indicate this sequence Sun-producers-consumers-decomposers-treasure of inorganic nutrients?
(A) Energy flow
(B) Flow of inorganic nutrients
(C) None of these
(D) Energy consumption
37 Presence of trigger hairs in
(A) Pinguicula
(B) Drosera
(C) All
(D) Pitcher plant

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

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

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

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

43 Product of aerobic respiration
(A) CO₂, Water, ATP
(B) SO₂
(C) None of these
(D) O₂, Water, ATP
44 Decomposers are
(A) Primary consumers
(B) Green plants
(C) Bacteria, fungi
(D) Herbivores

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

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

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

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

50. How many calories are released due to consumption of one molecule glucose in aerobic respiration?
(A) 254 calories
(B) 674 calories
(C) 300 calories
(D) 128 calories