

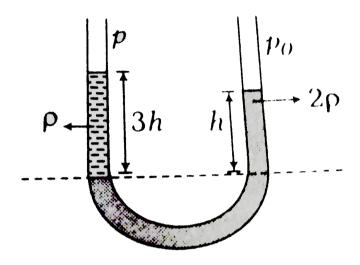


BIOLOGY NTA MOCK TESTS ENGLISH

NTA NEET SET 77

Biology

1. In the figure shown,



- A. Ornithorhynchus
- B. Macropus
- C. Pteropus
- D. Balaenoptera

Answer: C

- 2. Which statement (s) is/are not true for the five-kingdom classification proposed by R.H. Whittaker (1969)?
- (a) The main criteria for classification include cell structure, thallus organization, mode of nutrition, reproductions, and phylogenetic relationship.
- (b) All prokaryotic organisms such as bacteria, bluegreen algae, and ferns are grouped together under kingdom monera.
- (c) Chlamydomonas, chlorella, and spirogyra are placed in Algae within plants due to the presence of the cell wall.

(d) Fungi are placed in a separate kingdom: Kingdom fungi.

(e) Paramecium and Amoeba are placed in the animal kingdom due to lack of cell wall.

A. Only a

B. a, b, d

C. a, b and e

D. b and e

Answer: D



- 3. Which of the following statements are correct?
- 1. Starch forms helical secondary structures while cellulose doesn't have complex helices.
- 2. Palmitic acid has 14- CH_2 groups in its structure.
- 3. Maltose is a disaccharide made up of glucose and fructose.
- 4. The number of carbon and oxygen atoms present in glucose is less than those present in ribose.
 - A. 1 and 2
 - B. 3 and 4
 - C. 1, 2 and 3
 - D. 1, 2, 3 and 4

Answer: A



- **4.** The correct Statement about diseases of the cardiovascular system is
 - A. Blood pressure of about 140 /100 mm Hg causes rupturing of blood vessels of eyes.
 - B. Hypertension significantly increases the after load on the heart, causes decrease in the heart size and finally heart failure.

- C. Coronary artery disease refers to a condition such arteriosclerosis which causes formation of plaque which decreases the size of lumen of coronary arteries .
- D. The pain of Angina pectoris is severe, in the chest, and referred to the neck, lower jaw, left arm and left shoulder. It may disappear with rest.

Answer: D



5. The CORRECT sequence of the pathway of air from outside to inside the lungs is

- A. Larynx-trachea-alveoli-bronchus-pharynx
- B. Pharynx- larynx-trachea-bronchus-alveoli
- C. Trachea-larynx-bronchus-pharynx-alveoli
- D. Alveoli-larynx-pharynx-bronchus-trachea

Answer: B



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6. The cell organelle showing extensive polymosrphism is

- A. Ribosomes
- B. Chloroplast
- C. Lysosomes
- D. Golgi bodies



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7. Sam was very tall and giant for his age and looked elder than his elder brother John. Which endocrine glands and which hormone is likely to be the cause of this abnormal growth?

- A. Pituitary gland, Growth Hormone
- B. Pituitary Gland, ACTH
- C. Hypothalamus, Growth Hormone
- D. Adrenal Glands, Glucocorticoids

Answer: A



- 8. In human beings monophyodont teeth are
 - A. 6 premolars + 6 molars
 - B. 12premolars + 4molars

- C. 4 premolars + 8molars
- D. 8 premolars + 4 molars

Answer: D



- 9. Obligatory water reabsorption takes place at
 - A. PCT
 - B. DCT
 - C. Collecting duct
 - D. Both (A) and (B)

Answer: A



10. Read the statements:

- (a) Movement resulting in change of place is locomotion
- (b) Locomotion is in an involuntary movement .
- (c) Locomotion is generally for the search of shelter and food .
- (d) Methods of locomotion performed by animals vary with habitats .

Find out the WRONG statements.

- A. only a
- B. only b
- C. only a and b
- D. c & d

Answer: B



- **11.** Read the given statements and select the correct option.
- (i)Synaptic cleft of neurons secreates adrenaline.
- (ii)Myelinated nerve fibres are enveloped with

Schwann cells, which form a myelin sheath around the axon.

(iii)Non-myelinated nerve fibre is enclosed by a Schwann cell that does not form a myelin sheath.(iv)Spinal and cranial nerves are made of non-myelinated nerve fibres.

A. a, b are correct, but c and d are incorrect

B. a, b and c are correct, but d is incorrect

C. c , d are correct, but a and b are incorrect

D. b, c are correct but a and d are incorrect

Answer: D



- **12.** A student was given a sample of tissue. He observes and concludes the following characters.
- (i) The following The cells are composed of a single layer of tall and slender cells.
- (ii) Their nuclei are located at the base.
- (iii) Free surface may have microvilli.
- (iv) It is found in the lining of stomach and intestines
- (v) It help in secretion and absorption.
- Based on the above features identify the epithelium.
 - A. Cuboidal epithelium
 - B. Columnar epithelium
 - C. Squamous epithelium

D. Keratinized epithelium

Answer: B



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13. In an IgA antibody molecule, the antigen binding site is formed up of

- A. Variable region of both heavy and light chain
- B. Variable region of heavy and chain
- C. Variable region of both light and chain.
- D. Constant region of both light and heavy chain.

Answer: A



- **14.** The organs involved in the reproductive system can be grouped as primary and secondary. Which of the following is not a secondary sex organ?
- (1) Prostate gland
- (2) Mammary gland
- (3) Seminal vesicle
- (4) Ovary
 - A. Only b and d
 - B. Both d and c

- C. Only d
- D. a ,b and c



- **15.** Find out the mismatch.
 - A. Binary fission Amoeba
 - B. Buds Hydra
 - C. Conidia pencillium
 - D. Gemmules paramecium

Answer: D



16. Following statements are given regarding MTP.

Choose the correct options givne below.

I MTPs are generally advised during first trimester.

II MTPs are used as a contraceptive method.

III MTPs are always surgical.

IV MTPs require the assistance of qualified personnel.

A. ii and iii

B. iii and iv

- C. i and iv
- D. i and ii



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17. The homologous , chromosomes line up at the equator in pairs, name of phase and sequence

- A. metaphase of mitosis
- B. metaphase of meiosis-1
- C. both metaphase of meiosis

D. both (a) and (b)

Answer: B



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18. Which of the classes doesn't belong to the same superclass?

A. Reptilia

B. Aves

C. Osteichthyes

D. Amphibia



- **19.** Select the correct combination of the state- ments (i-iv) regarding the characteristics of certain organisms
- (1) Methanogens are Archaebacteria which produce methane in marshy areas
- (ii) Nostoc is a filamentous blue-green alga which fixes atmospheric nitrogen
- (iii) Chemosynthetic autotrophic bacteria synthesize cellulose from glucose
- (iv) Mycoplasma lack a cell wall and can survive

without oxygen

The correct statement are

A. a,b, c and d

B. a,b, and d

C. c and d

D. a and d

Answer: D



20. Match the amino acid with its correct R group.

	Amino acid		R- group
$\overline{\mathbf{P}}$	Cysteine	I	$-\mathrm{CH_2OH}$
			$-\mathrm{CH}_2$
Q	Serine	Ш	$-\mathrm{CH}_2\mathrm{-CH}_2$
			– COOH
R	Glutamic acid		-CH ₂ -OH
\overline{S}	Tyrosine	IV	$-\mathrm{CH}_2-\mathrm{SH}$

$$A. P - I, Q - IV, R - II, S - III$$

$$B.P-IV,Q-I,R-II,S-III$$

$$\mathsf{C.\,P-III}$$
 , $\mathsf{Q-IV}$, $\mathsf{R-II}$, $\mathsf{S-I}$

$$D. P - II, Q - I, R - IV, S - III$$

Answer: B

21. The mitochondria

- A. divide by budding
- B. divide by fission
- C. divide by meiosis
- D. do not divide

Answer: B



22. What will happen to the body of an adult man if the spleen is removed?

A. WBC production will be lowered

B. RBC production will be lowered

C. Antibody production will be less

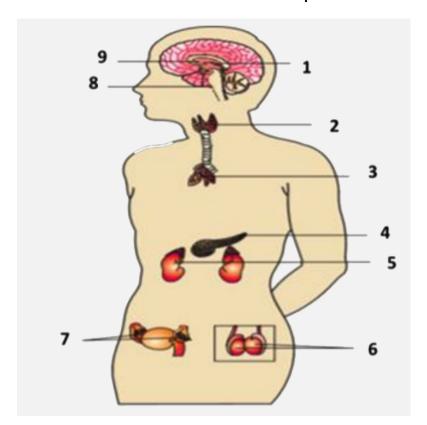
D. Filtration of dead RBC will not be there

Answer: D



23. Hormone which regulates water and electrolyte

balance is released from which part?



I. 2

II.9

III.8

IV.5

A. A)I only B. B)I and II C. C)VIII and V D. D)III and IV **Answer: C Watch Video Solution** 24. Which of the following structure is homologous to penis? A. mons pubis

- B. labia majora
- C. labia minora
- D. Clitoris

Answer: D



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25. Find out the incorrect statement.

A. In phycomycetes , asexual reproduction is

through motile as well as nonmotile spores.

- B. In ascomycetes, asexual spores are formed exogenously and called conidia.
- C. In basidiomycetes basidiospores are produced endogenously , unlike ascomycetes , where ascospores are produced exogenously
- D. All are correct Statements



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26. Condoms are one of the most popular contraceptives because of the following reasons

- A. These are effective barriers fore insemination
- B. They do not interfere with coital act
- C. These help in reducing the risk of STDs
- D. All the above

Answer: D



- **27.** Mark the incorrect option .
 - A. Carbon: % weight in earth's crust < % weight in human body

B. Magnesium :% weight in earth's crust > % weight in human body

C. Sulphur :% weight in earth's crust > % weight in human body

D. Sodium: % weight in earth's crust > % weight in human body

Answer: D



28. The correct arrangement of blood cell is

- A. In terms of quantity: erythrocytes > lymphocytes > monocytes > thrombocytes
- B. In terms of life span: thrombocytes > erythrocytes > monocytes > lymphocytes
- C. In terms of size : monocytes > lymphocytes
 - > erythrocytes > thrombocytes
- D. In terms of motility : erythrocytes > thrombocytes > lymphocytes > monocytes



29. Expiratory capacity - Inspiratory capacity + X =

Functional residual capacity . X in this equation is

A. Residual volume

B. Inspiratory reserve volume + Residual volume

C. Expiratory reserve volume + Residual volume

D. Vital capacity

Answer: C



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30. A large number of proteins made by the ribosomes get modified in .

- A. Lysosomes.
- B. Trans face of Golgi apparatus.
- C. Cisternae of Golgi apparatus.
- D. Smooth endoplasmic reticulum.



- **31.** Diabetes is one of the most common lifestyle disorders in India, which is successfully treated with insulin therapy which radius the blood glucose levels
- . Which of the following mechanism correctly shown

the action of insulin in lowering blood glucose levels
?

A. It stimulates the breakdown of glycogen .

B. It stimulates the process of gluconeogenesis .

C. It acts on adipocytes and hepatocytes and increase cellular glucose uptake and utilization

D. It reduces glucose uptake and utilization.

Answer: C



32. In the resting state, binding sites for myosin on actin filaments are masked by

- A. troponin
- B. tropomyosin
- C. Myosin
- D. dynein

Answer: A



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33. Which of the following is NOT true of a synapse?

- A. Neurotransmitter affect postsynaptic neurons
- B. Many neurons may be involved
- C. A synaptic cleft separates the neurons of the synapse
- D. Neurotransmitters are released from dendrites

Answer: D



34. Which one of the following statement is true for cockroach?

- A. There are three ganglia in thorax and nine in abdomen
- B. Each eye consists of about 6000 hexagonal ommatidia
- C. Fat body, nephrocytes and uricose glands help in excretion
- D. Respiratory system consists of network of trachea that open through 8 pairs of spiracles

Answer: C



35. Many diseases can be diagnosed by observing the symptoms in the patient. Which group of symptoms are indicative of pneumonia?

- A. Difficulty in respiration, fever , chills , cough , headache
- B. Constipation, abdominal pain cramps, blood clots
- C. Nasal congestion and discharge , cough, sore , throat , headache
- D. High fever, weakness, stomach pain loss of appetite and constipation,

Answer: A



36. The region outside the seminiferous tubules is called interstitial spaces which contain all, except

- A. Blood vessels
- B. Immunologically competent cells
- C. Leydig cell
- D. Sertoli cells

Answer: D



- **37.** How many statements are correct with respect to chrysophytes ?
- (i) They are found in the marine environment, freshwater organisms are very rare.
- (ii) In diatoms , the cell wall form two thick overlapping shells which fit together as in a soapbox .(iii) The cell membranes of diatoms are embedded
- with silica and accumulation of them over billions of
- (iv) Diatoms are the chief " Producers" In the oceans .

years is referred to as "diatomaceous earth"

- B. 2
- C. 3
- D. 4

Answer: A



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38. Sister chromatids are found in

- A. Mitotic metaphase
- B. Meiotic metaphase
- C. late telophase

D. both (A) & (B)

Answer: D



- **39.** How many of the following statements (s) are correct?
- (i) Genus comprises a group of related species which has more characters in common in comparison to species of other genera.
- (ii) 'pardus' and 'leo' are two different species but both belong to the genus Felis.
- (iii) Each genus may have one or more than one

specific epithets representing different organisms .

(iv) A species is a group of individuals with highest fundamental similarities and maximum number of organisms.

- **A.** 4
- B. 3
- C. 2
- D. 1

Answer: D



40. A female is hemophilic because the mother of the female is

- A. Carrier and father should be normal
- B. Carrier and father should be haemophilic
- C. Haemophilic and father should be normal
- D. Normal and father should be normal

Answer: B



- **41.** How many statements are incorrect?
- (i) The function of germ pore is Initiation of the pollen tube.
- (ii) The coconut water and edible part of coconut are equivalent to endosperm and endocarp, respectively
- (iii) when pollen is shed at the three-celled stage, syngamy occurs more quickly than the pollen when sheds at two called stage.
- (iv) Intine is made up of cellulose and pectin .
- (v) pollen grains in some plants remain viable for months .

- B. 2
- C. 3
- D. 4

Answer: B



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42. Collenchyma constitutes the hypodermis In

- A. Monocot root
- B. Dicot stem
- C. Dicot root

D. Monocot stem

Answer: B



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43. (1)
$$lpha$$
 - ketoglutaric acid $+NH_4^+ + NADPH \stackrel{X}{\longrightarrow} ext{glutamate} + H_2O + NADP$

What is X as shown on the arrows?

A. X - Glutamate dehydrogenase

B. X - Transaminase

C. X - Nitrogenase,

D. X - Glutamate aminase,

Answer: A



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44. Select the CORRECT pair from the following.

A. Marginal placentation - China rose, pea

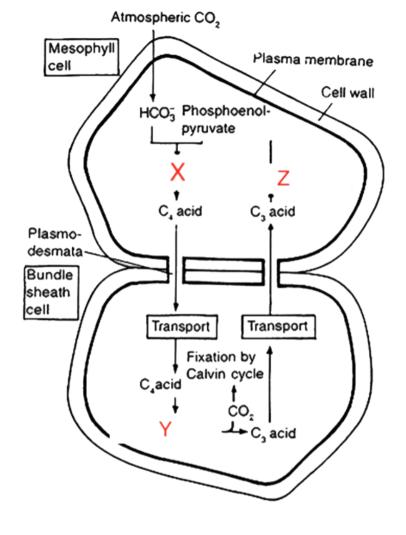
B. Parietal placentation - Mustard , Marigold

C. Free central placentation - Dianthus , primrose

D. Basal placentation - Tomato, Lemon

Answer: C

45. In which of the following options correct words for all three blanks X, Y, & Z indicated ?



A.X - decarboxylation , Y - reduction , Z - regeneration

```
B.X - fixation , Y - transamination , Z -
  regeneration
C.X - fixation , Y - decarboxylation , Z -
```

regeneration

D. X - carboxylation , Y - decarboxylation , Z reduction

Answer: C



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46. Which is not true for haplodiploid sex determination?

- A. It is reported in honey bees.
- B. In this type , the male produces sperms by meiosis
- C. They do not have a father and thus cannot have sons .
- D. In this type, the unfertilized egg develops as a male by means of parthenogenesis.

Answer: B



47. If the stock contains 48 chromosomes and the scion contains 30 chromosomes, then how many chromosomes are present in the root and egg cell of the resultant plant, respectively?

- A. 48 and 15
- B. 15 and 48
- C. 30 and 24
- D. 24 and 15

Answer: A



48. How does ethephon increases in yield of cucumber?

- A. Promoter senescence
- B. Promoter female flowers
- C. Promoter male flowers
- D. both A and B

Answer: B



- **49.** Consider the following four statements. Which of the following statements are incorrect?
- (A) The sporophyte in liverworts is more elaborate than in mosses.
- (B) salvinia is heterozygous.
- C) The life cycle in all seed bearing plants is diplomatic.
- (D) In pinus male and female cones are borne on different trees.
 - A. I and III are correct
 - B. I and IV are incorrect
 - C. II and III are incorrect

D. I and II are correct

Answer: B



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50. When $12H^{\,+}$ pass through $F_{0\,-}F_{1}$ particle, how many ATP are produced?

A. 6 ATP

B. 4 ATP

C. 8 ATP

D. 10ATP

Answer: A



51. FAD or FMN is a coenzyme. Which vitamin is incorporated into its structure

- A. Vitamin C
- B. Vitamin B_1
- C. Vitamin B_6
- D. Vitamin B_2

Answer: D



52. Choose the CORRECT statement from the following.

A. Stomata opens when guard cells become turgid

B. Stomata opens when guard cells become flaccid

C. Stomata opens when guard cells become turgid and flaccid

D. Stomata close when guard cells become turgid

Answer: A



53. Which of the following pairs is correctly matched?

- A. Uricotelism aquatic habitat
- B. Parasitism intra-specific relationship
- C. Excessive perspiration xeric adaptation
- D. Stream lined body aquatic adaptation

Answer: D



54. The source of complementary RNA required for RNA silencing is

A. infection by a virus having DNA genome

B. infection by a viroid having RNA genome

C. transposons which have copy and paste mechanism of transfer

D. transposons which have cut and paste mechanism of transfer

Answer: C



55. The rate of decomposition of detritus is accelerated

A. If the detritus contains lignin chitin, tannins and cellulose.

B. If the detritus is present in acidic soil

C. If the moisture and aeration are at optimum

D. If the temperature is below $10^{\circ}\,C$

Answer: C



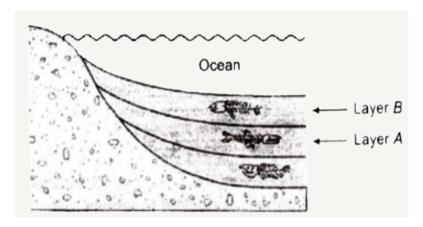
56. Acid rains are produced by

- A. excess NO_2 and SO_2 from burning fossil fuels
- B. excess production of NH_3 by industry and coal gas
- C. excess release of carbon monoxide by incomplete combustion
- D. excess formation of CO_2 by combustion and animal respiration

Answer: A



57. The given diagram shows an undisturbed sedimentary strata at the bottom of the ocean. The fossils found in layer 'B' resemble the fossils found in layer 'A'. This similarity suggests that



A. the fossils in layer 'B' were formed before fossils in layer 'A'

B. modern forms of the life may have evolved from earlier forms of life

- C. vertebrate fossils are only found in sediments
- D. the fossils in layer 'A' must be more complex than layer 'B'

Answer: B



58. The correct sequence in biogas production is

A. Acidogenesis ightarrow Solublisation ightarrow

Methanogenesis

B. Solublisation ightarrow Acidogenesis ightarrow Methanogenesis

C. Methanogenesis ightarrow Solublisation ightarrow Acidogenesis

D. Acidogenesis ightarrow Methanogenesis ightarrow Solublisation

Answer: B



59. Frameshift mutation occurs when:

- A. base is deleted or added
- B. purine is substituted by a pyrimidine
- C. purine is substituted by another purine
- D. pyrimidine is substituted by another pyrimidine

Answer: A



- **60.** Consider the following features seen in a plant:
- I: Male and female reproductive organs are generally found in separate flowers.
- II: The male flowers having a number of long

filaments terminating in exposed stamens.

III: The female flowers having long feather-like stigmas.

The flowers of this plant would most likely be pollinated by:

A. Wind

B. Water

C. Bees

D. Birds

Answer: A



61. Isolated protoplasts from two different varieties of plants, each having a desirable character can be fused to get hybrid protoplasts. These hybrids are called as

- A. Somatic hybridization
- B. Somatic hybrid
- C. Totipotent
- D. SCP

Answer: B



- **62.** Read the below statements and select the appropriate option.
- a. Experimental removal of Pisaster resulted in the extinction of more than species of invertebrates.
- b. Nearly 20 percent of all insects are known to be phytophagous.
- c Predators help to maintain species diversity.
 - A. Both a and c are correct
 - B. b is correct but c is incorrect
 - C. a is correct but b is incorrect
 - D. only c is correct

Answer: A

63. A plant with genotype AABbCcDD is self polinated. Provided that the four genes are independently assorting, what proportion of the progeny will show the genotype AAbbccDD?

- **A.** 1/4
- B. 1/16
- C.1/64
- D. 1/256

Answer: B

64. In plants towards the centre of the root, next to endodermis lies a few layers of thick - walled parenchymatous cell referred to as

- A. Pith.
- B. epidermis.
- C. phloem.
- D. pericycle

Answer: D



65. Match the column:

Column I Column II

- (i) Epiphyllous stamens (p) China rose
- (ii) Monoadelphous (q) Citrus
- (iii) Epipetalous stamens (r) Lily
- (iv) Polyadelphous (s) Brinjal

A.
$$(i) - (r), (ii) - (s), (iii) - (p), (iv) - (q)$$

$${\tt B.}\,(i)-(q),(ii)-(s),(iii)-(p),(iv)-(r)$$

$$\mathsf{C}.\,(i) - (q), (ii) - (p), (iii) - (s), (iv) - (r)$$

$$\mathsf{D}.\,(i)-(r),(ii)-(p),(iii)-(s),(iv)-(q)$$

Answer: D



66. If light is available for a given duration and then again made unavailable, the biosynthetic process will

- A. continue for long duration.
- B. continue for unlimited time.
- C. continue for short duration.
- D. will stop immediately

Answer: C



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67. Which of the following don't occur naturally?

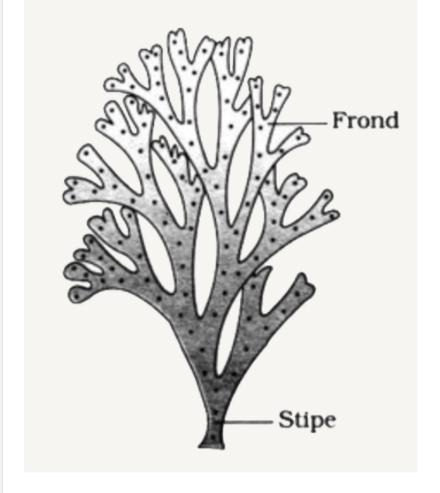
- A. IAA
- B. IBA
- C. NAA
- D. Both (A) and (B)

Answer: C



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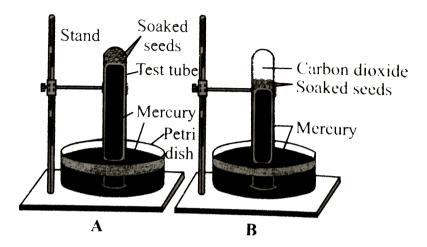
68. How many among among the given characteristics are true for th given organism?



- (I) Store food in the form of starch.
- (II) The cell wall is composed of cellulose and align.
- (III) Major photosynthetic pigments are chlorophyll a , chlorophyll d and phycoerythrin.
- (IV) Biflagellate zoospores with two unequal laterally

attached flagella. (VI) They are usually grass green in colour. (VII) These organisms range from simple branched forms as represented by kelps. A. 3 B. 4 C. 5 D. 6 **Answer: B Watch Video Solution**

69. The given experimental set-up demonstrates



- A. Photosynthesis
- B. Aerobic respiration
- C. Anaerobic respiration
- D. Ascent of sap

Answer: C



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70. Character of a stable community is that it

(a) should not show too much variations in year-toyear productivity

(b) must be resistant to occasional natural or manmade disturbances

(c) should be resistant to invasions by alien species

(d) all of these

A. Stable species

B. Stable community

C. Less species diversity

D. Stable biomass

Answer: B



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- 71. Choose the incorrect statement.
 - A. Sterile stamen is called staminode.
 - B. The arrangement of ovules inside the ovary is called placentation
 - C. Flower of Pisum sativum is actinomorphic
 - D. Flower of Datura is actinomorphic

Answer: C

- **72.** Arrange the following steps for making the bacterial cell competent to take up DNA, in chromonological order .
- I. Incubation of cells with recombinant DNA on ice.
- II . Incubation of cells with recombinant DNA at 42 degree Celsius.
- III. Treating cells with a specific concentration of a divalent cation such as calcium.
 - A. III followed by I followed by I followed by II
 - B. III followed by I followed by I
 - C. I followed by II followed by III followed by II

D. II followed by I followed by III followed by I

Answer: B



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73. The energy available to the organism at the third trophic level is called

- A. gross primary productivity
- B. net primary productivity
- C. secondary productivity
- D. primary productivity

Answer: C



- **74.** Wastes may be sealed in concrete-filled drums and discharged to a depth of about 500 m. This specific statement is true for
 - A. Radiation pollutants
 - B. U.V. radiation pollutants
 - C. Particle pollutants
 - D. All radioactive pollutants

Answer: D



- **75.** Which of the following is incorrect about Lamarckism?
 - A. Absence of all of the four limbs amongst snakes.
 - B. Exceptionally long neck of giraffe.
 - C. An intellectual parents having a dull daughter.
 - D. Loss of vision in cave dwelling mammals.

Answer: C



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- **76.** All the following is correct about mycorrhizare, except:
 - A. Enhancing its phosphorus uptake capacity
 - B. Increasing its tolerance to drought
 - C. Enhancing its resistance to root pathogens
 - D. Increasing its resistance to insects

Answer: D



77. Activation of amino acid during protein synthesis along with ATP requires

- A. mRNA
- B. tRNA
- C. rRNA
- D. snRNA

Answer: B



78. If parasitism is an example of +ve, -ve interaction,

then competition is an example of

A. -ve, -ve interaction

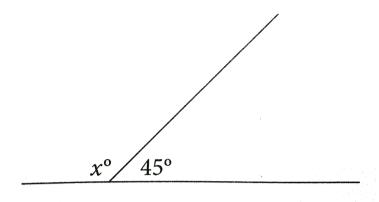
 $\mathrm{B.}-ve, \,\, \mathrm{O} \,\, \mathrm{interaction}$

 $\mathsf{C.} + ve, \; -ve \; \mathsf{interaction}$

 $\mathsf{D}. + ve, \; + ve \; \mathsf{interaction}$

Answer: A





*7*9.

What is the value of 2x?

A. Only offspring 1A would be affected.

B. Offspring 1B and 1C would be affected

C. Offspring 1A, 1B and 1C would be normal

D. Offspring 1A, 1B and 1C would all be affected

Answer: A



80. How many of the following statements (s) is/are correct about pollination ?

I. In Vallisneria and Zostera, the flowers emerge above the level of water and are pollinated by insects or wind.

II: In most of the water pollinated species, pollen grains are protected from wetting by a mucilaginous covering.

III. Pollination by water is quite rare in flowering plants and is limited to about 30 genera, mostly dicotydons.

- B. 2
- C. 3
- D. 0

Answer: A



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81. Identify flower which is not epigynous.

- A. Ray floret of sunflower
- B. Plum
- C. Guava

D. Cucumber

Answer: B



- **82.** How many of the following statements are CORRECT?
- I. India is one of the 12 megadiversity countries of the world.
- II. India has only 8.1 percent of the worl's land area.
- III. Nearly 45,000 species of animals and twice as many as plants have been recorded from India.
- IV. According to May's global estimates, only 22

percent of the total species have been recorded so far.

v. Nature's biological the library is burning even before we catalogued the titles of all books stocked there.

- **A.** 1
- B. 2
- C. 3
- D. 4

Answer: C



- **83.** Which of the following statements is incorrect about gene therapy in ADA deficiency?
 - A. A functional ADA c DNA is introduced in the lymphocytes of the patient and then these lymphocytes are re introduced in the patient
 - B. A functional ADA gene is introduced in the monocytes of the patients and then these monocytes are re-introduced of the patient.
 - C. Enzyme Adenosine deaminase is introduced in the blood of the patient .

D. The mutated gene on chromosome number 20 is treated with certain chemicals.

Answer: A



84. The linking of antibiotic resistance gene with the plasmid vector became possible with:

- A. DNA polymerase
- B. DNA ligase
- C. Restriction endonucleases

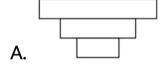
D. Polynucleotide kinase

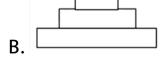
Answer: B

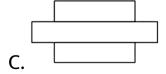


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85. Which one of the following shows a pyramid of biomass in a pond ecosystem ?









Answer: A



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86. The greatest weakness of Darwin's theory was his failure to explain

- A. Role of environment speciation
- B. Origin and transmission of variations
- C. Overproduction
- D. Survival of the fittest

Answer: B



87. In the given diagram of the chemical structure of DNA, identify the type of bonding shown by A, B and C.



A. A: N - glycosidic bonding, B: Phosphodiester bonding, C: Hydrogen bonding

B. A: N - glycosidic bonding, B: Covalent bonding, C - Phosphodiester bonding

C. A: Coordinate bonding, B: Phosphodister

bonding, C: N - glycosidic bonding

D. A: N - glycosidic bonding, B: Hydrogen

bonding, C: Phosphodiester bonding

Answer: D



88. Read the following four statements (A - D) and find the number of wrong statements

1. The characters blend in the heterozygous condition during Mendelian inheritance.

- 2. Change in a single base pair of DNA does not cause mutation .
- 3. Cancer cells can show chromosomal aberrations.
- 4. In insect, sex chromosomes in the male are ZZ and in females are ZW.
 - A. Two
 - B. Three
 - C. Four
 - D. One

Answer: D



89. If the number of chromosomes in the secondary nucleus of Zea maize is 20, what will be the number of chromosomes in PEC, polar nuclei, coleorhiza and aleurone layer respectively?

- A. (1)
- B.(2)
- C.(3)
- D.(4)

Answer: B



90. Which of the following statements is / are correct for a polygenic inheritance ?

- 1. They show uniformity.
- 2. Controlled by three or more genes.
- 3. It is not influenced by the environment.

In polygenic inheritance, phenotype reflects the contribution of recessive allele only.

- A. 1 and 2
- B. 2, 3 and 4
- C. 1, 3 and 4
- D. only 2

Answer: D

