BIOLOGY

BOOKS - NTA MOCK TESTS

NTA NEET SET 39

Biology

1. Which of these animals are placed in the same family but do not have the same genus ?

A. dog and cat

B. tiger and dog

C. dog and lion

D. cat and leopard

Answer: D

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2. In the following table ' X " is formed by the division or branching of 'Y ' which one is an

exception ?

	'X'	'Y'
A	Arteriole	Artery
B	Capillary	Arteriole
C	Venule	Vein
D	Renal Artery	Aorta

A. A

B. B

C. C

D. D

Answer: C

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3. The plant depicted in the following diagram which reproduces asexually through leaves is

A. agave

B. water hyacinth

C. bryophyllum

D. ginger

Answer: C

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4. The proportion of assimilated energy consumed in respiration is highest in

A. Decomposers

B. producers

C. herbivores

D. carnivores

Answer: D

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5. While studying an autosomal recessive disorder in a family . It was noted that husband and wife both did not suffer from disease but their fathers had the disease. What is the probability that the couple will have a girl child without the disorder ?

A. $\frac{1}{2}$

B. $\frac{3}{4}$

C. $\frac{3}{8}$

D. $\frac{1}{8}$

Answer: C

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6. Which of these apes is smaller in size ?

A. Gibbon

B. Orangutan

C. Chimpanzee

D. Gorilla

Answer: A

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7. A flowering plant with scutellum in its seeds has

A. unitegmic ovule

B. bitegmic ovule

C. ategmic ovule

D. polyatomic ovule

Answer: B

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8. Which of these characters selected by Mendel are located on the same chromosomes ?

A. Seed color and seed shape

B. Flower color and flower position

C. Flower color and seed color

D. Stem height and seed shape

Answer: C

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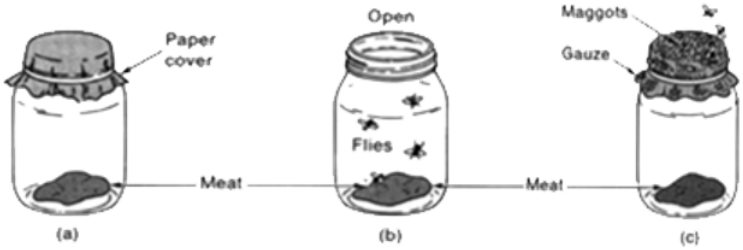
9. Observe the picture below and state the name the of the scientist/s who performed this experiment ?



A. Francesco Redi

B. Lazzaro Spallanani

C. Louis Pasteur

D. Joshua Lederberg and Esther Lederberg

Answer: A

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10. Hybrid breeding have led to the development of several high yielding varieties that are

A. resistant to drought stress

B. resistant to water stress

C. resistant to chemical stress

D. both (a) and (b)

Answer: D

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11. Which of the following statements given in the option is correct ?

A. Winter sleep is called hibernation while summer sleep is called aestivation

B. Summer sleep is called hibernation while winter sleep is called aestivation

C. Both summer sleep and winter sleep are called hibernation

D. Both summer sleep and winter sleep are called aestivation

Answer: A

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12. In hydrarch succession , the stage which comes immediately after submerged free - floating plant stage is

A. forest stage

B. scrub stage

C. reed - swamp stage

D. marsh - meadow stage

Answer: C

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13. In a two - celled pollen grain in angiosperms, the large cell with irregular nucleus

A. divides and forms two male gametes

B. divides and forms pollen tube

C. does not divide but forms two male gametes

D. does not divide but forms pollen tube

Answer: D

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14. The unit to measure productivity is

A. $gm^{-2}m^{-2}yr^{-1}$

B. $(kcalm^{-2})yr^{-1}$

C. $gm^{-2}yr^{-2}$

D. $(kcalm^{-2})yr^{-2}$

Answer: B

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15. Reserpine , the active chemical produced by Rauwolfia vomitoria is used in the treatment of

A. diabetes mellitus

B. urinary tract infections

C. high blood pressure

D. arthritis

Answer: C

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16. Which of these vehicles emission standards has been implemented throughout India since 2017 ?

A. 4 wheelers: Bharat stage III , 3 wheelers : Bharat stage III , 2 wheelers : Bharat stage III

B. 4 wheelers: Bharat stage III , 3 wheelers : Bharat stage III , 2 wheelers : Bharat stage IV

C. 4 wheelers: Bharat stage III , 3 wheelers : Bharat stage III , 2 wheelers : Bharat stage III

D. 4 wheelers: Bharat stage III , 3 wheelers : Bharat stage IV , 2 wheelers : Bharat stage IV

Answer: D

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17. Mendel 's inheritable 'factors ' influences

A. both phenotype and genotype

B. Phenotype only

C. genotype only

D. neither phenotype nor genotype

Answer: A

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18. A plant that is heterozygous for two genes was selfed. A total of 1000 seeds were collected. Find out the total number of seeds heterozygous for the first gene and homozygous for the second gene.

A. 125

B. 250

C. 300

D. 500

Answer: B

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19. The mediastinum is a space

A. on the right side of the left lung and on the left side of the right lung

B. on the left side of the left lung and on the right side of the right lung

C. on the left side of the left lung and on the left side of the right lung

D. on the right side of the left lung and on the right side of the right lung

Answer: A

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20. In a plant , the color of grains is controlled by 3 genes located on separate chromosomes. Gene 'C' and 'R' independently do not form any color, but when together , they impart greenish - brown color to the stem, while the

grains remain colourless. In presence of an additional allele 'A' the stem as well as grains become violet . In a trihybrid cross, what phenotypic ratio is expected in grains ?

A. 48 coloured : 16 colourless

B. 36 coloured : 28 colourless

C. 27 coloured : 37 colourless

D. 40 coloured : 24 colourless

Answer: C

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21. The normal glomerular filtration rate in humans is

A. 125ml/min by each kidney

B. 125ml/min by both the kidneys taken together

C. 125 ml/ hour by each kidney

D. 125 ml/ hour by both the kidneys taken together

Answer: B

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22. Three biodiversity hotspots of India are

A. the Himalayas and the Western Ghats

B. the Himalayas , the Western Ghats , the indo - Burma region

C. the Western Ghats and the Indo - Burma region

D. the Himalayas , the Western Ghats , the Madhumalai forest.

Answer: B

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23. The ' greenhouse effect ' results in

A. the warming of climate

B. blocking Earth's heat from escaping into space

C. increases the temperature of Earth, which sustains life

D. all of the above

Answer: D

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24. Cystic fibrosis is an autosomal recessive disease . In an island having a population of 200 people, 98 people suffer from cystic fibrosis. How many people are carried of this disease ?

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25. In polygounm ,

A. ovule is orthotropic with an endosporic embryo sac derived from a single chalazal megaspore

B. ovule is orthotropic with an endosporic embryo sac derived from a single micropylar megaspore

C. ovule is anatropous with an endosporic embryo sac derived from a single

chalazal megaspore

D. ovule is anatropous with an endosporic embryo sac derived from a single micropylar megaspore

Answer: A

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26. "Constant environment promote niche specialization and lead to greater species diversity." This statement is true for

A. Tundra region

B. Temperate region

C. Tropical region

D. All of the these

Answer: C

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27. In which of these points did Darwin believe?

A. Every organism has an internal vital force that tends to increase its size up to a certain limit.

B. Variations appear due to change in genetic make up

C. The organs put to more use will develop more while organs not used begin to degenerate.

D. All living cells produce minute particles which pass into germ cells for

transmission to the offspring.

Answer: D

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28. Resource partitioning was shown by

A. Connell

B. MacArthur

C. Gausse

D. Allen

Answer: B

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29. In most of the following plants , seeds does not contain any remnant of

A. outer integument

B. inner integument

C. nucellus

D. micropyle

Answer: C

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30. A color - blind man marries a woman who is carrier for hemophilia . Which of the following is true for their progenies ?

A. 25% of the progenies carry the genes for both hemophilia and color - blindness

B. 25% of the progenies carry only the gene for hemophilia

C. 25% of the progenies carry only the gene for color - blindness

D. All of these

Answer: D

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31. Select the CORRECT statements regarding periplaneta americana.

I. A ring of 6-8 blind tubules called hepatic or gastric caeca is present at the junction of

foregut and midgut.

II. The lower lip is called labium and the upper lip is called the labrum.

III. Tegmina are mesothoracic wings that are opaque, leathery, and dark.

IV. It has a vision known as a mosaic vision with more resolution but less sensitivity.

A. I,II and III only

B. I,III and IV only

C. I,II,III and IV only

D. III and IV

Answer: A

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32. Which of these statements about Taq polymerase used during PCR is not correct ?

A. It is used for primer extension to synthesise a new DNA strand

B. It is a thermostable enzyme and can survive temperatures up to $125^{\circ} C$

C. It is obtained from Thermus aquaticus

D. Its addition eliminated the need to add fresh polymerase in every PCR cycle

Answer: B

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33. Which of the structures are found in photosynthetic prokaryotes ?

I. Mesosomes

II. Cellulose wall

III. Ribosomes

IV. Chloroplasts

A. I,II,III and IV only

B. I, II and III only

C. I and III only

D. II and IV only

Answer: C

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34. Some of the molecular found in animal tissue are grouped into three lists.

I. glucose , cholesterol, triglycerides, water

ii. glucose , antibodies, adenine , phospholipids

iii. hemoglobin, carbon dioxide, mRNA , monosaccharides

Which lists include one or more molecules that always contain nitrogen atoms ?

A. I,II and III

B. I and II only

C. I and III only

D. II and III only

Answer: D

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35. In the structure of pro - insulin in humans disulphide bonds exist between

A. between B peptide and C peptide

B. between A peptide and B peptide

C. between C peptide and A peptide

D. between A and C peptide as well as B and C peptide

Answer: B

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36. In the process of meiosis, there are two sequential cycles of nuclear and cell division. How many cycles of DNA replication are required in meiosis ?

A. one

B. Four

C. Two

D. No replication process

Answer: A

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37. Spirometer is useful in assessment of all the following pulmonary functions except

A. Vital Capacity (VC)

B. Functional Residual Capacity (FRC)

C. Inspiratory Capacity (IC)

D. Expiratory Capacity (EC)

Answer: B

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38. Which of these statements about protein synthesis are NOT correct ?

I. During transcription, mRNA synthesized

from DNA nucleotides to have the same sequence of nucleotides as the DNA strand on which it was made.

II. During transcription , tRNA is synthesized from RNA nucleotides and carries codons that are complementary to the sequence of nucleotides on the DNA strand on which it was made.

III. During translation, mRNA is synthesized from RNA nucleotides to have the complementary sequence of nucleotides to that. Of the DNA strand on which it was made .

IV. During translation ribosomes move on

mRNA from '5' and '3' one codon at a time .This is called translocation

A. I,II and III only

B. I,II ,III and IV

C. III and IV only

D. I, II and IV only

Answer: A

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39. Select the option that was not used in Green revolution.

A. Agrochemical based agriculture

B. Conventional plant breeding and hybridization

C. Agriculture using high yielding varieties

D. Genetically engineered crop - based agriculture

Answer: D

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40. Lacunae are present in

A. certain types of epithelium

B. all connective tissues

C. all connective tissues with solid matrix

D. bone only

Answer: C

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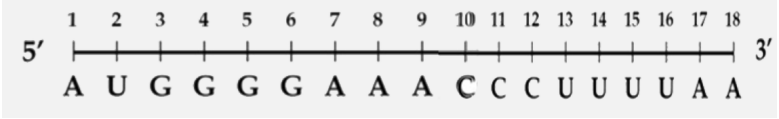
41. Observe the following messenger RNA :



Due to a mutation , the guanine nucleotide in the sixth position is replaced by an adenine nucleotide. What will be the correct effect on the sequence of amino acids due to this mutation ?

A. The sequence of amino acids in the mutated protein is exactly the same as

the sequence of amino acids in the original protein.

B. Only the second amino acid in the mutated protein will be different while the rest will be same as that of the original protein.

C. All amino acids except the first one will be different in the mutated protein.

D. Second and third amino acids in the mutated protein will be different while

the rest be same as that of the original protein.

Answer: A

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42. The prokaryote that is credited with construction of the first recombinant DNA by linking an antibiotic resistance gene with its native plasmid is

A. Escherichia coli

B. Pneumococcus pneumonia

C. Salmonella typhimurium

D. Agrobacterium tumefactions

Answer: C

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43. Which parts of a cell contain ribosomes ?

I. Chloroplast

II. Mitochondrion

III. Nucleus

IV. Cytoplasm

A. I,II , III and IV

B. I,II and III only

C. I,II and IV only

D. III and IV only

Answer: A

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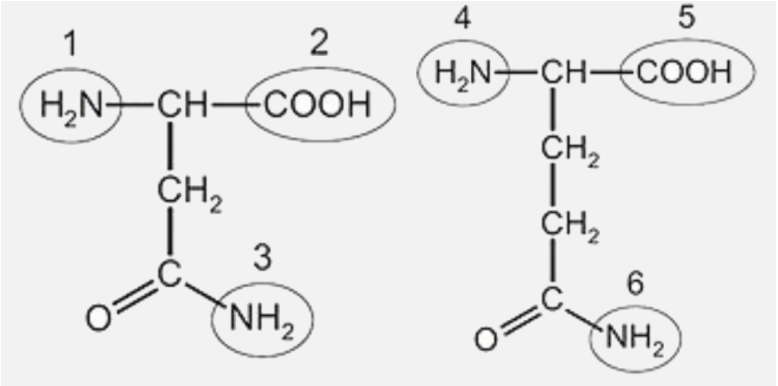
44. The diagrams show the structures of two amino acids, each of which has two amine $(-NH_2)$ Group .



A peptide bond is formed between the two amino acids. Which groups could from the peptide bond ?

A. 1 and 4

B. 2 and 4

C. 2 and 6

D. 3 and 5

Answer: B

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45. The following statements describe events during the mitotic cell cycle. What is the correct of these events in the mitotic cell cycle ?

I. chromosomes migrated to opposite poles of the spindle.

II. Chromosomes arrange themselves at the equator of the spindle.

III. Chromosomes condense and the number membrane disappears .

IV. Centromeres divide.

A. $II \rightarrow III \rightarrow IV \rightarrow I$

B. $III \rightarrow II \rightarrow IV \rightarrow I$

C. $III \rightarrow IV \rightarrow II \rightarrow I$

D. $IV \rightarrow II \rightarrow I \rightarrow III$

Answer: B

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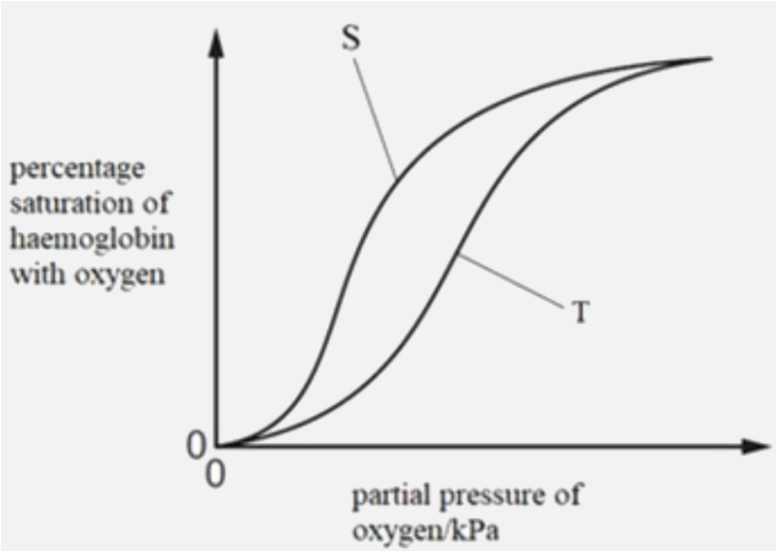
46. The graph shows the oxygen dissociation curves of haemoglobin from two species of mammals, s and T .



Which statements could explain the difference in the oxygen dissociation curves of species S and species T ?

I. Species T has higher haemoglobin concentration in its red blood cells than species S.

II. The haemoglobin in species T has a lower affinity for oxygen than the haemoglobin in species S.

III. Species T may be living at a higher altitudes than species S.

A. I, and III only

B. II and III only

C. I,II and III

D. III only

Answer: C

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47. Which of these statements about centrioles is correct ?

A. There are two centrioles in animal cells which lie perpendicular to each other within a centromere.

B. They have nine doublets of radially arranged peripheral fibrils.

C. The central part of the distal region of the centriole is proteinaceous and is called the hub.

D. The centrioles form the basal body of cilia of flagella, and spindle fibers that

give rise to spindle apparatus during cell division in animal cells.

Answer: D

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48. Which of these is the correct function of enzymes/ Protein used in DNA replication ?

	Helicase	Topoisomerase	Single-strand binding protein	DNA polymerase
I	Adds DNA nucleotides to the 3' end of a growing polynucleotide strand	Prevents original strand reforming complementary base pairs	Releases the tension caused by unwinding	Makes strands available as templates
II	Releases the tension caused by unwinding	Prevents original strands from reforming complementary base pairs	Makes strands available as templates	Adds DNA nucleotides to the 3' end of a growing polynucleotide strand
III	Releases the tension caused by unwinding	Makes strands available as templates	Adds DNA nucleotides to the 3' end of a growing polynucleotide strand	Prevents original strands from reforming complementary base pairs
IV	Makes strands available as templates	Releases the tension caused by unwinding	Prevents original strands from reforming complementary base pairs	Adds DNA nucleotides to the 3' end of a growing polynucleotide strand

A. I

B. II

C. III

D. IV

Answer: D

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49. Which of the following is part of bioprocess engineering ?

A. Techniques for formation of hybrid DNA in genetic engineering process

B. Techniques for alteration of sequence of genetic material

C. Maintenance of sterile ambiance in chemical engineering process to

produce large quantities of biotechnological products

D. Methods of isolation of only desirable genes from host cell required for recombinant DNA technology

Answer: C

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50. How many of the following elements have a greater percentage weight in the human body than percentage weight in in the earth crust ?

(Sulphur, sodium, oxygen, Nitrogen, carbon, Hydrogen, Megnesium, silicon, and calcium)

A. 3

B. 5

C. 6

D. 7

Answer: B

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51. Match the organisms given in column I with their common names given in column II and select the correct option from the codes given below.

A. I- B , II- D , III - A , IV - C

B. I- C , II- D , III - A , IV - B

C. I- C , II- A , III - D , IV - B

D. I- A , II- C , III - B , IV - D

Answer: C

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52. Which of the following statements regarding digestive glands is correct ?

A. Saliva is produced mainly by three glands in the human body .

B. The liver is situated in the abdominal cavity , just lateral to the diaphragm.

C. The common hepato - pancreatic duct is guarded by the sphincter of Oddi.

D. The exocrine portion of the pancreas secretes an acidic pancreatic juice.

Answer: C

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53. Which of the following statements regarding joints is incorrect ?

A. Shoulder joint is a type of ball and socket joint with synovial fluid .

B. Fibrous joints do not permit any movement .

C. Cartilaginous joint allows considerable free movement.

D. Saddle joint is present between the carpal and metacarpal of thumb.

Answer: C

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54. With respect to their function identify the odd one from the cranial nerve given below.

A. Olfactory nerve

B. Optic nerve

C. Oculomotor nerve

D. Vestibulocochlear nerve

Answer: C

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55. In human female, second polar body is formed in the ovum

A. within ovary

B. within oviducts

C. within uterine cavity

D. within uterine endometrium

Answer: B

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56. Which of these pairs of hormones are not antagonistic in their action ?

A. Erythropoiesis : Tyroxine and Erythropoietin

B. Calcium metabolism : Parathormone and Calcitonin

C. Glucose metabolism : Insulin and Glucagon

D. Blood pressure regulation : Aldosterone and Atrial Natriuretic Factor

Answer: A

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57. Which of the following statements are incorrect

I. A rapid decline in the death rate is the only reason for the population explosion.

II. The marriageable age decided by the government is 18 years for females and 21, years for males.

III. An ideal contraceptive is the one that reduced the sexual drive of the user .

IV. The ' one child norm has mostly been adopted by people living in rural areas.

A. I, II and III

B. I,III and IV

C. I and II

D. III and IV

Answer: B

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58. How many of the following are diseases that can be caused by bacteria ?

Typhoid , Pneumonia , Malaria , Amoebiasis Ascariasis , Filariasis , Common cold

A. 6

B. 5

C. 3

D. 2

Answer: D

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59. The viruses which are excellent candidates for speciens - specific , narrow spectrum, insecticidal applications are

A. Nuclepolyhedroviruses

B. DDT

C. Azospirillum

D. Glomus

Answer: A

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60. Which of the following is the correct combination of the class of vertebrates and properties exhibited by it?

A. Internal fertilization , Aves and Reptilia

B. Oviparity : Chondrichthyes and Osteichthyes

C. Poikilothermic : Amphibia and Mammalia

D. Three chambered heart : Amphibia and Aves

Answer: A

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61. Which of the following correlations are incorrect?

A. There are seven free cervical vertebrae and seven pairs of cervical spinal nerves

B. There are twelve free thoracic vertebrae and twelve pairs of thoracic spinal

nerves

C. There are five free lumber vertebrae and five pairs of lumbar spinal nerves

D. There are five fused sacral vertebrae and five pairs of sacral spinal nerves

Answer: A

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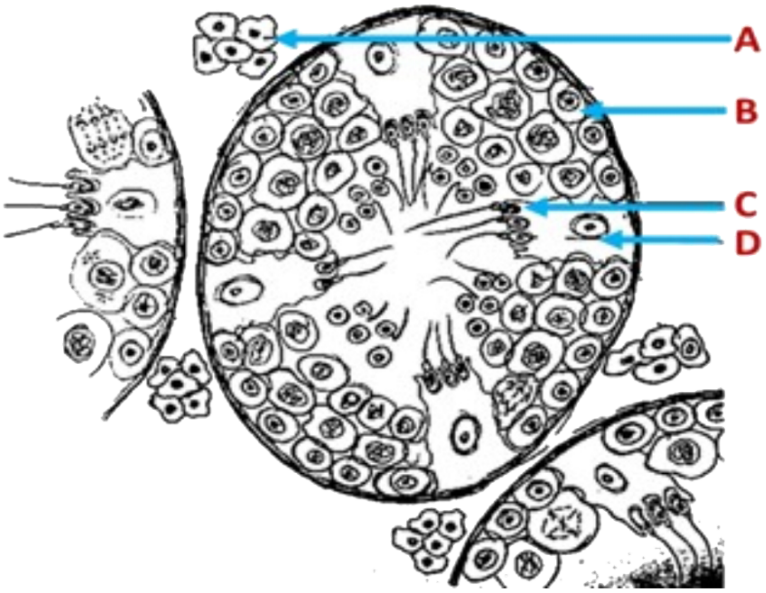
62. Observe the given diagram of the sectional view of testis.



Which of the following statements about the above diagram is correct?

A. A is stimulated by FSH

B. B is responsible for secretion of hormone testosterone

C. C is the diploid germ cell which gives rise to gametes .

D. D is responsible for providing nutrition to the growing sperms.

Answer: D

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63. Complete the following paragraph by selecting the correct option for the blanks A,B and C.

The thymus gland is located between the lungs behind the sternum on the .....A.... Side of the aorta. .....B..... Secreted by the gland plays a major role in the differentiation of T-lymphocytes which provide .....C..... They also promote antibody production which provides.....D....

A. A: dorsal , B : Thymic humoral factor , C : humoral immunity , D : Cell - mediated immunity

B. A: Ventral , B : Thymopoietin , C: humoral immunity , D : cell - mediated immunity

C. A: Ventral , B : Thymopoietin , C: humoral immunity , D : cell - mediated immunity

D. A: Ventral , B : Thymosin , C: cell - mediated , D : humoral immunity

Answer: D

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64. A healthy male has got normal sperm count. However, he is unable to inseminate. Which of the following assisted reproductive technology can be best suggested in this case?

A. GIFT

B. ZIFT

C. IVF

D. AI

Answer: D

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65. Complete the following sentence by filling in the blanks A and B.

....A..... Produced by a yeast .....B..... is used as a blood cholesterol-lowering agent.

A. A - Cyclosporin , B - Monascus purpureus

B. A - Statins , B - Monascus purpureus

C. A - Statins , B - Trichoderma polysporum

D. A - Cyclosporin , B - Trichoderma polysporum

Answer: B

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66. Which of the following part in ear is filled with endolymph ?

A. scala tympani

B. scala media

C. scala vestibule

D. Helicoterma

Answer: B

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67. Which of the following option about various types of antibodies is correct?

A. The most abundant antibody is lgM and the antibody which is largest in size is lgG

B. The most abundant antibody is lgG and the antibody which is largest in size is lgM

C. lgA is the most abundant antibody as well as it appears as pentamer

D. IgG is the most abundant antibody found in colostrum , while lgE is found in

the case of hypersensitivity

Answer: B

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68. Given below are the steps involved in parturition. Arrange them in proper sequence and select the correct option.

I. The induction of mild uterine contractions is called foetal ejection reflex.

II. Stronger uterine contractions causing the

further release of oxytocin. III. Origination of signals from the fully developed foetus and placenta.

IV. Release of oxytocin from maternal pituitary

V. Expulsion of baby from the birth canal

A. III , IV , I , II , V

B. III, I , IV , II , V

C. I, III , II , IV ,V

D. II , IV , III, I,V

Answer: B

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69. Read the following statements about cancer . Identify the true and false ones and select the correct option .

A . Cancer cells lose the property of contact inhibition

B. The property of metastasis is mostly found in benign tumors .

C. The transformation of normal cells into cancerous cells occurs only because of chemical agents.

D. The chemical carcinogen present in tobacco smoke is a major cause of lung cancer.

A. A - True , B - False , C - False , D - True

B. A - False , B - True , C - True , D - False

C. A - True , B - False , C - True , D - False

D. A - False , B - True , C - False , D - True

Answer: A

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70. In humans, inhibin

A. inhibits the production of FSH from pituitary but doesn't inhibit the secretion of Gonadotropin Releasing hormone (GnRH) form the hypothalamus .

B. doesn't inhibit the production of FSH from pituitary but inhibits the secretion

of Gonadotropin Releasing hormone (GnRH) from the hypothalamus.

C. inhibits the production of FSH from pituitary as well as the secretion of Gonadotropin Releasing hormone (GnRH) from the hypothalamus .

D. neither inhibits the production of FSH from pituitary nor does it inhibit the secretion of Gonadotropin Releasing

hormone (GnRH) from the hypothalamus.

Answer: A

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71. Heterocysts in Nostoc

A. are located terminally

B. don't have chlorophyll

C. are green cells capable of nitrogen fixation

D. help in sexual reproduction

Answer: B

72. Identify the nutrients that are required.

A. This nutrient helps in the utilization of calcium.

B. This nutrient is the component of the

nitrate radical enzyme.

C. This nutrient is required for the photolysis of water .

A. A : Cu , B : Zn, C : Cl

B. A : Zn , B : Mo , C,Cl

C. A : B , B : Mo , C: Mn

D. A : Fe , B : Cu , C : Mn

Answer: C

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73. Which of the following is correct about flowering in rice and wheat plants ?

A. Rice needs a continuous uninterrupted long period of light to flower while wheat needs a continuous uninterrupted long period of darkness to flower

B. Wheat needs a continuous uninterrupted long period of light to flower while rice needs a continuous

uninterrupted long period of darkness to flower

C. Both rice and wheat need a continuous uninterrupted long period of light to flower

D. Both rice and wheat need a continuous uninterrupted long period of darkness to flower

Answer: B

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74. In which of the following steps of aerobic respiration of glucose, carbon dioxide is evolved ?

I. Glycolysis

II. Link reaction

III. Krebs cycle

IV. Election transport system

A. I and II

B. I , II and III

C. II, III and IV

D. II and III

Answer: D

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75. During photorespiration, 25% of the carbon is lost in

A. chloroplast

B. mitochondria

C. peroxisome

D. nucleus

Answer: B

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76. Which of these fungi does not have a branched and septate mycelium ?

A. Neurospora

B. Albugo

C. Ustilago

D. Colletotrichum

Answer: B

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77. Which of the following types of roots are correctly matched with their examples ?

I. Apogeotropic roots : Rhizophora

II. Absence of calyptra : Lemna

III. Velamen containing roots : vanda

IV. Moniliform roots : portulaca

A. I and II

B. III and IV

C. I , II and IV

D. I , II , III and IV

Answer: D

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78. Which of the following statements about cycas and pinus is correct ?

A. The stem in Cycas is branched while it is unbranched in Pinus . The male and female strobili are present on the same plant in Pinus while they are present in different plants in Cycas.

B. The stem in Cycas is unbranched while it is branched in Pinus . The male and female strobili are present on the same plant in Pinus while they are present in different plants in Cycas.

C. The stem in Cycas is branched while it is branched in Pinus . The male and female strobili are present on the same plant in Cycas while they are present in different plants in Pinus .

D. The stem in Cycas is unbranched while it is branched in Pinus . The male and female strobili are present on the same plant in Cycas while they are present in different plants in Pinus .

Answer: B

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79. How many of the following properties are seen in the brinjal plant ?

Legume fruits , alternate phyllotaxy, actinomorphic flower, bicarpellary- syncarpous gynoecium , non - endospermic seeds

A. five

B. four

C. three

D. two

Answer: B

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80. Sclerenchymatous bundle sheath around vascular bundles is seen in

A. monocot leaf

B. dicot leaf

C. dicot stem

D. monocot stem

Answer: D

81. As we go from periphery to the center of a dicot root , the correct order of tissues that we will encounter is

A. Epiblema - Cortex - Endodermis - Metaxylem - Protoxylem - Pith

B. Cortex - Epiblema - Endodermis - Metaxylem - Protoxylem - Pith

C. Cortex - Epiblema - Endodermis - Protoxylem - Metaxylem - Pith

D. Epiblema - Cortex - Endodermis - Protoxylem - Metaxylem - Pith

Answer: D

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82. The correct sequence of four carbon acids formed during Krebs cycle is

A. oxalo - acetic acid - fumaric acid - malic acid - succinic acid

B. oxalo - acetic acid - malic acid - fumaric acid - succinic acid

C. succinic acid - malic acid - fumaric acid - oxalo - acetic acid

D. succinic acid - fumaric acid - malic acid - oxalo - acetic acid

Answer: D

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83. In photosynthesis, 12 molecules of water are utilised and 6 molecules of water are released while the formation of one molecule of glucose.

The oxygen atom present in glucose came from

A. the fixed carbon dioxide

B. the water released

C. the water utilised

D. Both (A) & (C)

Answer: A

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84. Read the following information about a phytohormone and them identify it.

I. They cause fruits like apple to elongate and improve their shape.

II. They are used to speed up the malting process in the brewing industry.

III. They are used to convert genetically dwarf plants into tall plants.

A. Auxin

B. Gibberellin

C. Cytokinin

D. Ethylene

Answer: B

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85. Corn is a modification of

A. Root

B. Leaf

C. Stem

D. Bud

Answer: C

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86. During the transport of water, the value of which of the following is always negative ?

A. water potential

B. Solute potential

C. Pressure potential

D. Both (B) and (C)

Answer: B

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87. Which of these combinations is correct about protozoans ?

A. Entamoeba - Sporozoan , Paramecium - ciliated protozoan

B. Plasmodium - Sporozoan , Trypanosome - Ciliated protozoan

C. Paramecium - Ciliated protozoan, Trypanosome - Flagellated Protozoan

D. Entamoeba - Ciliated protozoan , Plasmodium - Flagellated protozoan

Answer: C

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88. Which of the following scientist's contributions to viruses is correctly matched ?

I . M.W Beijerinek demonstrated that the

extract of the infected plants of tobacco mosaic could cause infection in healthy plants and called the fluid as contagium vivum fluidum (infection living fluid)

II. W. M. Stanley showed that viruses could be crystallized and crystals consist venom or proteins.

III.The name virus that means venom or poisonous fluid was given by Dmitri Ivanowsky.

A. I and II

B. I and III

C. II and III

D. I , II and III

Answer: D

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89. Normally algae show a haplontic life cycle. Polysiphonia and focus are exceptions to this rule. The correct option depicting their classes and life cycles is.

A. Polysiphonia is a green algae with haplo diplontic life cycle and Fucus is a red alga with diplontic life cycle

B. Polysiphonia is a green algae with diplontic life cycle and Fucus is a red alga with haplo- diplontic life cycle

C. Polysiphonia is a red algae with haplo diplontic life cycle and Fucus is a brown alga with diplontic life cycle

D. Polysiphonia is a red algae with diplontic life cycle and Fucus is a brown alga with haplo- diplontic life cycle

Answer: C

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90. Given below is plant and two properties of it Which of these options is INCORRECT ?

A. Cucumber : (a) Stem tendrils develop from axillary buds (b) The margin of thalamus grows upward enclosing the ovary parts of flower arise above the ovary

B. Rose : (a) Ovary is half inferior (b) Gynoecium is polycarpellary and apocarpous

C. Lemon , (a) Stamens are polyadelphous (b) Placenta is axial and the ovules are

attached to it in a multilocular ovary

D. Castor : (a) The seed has one cotyledon

(b) The seed has endosperm

Answer: D

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