



BIOLOGY

BOOKS - NTA MOCK TESTS

NTA NEET TEST 81

Biology

- **1.** Read the following analogies and state the one which is wrong.
 - A. Starch : bluish black colour with iodine :: Glycogen : Red colour

with iodine

- B. DNA : 4 types of monomers :: Protein : 20 types of monomers
- C. Oleic acid : MUFA :: Palmitic acid : PUFA
- D. Phospholipid : Lecithin :: Glycolipid : Ganglioside

Answer: C Watch Video Solution

2. During which phase(s) of cell cycle amount of DNA in a cell remains

at 4C level if the initial amount is denoted an 2C

A. G_2 and G_1

 $B. G_1$ and S

C. only G_2

D. G_2 and M

Answer: C



3. If the cells are broken up an sedimented the new structrue formed in

one of the fraction is

A. lysosomes

B. microsomes

C. centrosomes

D. peroxisomes

Answer: B

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4. Darwin's finches are example of

A. convergent evolution

B. adaptive radiation

C. divergent evolution

D. both (b) and (c)

Answer: D



5. The first movements of the fetus are observed during

A. First month

B. First trimester

C. Fifth month

D. End of nine months

Answer: C

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6. peritoneum of coelom is an example of

- A. Stratified squamous epithelium
- B. Non ciliated columnar epithelium
- C. Cuboidal epithelium
- D. Simple squamous epithelium

Answer: D

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- 7. Which of the statements regarding coelenterates is/are wrong
- I. Cnidocytes are present on the tentacles and on the body
- II. Diploblastic with cellular level of organisation
- III. Polyp forms are free living
- IV. Exhibit metagenesis

V. Polyps produce medusae sexually and medusae form polyps asexually.

A. (ii) and (iv) only

B. (iii) and (v) only

C. (ii) , (iii) and (v)

D. (i),(ii) and (iii)

Answer: C

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8. Match Column I with Column II and select the correct option .

 $\operatorname{Column} I$

Column II

- (A) AIDS (p) Yersinia pestis
- (B) Syphilis (q) Hepatitis virus
- (C) Viral jaundice (r) HIV
- (D) Gonorrhea (s) Treponema
 - (t) Neisseria

A.
$$(A)-(r),\,(B)-(s),\,(C)-(q),\,(D)-(p)$$

$$\mathsf{B}.\,(A)-(r),\,(B)-(p),\,(C)-(q),\,(D)-(t)$$

$$\mathsf{C.}\,(A)-(r),\,(B)-(s),\,(C)-(q),\,(D)-(t)$$

 $\mathsf{D}.\,(A)-(p),\,(B)-(q),\,(C)-(r),\,(D)-(s)$

Answer: C



9. Malic acid inhibits the activity of enzyme succinates dehydrogenase . During this inhibition.

A. $V_{
m max}$ increases , K_m decreases

B. $V_{
m max}$ remains the same , K_m decreases

C. V_{\max} decreases , K_m increases

D. $V_{
m max}$ remains the same , K_m increases

Answer: D



10. Which stage is marked by terminalizatioh of chiasmata?

A. Zygotene

B. Pachytene

C. Diplotene

D. Diakinesis

Answer: D

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11. Glycolipids in the plasma membrane are located at

A. Inner leaflet of the plasma membrane

B. The outer leaflet of the plasma

C. Evenly distributed in the inner and outer leaflest

D. It varies according to cell types

Answer: B



12. A type of natural selection that preserves existing allelic

frequencies is called

A. unidirectional selection

B. stabilizing selection

C. disruptive selection

D. bidirectional selection

Answer: B

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13. Which is wrong about oogenesis?

A. Diploid oogonia

B. Growth phase

- C. Formation of polar bodies
- D. Equal meiotic division

Answer: D

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14. Genital warts are commonly spread by

A. Herpes virus

B. Papilloma virus

C. Hepatitis A

D. Trichomonas

Answer: B

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15. Which one of the following is matching set of a phylum and its three examples

A. Porifera - Spongilla , Euplectella, Pennatula

B. Cnidaria - Limulus , Physalia , Aurelia

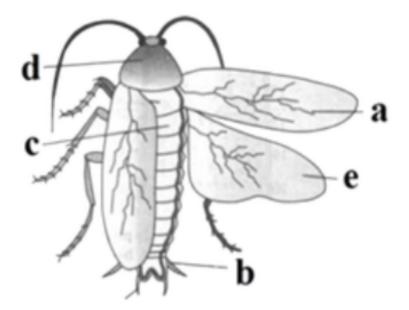
C. Platyhelminthes - Planaria , Schistostoma, Enterobius

D. Mollusca - Loligo , Teredo , Octopus

Answer: D

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16. Recognise the figure and find out the CORRECT matching .



A. a - forewing , b - anal style , c - mesothorax, d - prothorax , e -

tegmina

B. a - forewing , b - anal cerci , c - prothorax, d - pronotum , e - hind

wing

C. a - tegmina , b - anal cerci ,c - mesothorax, d - pronotum , e - hind

wing

D. a - tegmina , b - anal style ,c - mesothorax, d - prothorax , e - fore

wing

Answer: C

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17. The following graph represents enzyme activity with changing

A. pH

B. temperature

C. either (a) or (b)

D. neither (A) nor (B)

Answer: C

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18. Axoneme having 9 + 2 doublet microtubule arrangement is found in

A. cilia and flagella

B. centriole

C. cilia

D. flagella

Answer: A

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19. Replica plate experiment by Lederbery showing antibiotic resistance

proves

A. genetic drift

B. natural selection

C. chemical mutation

D. founder's effect

Answer: B



20. Which event ensures that only one sperm can fertilize an ovum?

A. Spermatogenesis Amphimixis

B. Amphimixis

C. Depolasation of oocyte plasma membrane

D. Capacitation

Answer: C



21. What will be the distribution of phenotypic features in the first generation after a cross between a homozygous female and a heterozygous male for a single locus ?

A. 3:1

B.1:2:1

C.1:1

D. None of these

Answer: C

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22. What is a herbarium ?

A. Store house of collected plant specimen

B. Store house of collected animal specimen

C. A green house

D. Both (a) and (b)

Answer: A

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23. What is so special about tropics that might account for their greater biological diversity?

a. Unlike temperate regions subjected to frequent glaciations in the past, tropical latitudes have remained relatively undisturbed for millions of years and thus, had a long evolutionary time for species diversification.

b. Temperate environments, unlike tropical ones, are less seasonal, relatively more constant and predictable. Such constant environments promote niche specialization and lead to a greater species diversity.c. There is more solar energy available in the tropics, which contributes

to higher productivity, this in turn might contribute indirectly to greater diversity.

A. a only

B. b and c

C. a and c

D. a, b and c

Answer: C

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24. Escherichia coli is used in biological researches because

A. it is easily available

B. it can be easily cultured

C. it is easy to handle

D. it can easily multiply in the host

Answer: B



25. Select the WRONG statement regarding energy flow in an ecosystem.

- A. Energy flow in one direction only
- B. About 1-5% of the energy reaching the ground is converted by

the green plants into chemical energy.

C. Energy requirement for maintenance of body gradually

decreases in successive tropic levels.

D. Only 10% of the gross productivity of producers is entrapped by

herbivores for their body building.

Answer: C

26. Death while sleeping in closed room with burning coal furace is due

A. CO_2 B. CO C. CCl_4

D. SO_2

to

Answer: B

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27. The biological scissors are :

i. Restriction enzymes are used to cut DNA into nucleotide monomers.

ii. Enzymes always cut the DNA at specific nucleotide sequences.

iii. Present variously recognizing and cutting different DNA sequences.Select the option with the correct statement/s.

A. i and ii

B. ii and iii

C. i and iii

D. i, ii and iii

Answer: B

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28. Complete the given flow chart about DNA compaction and packaging by selecting the correct option.

DNA - Chromatin fiber - Chromosome

A.XYZSolenoidNucleosomeChromatidB.XYZSolenoidChromatidNucleosome

- $\mathsf{C}. \begin{array}{c} X & Y & Z \\ \text{Nucleosome} & \text{Solenoid} & \text{Chromatid} \end{array}$
- D. (X, Y, Z), (Nucleosome, Chromatid, Solenoid):

Answer: C

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29. Carrying capacity of a population is determined by :

A. predation

B. natality rate

C. mortality rate

D. limiting resources

Answer: D

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30. The possibility of a female becoming haemophilic is extremely rare because mother of such a female has to be at least <u>(i)</u> and father should be <u>(ii)</u>

A. (i) haemophilic, (ii) carrier

B. (i) carrier, (ii) haemophilic

C. (i) haemophilic, (ii) normal

D. (i) normal, (ii) haemophilic

Answer: B

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31. Sexual mode of reproduction in protozoa is

A. anisogamy

B. plasmogamy

C. plamotomy

D. schizogamy

Answer: A



32. Match the columns I and II, and choose the CORRECT combination

from the options given .

column I Column II Approx. Number of species

- a. Beetles 1.20,000
- b. Ants 2. 28,000
- c. Orchids 3. 30,000
- d. Fishes 4.3,00,000

A.a-1,b-3,c-2,d-4

B.a-4,b-2,c-1,d-3

C.a-4,b-1,c-2,d-2

D.a-4,b-1,c-1,d-2

Answer: D



33. The protein products of the following Bt toxin genes cryIAc and cryIIAb are responsible for controlling:

A. Bollworm

B. Roundworm

C. Moth

D. Pod shape

Answer: A

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34. Which of the following constitutes of a micro -ecosystem ?

A. Ocean

B. Pond

C. Log of wood

D. Kitchen garden

Answer: B

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35. During his experiments with pea plant , which of the following

characteristics was not used by Mendel ?

A. Seed Colour

B. Seed Shape

C. Pod length

D. Pod shape

Answer: C

36. Which of the following pairs of after effects are considered to be

consequences of the Green Revolution ?

A. waterlogging and soil salinity

B. soil erosion and desertification

C. deforestation and jhu, cultivation

D. ozone depletion and global warming

Answer: A

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37. Which of the following mRRNA will get translated completely ?

A. AUGUUUCCUCAUUAGGGUGUU

B. GUGUUUCCUCAUGGUUGAGUU

C. AUGUUUCCUCAUGGUGUUUAA

D. AUGUUUCCUUGAAGGUUUUA

Answer: C

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38. Which one of the following is a matching pair of certain organism

(s) and the kind of association between them ?

A. Algae and fungi in lichens - Mutusalism

B. Shark and sucker fish - Ammensalism

C. Orchids growing on trees - Parasitism

D. Cuscuta (dodder) growing on other - flowering plants -

Epiphytism

Answer: A

39. Mendel proposed that the factor controlling any character is discrete and independent. This proposition was based on which of the following observations ?

- A. Offsprings of F_3 generation of a cross made between the plants having two contrasting characters show blended characters of its parents
- B. Offsprings of a cross made between the plants having two contrasting characters shows only character without any blending
- C. Offsprings of self pollination of F_1 parents with the same contrasting characters show blended characters of its parents D. Offspring of cross - pollination of parental generation having three contrasting characters show only one character with

blending.

Answer: B



40. Which of the following is a mismatched pair ?

A. Species - area graph - parabola

B. Equator - increased species diversity

C. Species richness - related to explored geographical area

D. Speciation - function of time

Answer: A



41. According to the latest estimates. How many documented varicties

of Basmati rice are grown in india?

A. 30

B.27

C. 118

D. 125

Answer: B



42. Select the disease which is caused by recessive autosomal genes

when present in homozygous condition

A. Alkaptonuria

B. Albinism

C. Cystic Fibrosis

D. All of these

Answer: D

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43. What is true plasmids ?

A. Plasmids are widely used in gene transfer

B. These are found in both bacteria and viruses.

C. Plasmids contain genes for vital activates.

D. They are an important part of the chromosome .

Answer: A

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44. What will happen if decomposers are completely remove from the ecosystem ?

A. There will be no energy flow.

B. There Will be an increase in the number of detritivores

C. Herbivores will not receive solar energy

D. The movement of minerals in an ecosystem will be blocked .

Answer: D

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45. While analyzing the DNA of an organism, it was found that adenine proportion was 30% what. Would be the proportion of cytosine in its DNA ?

A. 20~%

B. 30~%

 $\mathsf{C}.\,40\,\%$

D. 25~%

Answer: A

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46. In mice, black coat colour (allele B) is dominant to brown coat colour (allele b). The offspring of a cross between a black mouse (BB) and a brown mouse (bb) were allowed to interbreed. What percentage of the progeny would have black coats ?

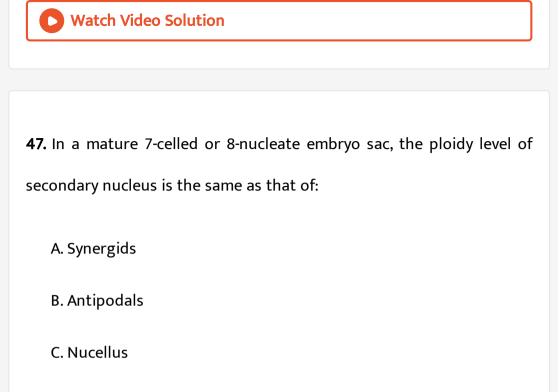
A. 25~%

 $\mathsf{B.}\,50~\%$

C. 75 %

D. 100~%

Answer: C



D. Polars

Answer: C

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48. A typical monocotyledonous root is characterised by

A. Usually more than six xylem bundles.

B. large and well developed pith .

C. no secondary growth.

D. All of the above

Answer: D

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49. Match column-I with column-II and select the CORRECT option from the codes given below.

A. 1-(ii) ,2-(i) ,3-(iv) ,4-(iii)

B. 1-(ii) ,2-(iv) ,3-(i) ,4-(iii)

C. 1-(iv) ,2-(i) ,3-(ii) ,4-(iii)

D. 1-(iv) ,2-(iii) ,3-(ii) ,4-(i)

Answer: A



50. The ovary is said to be hypogenous in the flowers of

A. Brinjal

B. Cucumber

C. Peach

D. Guava

Answer: A

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51. In moss, sporophyte is formed on

A. antheridia.

B. archegonia.

C. prothallus.

D. leafy stage.

Answer: D

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52. Which of the following correctly describes probiotics ?

A. Cancer- inducing microbes

B. New kind of food allergens

C. Live microbial food supplements

D. Safe antibiotics

Answer: C

53. Archesporium refers to:

A. Jacket layer

B. Sporogenous layer

C. Tapetal layer

D. Outermost endosperm layer

Answer: B

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54. Deficiency of which of the following elements leads to discoloration

of plant parts ?

A. Na

B. Ca

C. Cu

D. P

Answer: D

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- 55. Read the following statements (A-D) carefully .
- A. Causes the 25% loss of CO_2 Fixed by Calvin Benson cycle.
- B. Operates in Chloroplasts, leaf peroxisomes and mitochondria.
- C. Absent in photosynthetic bacteria.
- D. Does not produce ATP.

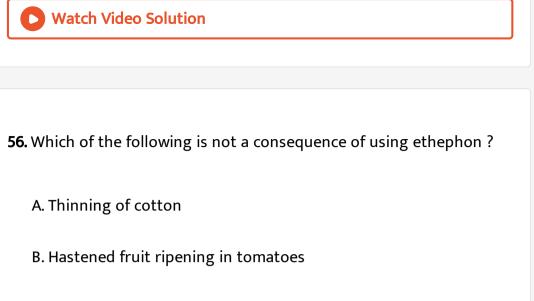
Which light-dependent phenomenon has been described by the above

statements ?

A. Cyclic ETS

- B. Photolysis of water
- C. Photorespiration
- D. Pentose phosphate pathway

Answer: C



- C. Accelerated abscission
- D. Promotion of male flowers in cucumbers

Answer: D

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57. Choose the incorrect statement about osmosis from the following.

A. The rate of osmosis is dependent only on the pressure gradient .

B. Osmosis occurs spontaneously in response to a driving force

C. Osmotic pressure is referred to the applied positive pressure ,

while y osmotic potential is negative.

D. Water moves from a region of higher chemical potential to a

region of lower chemical potential

Answer: A



58. Which one of the following pair is incorrectly matched in respect to

the crop varieties for pest resistance ?

- Crop variety Resistant to
- A. Pusa Sawani Fruit borers
- B. Crop variety Resistant to
- Pusa Sem Jessids and aphids
- Crop variety Resistant to
- C. Pusa Gaurav Aphids
- Crop variety Resistant to
- D. Pusa Swarnim Shoot borers

Answer: D



59. Which of the following tissue systems constitutes bulk of the plant

body?

A. Epidermal tissue system

B. Ground tissue system

C. Vascular tissue system

D. Both (A) and (C)

Answer: B



60. Eukaryotic, achlorophyllous and heterotrophic organisms are grouped under which of the following kingdoms?

A. Monera

B. Protista

C. Fungi

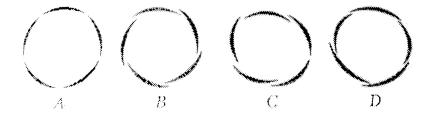
D. Plantae

Answer: C

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61. The following diagram represent the types of aestivation in corolla

indetify the correct combination of labelling



A. A - Valvate ,B - Vexillary , C - Twisted , D - Imbricate

B. A - Vexillary ,B - Imbricate , C - Twisted , D - Valvate

C. A - Valvate ,B - Vexillary , C - Twisted , D - Imbricate,

D. A - Valvate ,B - Imbricate , C - Twisted , D - Vexillary

Answer: D

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62. What is the quantum yield of photosynthesis

A. 9~%

B. 12~%

 $\mathsf{C.8}\,\%$

D. 38~%

Answer: C



63. Fill in the blanks:

1. Spraying sugarcane crop witha.... increases in the length of the stem, thus increasing the yield by as much asb.. tonnes per acre.

2.c does not occur naturally in plants.

3. Search for natural substances with cytokinin like activities led to the isolation of ...d... from corn kernels and coconut milk.

A. a - auxins , b - 10 , c - NAA ,d - zeatin

B. a - gibberellins , b - 20 , c - zeatin ,d - kinetin

C. a - gibberellins , b - 10 , c - zeatin ,d - kinetin

D. a - gibberellins , b - 10 , c - kinetin ,d - zeatin

Answer: D



64. Consider the following statements regarding gymnosperms and choose the correct option

I. In gymnosperms, the male and female gametophytes have an independent existence

II. The multicellular female gametophyte is retained within the megasporangium

III. All gymnosperms are heterosporous.

Of these statements :

A. I and II are true but III is false

B. I and III are true but II is false

C. II and III are false but I is true

D. II and III are true but is false

Answer: D

65. C_2H_5OH is commercially produced through a particular species of

A. Saccharomyces

B. Clostridium

C. Trichoderma

D. Aspergillus

Answer: A

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66. In a maize comb, the silky hairs represent:

A. Long style

B. Long style with feathery stigma

C. Involucre of bracts

D. Hairs or pappus

Answer: B

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67. How many of the given matches are correct?

(i) Sugarcane	$\operatorname{Prop}\operatorname{roots}$
(ii) Turnip	Modified tap root
(iii) Banyan	Stilt roots
(iv) Rhizophora	Pneumatophore
(v)Sweet potato	Fasciculated tap root

A. (i),(ii),(iii) & (iv)

B. (i),(iii) & (iv)

C. (ii),(iv) ,(v)

D. (ii),(iii)

Answer: C

68. During meiosis, a microscope mother cell has 12 bivalents, the number of chromosomes in its pollen gains will be:

A. 12

B. 24

C. 6

D. 18

Answer: A



69. Coenocytic mycelium is

A. unincleate, septate.

B. multinucleate , septate .

C. multinucleate , aseptate .

D. Both (B) and (C)

Answer: C



70. If a plant BBCC is pollinated by pollens of plant AADD, the fruit thus

obtained will have:

A. AaBbCcDd genotype

B. AABBCCDd genotype

C. BBCC genotype

D. AABBCCDD genotype

Answer: C

71. If due to some injury the chordae tendineae of the tricuspid valve of the human heart is partially non-functional, what will be the immediate effect ?

A. The flow of blood into the pulmonary artery will be reduced.

B. The blood will tend to flow back into the right atrium .

C. The flow of blood into the aorta will be reduced .

D. Both (A) and (C)

Answer: C

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72. The contraction of internal intercostal muscles takes place during

A. effortless inhalation .

B. effortless exhalation.

C. forceful inhalation.

D. forceful exhalation .

Answer: D

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73. A gorilla-like appearance with huge hands and legs is due to excess

secretion of:

A. LH

B. GH

C. MSH

D. FSH

Answer: B

74. Refer to the characteristics given below and identify how many are true for a skeletal muscle ?Uninucleated , branched , dark and light band , actin and myosin filaments , spindle - shaped cells

A. 2 B. 3 C. 4 D. 5

Answer: A

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75. Which of the following options given the correct match w.r.t the

disease, its Causative organism and mode of infection?

Δ	Disease	Causative Organism	Mode of infection
	Pneumonia	Haemophilus influenzae	Vector borne

	Disease	Causative Organism	Mode of infection
	Malaria	Plasmodium vivax	Bitr of female Culex mosquito
C.			sm Mode of infection
	Amoebia	sis Enatamoeba histo	olytica Faeco - oral route

D.

Disease	Causative Organism	Mode of infection
Ascariasis	Filarial worm	With infected food and water

Answer: C

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76. Which of the following doesn't secrete saliva ?

A. Parotid glands

B. Supra-maxillary glands

C. Sub-mandibular glands

D. Sub-lingual glands

Β.



77. Which of the following statements about the functioning of the kidney is CORRECT ?

I. On a average , 1100-1200 ml of blood is filtered by the kidneys per minute which constitute roughly 1/5th of the blood pumped out by both the Ventricles of the heart in a minute .

II. JGA is a special sensitive region formed by cellular modifications in the distal convoluted tubule and glomerulus at the location of their contact.

III. The ascending limb of Henle's loop is impermeable to water but allows transport of electrolytes.

IV. The collecting duct allows passage of small amounts of urea into the medullary interstitium to keep up the osmolality.

A. I and II

B. III and IV

C. I, II and III

D. II , III and IV

Answer: B

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78. All the following structure are found in an electrical synapse except

A. Gap junction

B. Synaptic vesicles

C. Presynaptic membrane

D. Post - synaptic membrane

Answer: B

79. All enzymes of TCA cycle are located in the mitochondrial matrix except one which is located in inner mitochondrial membranes in eukaryotes and in cytosol in prokaryotes. This enzyme is

A. isocitrate dehydrogenase.

B. Ketoglutarate dehydrogenase.

C. succinate dehydrogenase.

D. lactate dehydrogenase

Answer: C



80. The tallest positive wave in ECG represents

A. atrial depolarization.

B. ventricular depolarization .

C. atrial repolarization .

D. ventricular repolarization.

Answer: B

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81. The increases in which of these properties doesn't increase the rate

of diffusion of a gas across alveoli?

A. Solubility

B. Partial pressure gradient

C. Thickness of respiratory membrane

D. All of these

Answer: C

82. The posterior lobe of pituitary gland secretes :

A. FSH, GH and LH

B. Somatostatin, GH and TSH

C. TSH , ADH and prolactin

D. ADH and oxytocin

Answer: D

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83. During contraction of a skeletal muscle :

A. A - band shortens

B. I - band remain same

C. I - band shortens

D. Z - line is stretched

Answer: C

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84. Which one of the following is not an autoimune disease

A. Grave's disease

B. Pernicious anemia

C. Rheumatoid arthritis

D. Sleeping sickness

Answer: D



85. Which of the following statements about dialysis is INCORRECT ?

A. Blood drained from a convenient artery is pumped into a

dialysing unit after adding an anticoagulant like heparin.

B. The dialysing unit contains a coiled cellophane tube surrounded

by a dialysing fluid .

C. The cleared blood is pumped back to the body through a vein

after adding anti-heparin to it .

D. The dialysing fluid have the exactly the same composition as that

of plasma .

Answer: D

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86. Reflex action is controlled by :

A. Sympathetic nervous system

B. Autonomous nervous system

C. Spinal cord

D. Peripheral nervous system

Answer: B

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87. Which of the following steps during glycolysis is associated with utilisation of ATP?

A. Glucose \rightarrow Glucose -6- phosphate

B. Fructose-6-phosohate \rightarrow Fructose -1,6- bisphosphate

C. PEP \rightarrow pyruvic acid

D. Both (A) and (B)

Answer: D

88. The hormone that can increase the value rate of breakdown of glycogen ,the volume of blood in vessels and rate of heartbeat is

A. insulin

B. glucagon

C. adrenaline.

D. FSH.

Answer: C

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89. Which the column I and II, and choose the CORRECT combination

from the options given .

 $\operatorname{Column} I$

 $\operatorname{Column} \operatorname{II}$

- (a)Opioids
- (i) Snorting and injection

(ii) Inhalation and oral ingestion

- (b) Cannabinoids
- (c) Coka alkaloids (iii) Snorting

A. a - i, b - ii , c - iii B. a - iii, b - ii, c - i C. a - ii, b - i, c - iii D. a - i , b - iii , c - ii

Answer: A

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90. Which one is an INCORRECTLY matched pair ?

A. Phycomycetes - Mucor, Albugo

B. Ascomycetes - Penicillium , Aspergillus

C. Basidiomycetes - Puccinia , Agaricus

D. Deuteromycetes - Ustilago, Colletotrichum

Answer: D



