



BIOLOGY

BOOKS - NTA MOCK TESTS

NTA NEET SET 113



1. Phenotypically, Turner's syndrome humans

are

A. males

B. females

C. Super females

D. Inter-sex individuals

Answer: B

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2. Which of these statements is true about

chara?

A. Oogonium and antheridium are present

on different plants.

B. Oogonium is placed in the upper part

and antheridium in the lower part

C. Oogonium is placed in the lower part

and antheridium in upper part

D. Chara belongs to angiosperm

Answer: B

3. The fertilisation in which male gametes are carried through pollen tube is known as

A. Syngamy

B. porogamy

C. siphonogamy

D. chalazogamy

Answer: C

4. From a cross AABb x aaBb, the genotypes

AaBB:AaBb:Aabb,aabb are obtained in ratio

A.1:1:1:1

B.1:2:1:0

C. 0 : 3 : 1 : 0

D.1:1:1:0

Answer: B



5. Read the given table stating some features

of molecules X and Y.

	X	Y
11	Accounts for about 5%	Accounts for about 80%
	of total RNA in cell.	of RNA in cell
II.	It is linear but never	It is linear and highly
	coiled	coiled
	It is short lived and	It is most stable and
	degrades easily	does not degrade easily

Here, the X and Y can be identified as

A. X - rRNA, Y = tRNA

B. X - mRNA, Y - tRNA

 $\mathsf{C.}\,X-mRNA,Y-rRNA$

 $\mathsf{D}. X - tRNA, Y - tRNA$

Answer: C



6. Purposeful manipulation of plant species in order to create desire plant type that are better suited for cultivation give better yields and disease resistance is

A. Hybrid breeding

- B. Tissue culture
- C. Biofortification

D. Plant breeding

Answer: D

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7. The large holes in 'Swiss cheese' are because of

A. Propionibacterium sharmanii

B. Saccharomyces cerevisiae

C. Trichoderma polysporum

D. Clostridium butylicum

Answer: A

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8. Which one of the following statement is incorrect?

A. In amensalism one species is harmed and other is benefited.

B. Commensalism is the interaction in which one species benefits and the other is neither harmed nor benefited C. The association of cattle egret and grazing cattle is a classic example of commensalism. D. Competition occurs when closely related species complete for the same

resources.

Answer: A



9. A communite that starts the process of succession in a habital is called

A. pioneer communit

B. seral community

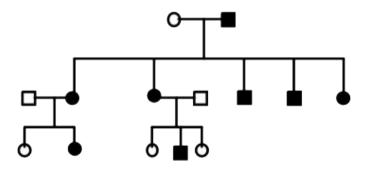
C. climanx community

D. ecotonal community

Answer: A



10. In a family, the father has a trait but the mother did not. All their sons and daughters has this trait. The same trait was found in some grand daughters, though daughters were married to normal persons.



In this pedigree the genotypes of the father , mother and husband of daughter are A. Father is AA, the mother is of aa,

husbands are aa

B. father is AA, the mother is aa, and

husband are AA

C. father is aa, the mother is Aa, husbands

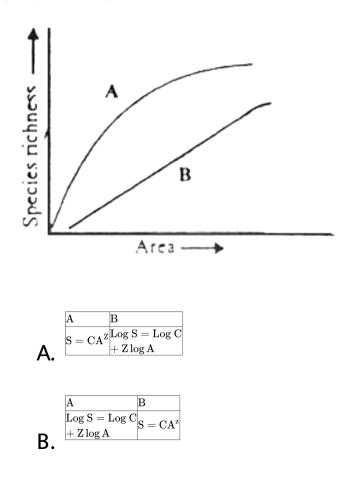
AA

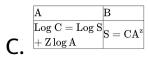
D. father is AA, mother AA, one husband is

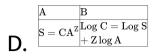
Aa, and second husband aa.

Answer: A

11. Which option correctly describes the equation for curves A and B, in the given graph of species - area relationship ?







Answer: A



12. Which of the following is a method used to get rid of particulate matter present in the exhaust from a thermal power plant ?

A. Magnetic precipitator

- B. Chromatography
- C. Electrostatic precipitator
- D. Mass spectrometry

Answer: C

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13. Pollination is essential in angiosperm

plants because

A. It decreases the time required for

fertilization

B. both of the male and female gametes

are non-motile and they need to be

brought together for fertilization

C. It is a time taking process

D. Both (a) and (b)

Answer: B

14. Expected children of a blue - eyed (recessive) woman and brown -eyed (dominant) man who had a blue had a blue eyes mother are likely to be

A. all brown-eyed

B. all blue-eyed

C. 50% blue-eyed and 50% brown-eyed

D. Three blue eyed and one brown eyed

Answer: C

15. E.coli with dsDNA labeled with radioactive thymidine, allowed to replicates in a simple nutrient medium for two - generation. What will be the percentage of bacteria containing only non-radioactive DNA ?

A. 12.5~%

B. 0.0625

C. 0.25

D. 0.5

Answer: D



16. VAM is a

- A. bioinsecticide
- B. bioherbicide
- C. endomycorrhiza
- D. ectomycorrhiza





17. The number of individuals of the population who left the habitat and gone elsewhere during the time period is called :

A. immigration

B. emigration

C. migration

D. All of these

Answer: B



18. Bacterial and fungal enzymes degrade the detrius into simple inorganic substances, this process is called

A. leaching

B. catabolism

C. fragmentation

D. mineralisation

Answer: B



19. Amazon rainforests are considered as 'lungs of the planet' as they contribute_____of the total oxygen in the earth's atmosphere.

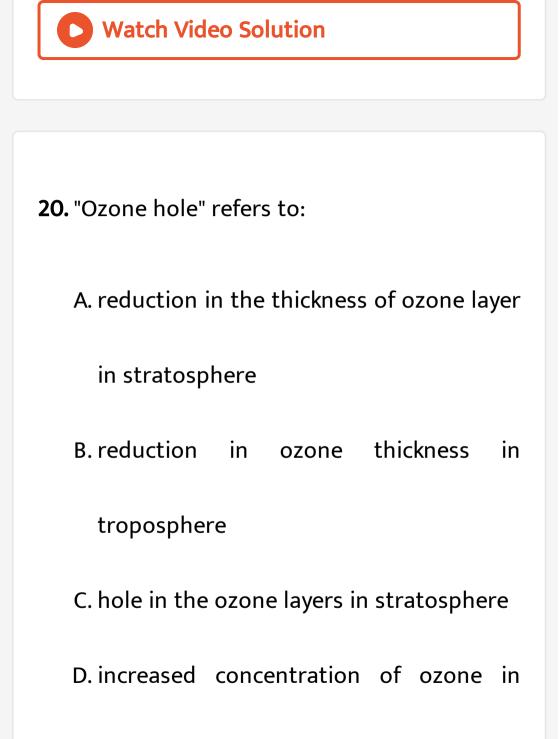
A. 0.1

B. 0.15

C. 0.2

D. 0.3

Answer: C



troposphere

Answer: A



21. Identify each part and write whether it is haploid (n) or diploid (2n), in a flowering plant.
(a) Ovary (b) Anther (c) egg (d) pollen (e) male gamete (f) zygote

A. 2n, 2n, n, n, n, 2n

B. 2n, 3n, n, n, 2n, 2n

C. 2n, n, n , n, n , 2n

D. 2n, 2n, n, 2n, n, 2n

Answer: A

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22. Consider the following statements regarding linkage

(i) The linked genes are located on the same chromosome.

(ii) Crossing over between linked genes is maximum.

(iii) The linkage can be broken by crossing over.

(iv) Linkage is against Mendel's law of segregation.

A. (i) and (iii) are correct

B. (i) and (ii) are correct

C. (ii), (iii) and (iv) are correct

D. (i), (iii) and (iv) are correct

Answer: A

23. Which of the following is incorrect for operon concept?

A. The sequence of structural gene in lac operon is ZYA where Z gene codes for hydrolytiv enzyme

B. Allolactose turns it on by binding with

repressor protein

C. It is an inducible operon and controls

catabolic reactions

D. Operator gene receives RNA polymerase

to switch it off

Answer: D

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24. In a food chain, the largest population is that of

A. primary consumers

B. tertiary consumers

C. producers

D. decomposers

Answer: C

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25. Presently, total number of biodiversity hotspots in the world is

A. 25

B. 34

C. 37

D. 40

Answer: B



26. Thalamus takes part in fruit formation in

A. guava

B. orange

C. strawberry

D. mango

Answer: C

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27. Down's syndrome is caused due to of chromosomes.

A. autosomal addition

B. autosomal deletion

C. allosomal addition

D. allosomal deletion

Answer: A

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28. Diameter of pollen grain is

A. 25 - 50 cm

B. 25 - 50 μm

C. 30 -50 mm

D. 10 - 25 μm

Answer: B



29. Bacteria genetically engineered to express a gene from a plant will

A. Synthesize a protein with the same

sequence of amino acid as in the plant

and, therefore, the protein will have the

same structure and function as in the		
plant		
B. Synthesizea protein with essentially the		
same sequence of amino acid as in the		
plant but with difference to different		
codons between prokaryotes and		
eukaryotes		
C. Not be able to synthesise a protein due		
to the presence of exon, slicing		

sequences in the DNA sequence from the plant

D. Not be able to synthesize a protein

because translation is couple with

transcription and post-transcriptional

processing does not occur in it.

Answer: A

30. Match the columns.

(a)	Homo habilis	(P) 450 cc
		$(\mathrm{Q})\ 1450\ \mathrm{cc}$
(c)	Neanderthal man	
(d)	Australopithecus	(S) 650
(u)		$-800 ext{ cc}$

Answer: B



31. Infection by a pathogen can be detected by the presence of antigens or by detecting the antibody synthesized against the pathogen. The test/s based on this principle is/are

A. PCR

B. ELISA

C. Both PCR and ELISA

D. Neither PCR nor ELISA

Answer: B



32. A zymogen is an inactive substance which is made active with the help of difference enzymes. Pepsinogen is secreted as a zymogen into the stomach to

A. change the pH of the stomach fluids to aid digestion

B. digest complex carbohydrates.

C. digest tough cellulose material

D. prevent digestion of the gastric glands

Answer: D

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33. Match the abnormal conditions given in Column A with their explanation given in

Column B and choose the correct option.

	Column A		Column B
(A)	Glycosuria		Accumulation of uric acid in
			joints
(B)	Renal calculi	(ii)	Inflammation in glomeruli
(C)	Glomerular nephritis	(iii)	Mass of crystallised salts within the kidney
	nephritis		within the kidney
(D)	Gout	(iv)	Presence of glucose in urine

D. A - iv, B - ii, C - iii, D - i

Answer: C

34. Many elements are found in living organisms either free or in the form of compounds. One of the following is not found in living organisms.

A. Silicon

B. Magnesium

C. Iron

D. Sodium

Answer: A



- **35.** Inspiration is achieved when
 - A. Intrapulmonary pressure is less than the

atmospheric pressure

B. Intrapulmonary pressure is greater than

the atmospheric pressure

C. Intrapulmonary pressure is equal to the

atmospheric pressure

D. Intrapulmonary pressure becomes more

than the intra alveolar pressure

Answer: A

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36. ECG depicts the depolarization and repolarisation processes during the cardiac cycle. In the ECG of a normal healthy individual one of the following waves is not represented

- A. Depolarisation of atria
- B. Repolarisation of atria
- C. Depolarisation of ventricles
- D. Repolarisation of ventricles

Answer: B

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37. Choose the set which depicts only homologus organs.

A. Forelimbs of man, bat , cheetah

- B. Wings of bats, butterfly and bird
- C. Sting of honey bee, scorpion and snake
- D. Tail of rat, peacock and cockroach

Answer: A

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38. Which of the following is/are an example/s

of direct gene transfer?

- A. Microinjection
- **B. Electroporation**
- C. Particle gun
- D. All of these

Answer: D



39. If a non-diabetic person releases glucose in

the urine, it may be due to a defect in:

A. Ultrafiltration

- B. Selective reabsorption
- C. Tubular secretion
- D. Micturition

Answer: B

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40. Which of these is false about enzymes?

A. Nucleic acid which behave as enzymes		
are called ribozymes		
B. Enzymes only catalyse the reaction and		
do not initiate it.		
C. All enzymes are subjected to		
degradation at a temperature of more		
than 40^\circC		
D. A reaction producing 200 molecules of		
H_2CO_3 increases to 600,000 molecule		
in the presence of carbonic anhydrase.		

Answer: C



41. Respiration in insects Is called direct because

A. the tissue exchange $O_2 \,/\, CO_2$ directly

with the air in the tracheal tubes

B. the tissue exchange O_2/CO_2 directly

with the coelomic fluid

C. the tissues exchange O_2/CO_2 directly with the air outside through the body surface

D. the tracheal tubes exchange $O_2 \,/\, CO_2$

directly with the haemocoel which then

exchange with tissues

Answer: A

42. A patient has met with a car accident and has lost a lot of blood. Choose the response that will compensate the most for the blood loss.

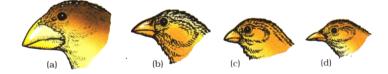
- A. Increase stroke volume
- B. Increased heart rate
- C. Decrease heart rate
- D. Increase uptake of water in the

collecting duct of the nephron

Answer: B



43. Based on the phenomenon represented by the given diagram, choose the correct statement from the following.



A. The finches on the Galapagos island

prove an evolution due to mutation

B.A rapid decline was observed in the population of finches on the island due to competition among the species. C. This phenemenon is an example of convergent evolution, which is similarly observed between the Australian marsupials and placental mammals. D. The original insectivorous finches evolved into seed-eating and vegetarian finches, eventually changing the shape

of their beaks according to their food

habits.

Answer: C



44. An antibiotic resistance gene in a vector

usually helps in the selection of :

A. competent cells

B. transformed cells

C. cloning vector

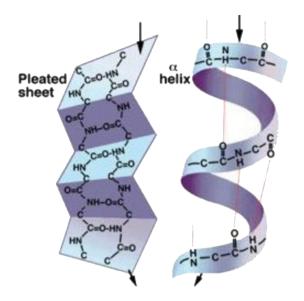
D. ligase enzyme

Answer: B



45. The structure shown below is made up of

two strands of long chanins of amino acids.



What does it depict ?

A. Primary structure with β - pleated sheet

B. Tertiary structure with amino acid chains

C. Secondary structure with β -

conformation

D. Quaternary sturcture with β -pleated

sheet

Answer: C



46. Eli Lily an American company prepared two DNA sequence corresponing to A and B, chains of human insulin and introduced them in plasmids of E.coil to produce insulin chains. These chains A and B were

- A. Peptide bonds
- B. Ionic bonds
- C. H bond
- D. Disulphide bonds

Answer: D

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47. For classification of angiosperms floral characters are preferred over vegetative characters because

A. The reproductive axis shows a large

degree of prominent variations

B. Floral characters show fewer variations

than vegetative traits

C. The shape of the flower is a diagontic

feature in many families

D. Flower character is more prominent

than vegetative characters.

Answer: B

48. The earliest attempt to the scientific basis for classification is made by

A. Linnaeus

B. Whittaker

C. Aristotle

D. Theophrastus

Answer: C

49. Bryophyte comprise of

- A. a sporophyte which is of longer duration
- B. a dominant phase of sporophyte which

is parasitic

C. a dominant phase of gametophyte which

produces spores

D. a small sporophyte phase which is

generally parasitic on the gametophyte

Answer: D



50. Which of the following statements is CORRECT ?

A. Mitochondria contain circular DNA, but

chloroplasts lack it.

B. Chloroplasts contains circular DNA, but

mitochondria lack it

C. Neither mitochondria nor chloroplasts

contain any DNA



contain circular DNA

Answer: D

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51. The G_2 -phase of the cell cycle is characterized by the presence of

A. the number of chromosomes increases

from n to 2n or 2n to 4n

- B. single chromatids
 - C. formation of tubulin
 - D. double the amount of DNA (in

chromosomes)

Answer: C

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52. The correct floral formula of chilli is



B ⊕ Q K(5) C (5) A5G(2)

C. $\bigoplus K_{(5)}C_{(5)}A_{(5)}G_{2}$ $\bigoplus K_{(5)}C_{5}A_{5}G_{2}$ D.

Answer: B

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53. In temperate regions, during spring season, combium is very active and produces a large number of cylary elements having vessel with wider cavities.wood formed in this way is

called as

A. heart wood

B. autumn wood

C. sap wood

D. early wood

Answer: D

54. Water will be absorbed by root hairs when

- A. the concentration of salts in soil is high
- B. the concentration of solutes in the cell

sap is high

- C. the plant is rapidly transpring
- D. they are separated from soil by a

semipermeable membrane

Answer: B

55. Deficiency of which of the following does not cause chlorosis?

A. Mo

B. Cu

C. Fe

D. Zn

Answer: B

56. Which of the following conditions are favourable for cyclic photophosphorylation

A. anaerobic condition and high CO_2

B. aerobic and high CO_2

C. aerobic and low light intensity

D. anaerobic and low light intensity

Answer: D

A. Oxaloacetic acid

B. Phosphoglyceric acid

C. Oxalosuccinic acid

D. Phosphoenolpyruvate

Answer: A

58. Which one of the PGRs would be used by farmers if they are asked to ?

A. a - auxins, b - ethephon, c - ethylene, d -

GA, e - cytokinin

B.a - ethylene, b - GA, c - auxin, d-

ethephon, e - cytokinin

C. a-auxin, b - ethephon, c - cytokinin, d -

ethylene, e-GA

D.a - cytokinin, b - auxin , c - GA, d -

ethephon, e - ethylene

Answer: A

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59. All viruses

A. contain only DNA

B. contain only RNA

C. contain only protein

D. are susceptible to lipid solvents

Answer: C

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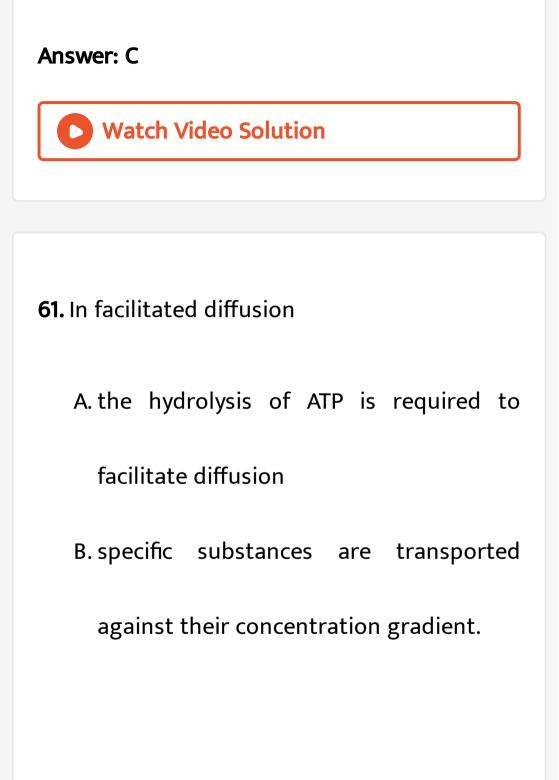
60. In pinus, male and female cones occur on

A. different plants

B. same branch of the same plant

C. different branches of the same plant

D. different branches of different plants



C. membrane phospholipids create a
channel that permits diffusion of a
specific substance
D. a membrane protein binds to specific
solute and then undergoes a

conformational change.

Answer: D

62. Whereas the number of chromosomes is reduced to half in first reduction division of meiosis, then what is the need for second mitotic division

A. The division is required for the formation of four gametes.

B. The division ensures equal distribution

of genes on the chromosomes

C. The division ensures equal distribution

of haploid chromosomes.

D. The division is required for segregation

of replicated chromosomes.

Answer: D

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63. Which of the following is not a characteristic feature of FabaceaeA. Corolla five petals, gamopetalous

papilionaceous

B. Zygomorphic flowers, diadelphous stamens, many ovules C. Sepals five, gamosepalous, imbricate aestivation, placentation marginal D. Monocarpellary, ovary superior, seeds non-endospermic

Answer: A

64. Which of the following statements is correct about a woody dicot stem which shows extensive secondary growth?

A. The primary xylem persists in the centre of the axis.

B. Primary and the older secondary phloem

get crushed

C. Secondary xylem forms the bulk of the

stem

D. All of these

Answer: D



65. One hormone helps in petiole elongation in deepwater rice plants, while the other stimulates closure of stomata. These are respectively:

A. ABA and auxin

B. Ethylene and ABA

C. Ethylene and gibberellic acid

D. Gibberellic acid and ABA

Answer: B

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66. The assimilatory power formed in light reaction of photosynthesis is:

A. ATP

B. $ATP + NADPH_2$

 $\mathsf{C}.NADH_2$

$\mathsf{D}.ADP + NADH_2$

Answer: B

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67. The type of organisms found in the kingdom Protista are :

A. Unicellular nucleated

B. Multicellular, enucleated

C. Eukaryotes

D. Both (A) and (C)

Answer: D

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68. Select the incorrect pairing

A. Mitochondria - Semiautonomous

organelle

B. Stroma - Site of dark reaction

C. Centrioles - (9 + 2) array of microtubules

D. Axoneme - Core of eukaryotic flagella

Answer: C

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69. In _____the leaf base expands into a

sheath covering the stem partially or wholly.

A. monocots

B. dicots

C. china rose

D. leguminous plants

Answer: A

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70. Unicellular organisms that divide by binary

fission are:

A. Viruses

B. Bacteria

C. Fungi

D. Both (B) and (C)

Answer: B

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71. Which of the following structure is not made up of a single layer of flattened cell with irregular boundaries?

A. Alveoli

B. Endothelium

C. Bowman's capsule

D. Skin

Answer: D



72. Which one of the following statements about morula in humans is correct ?

A. It has almost equal quantity of

cytoplasm as an uncleaved zygote byt

much more DNA.

B. It has far less cytoplasm as well as less

DNA than in an uncleaved zygote

C. It has more or less equal quantity of

cytoplasm and DNA as in uncleaved

zygote.

D. It has more cytoplasm and more DNA

than an uncleaved zygote.

Answer: A

73. Mucus coating of the epithelium lining of the respiratory, gastrointestinal and urogenital tracts helps in trapping microbes entering our body. This coating belongs to which barrier of the innate immunity?

A. Physical

B. Cytokine

C. Physioligical

D. Cellular





74. Chondrichthyes is characterised by

- A. placoid scale and terminal mouth
- B. ctenoid scale and terminal mouth
- C. ctenoid scale and ventral mouth
- D. placoid scale and ventral mouth

Answer: D

75. A man is admitted to a hospital. He is suffering from an abnormally low body temperature, loss of appetite and extreme thirst. His brains scan would probably show a tumor in

- A. pons varoli
- B. cerebellum
- C. medulla oblongata

D. hypothalamus

Answer: D

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76. The hormone which suppresses the immune system is produce by

A. zona fasciculata of adrenal cortex

B. zona glomerulosa of adrenal cortex

C. zona reticular's of adrenal cortex

D. Both (A) and (C)

Answer: A

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77. Immovable joints is

A. composed of dense fibrous connective

tissue

B. Composed of cartilaginous fibres

C. Composed of synovial fluid

D. Both (A) and (B)

Answer: A

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78. Which of the following can be included under natural methods of birth control ?

A. Rhythm method

B. Coitus interruputs

C. Lactational amenorrhea

D. All of these

Answer: D

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79. Read the following statements and find out the INCORRECT statement for a cockroach.

A. The blood (haemolymph) is composed of

colourless plasma and haemocytes

B. Heart of cockroach consists of an elongated muscular tube lying along mid-ventral line of thorax and abdomen. C. The hindgut is broader than midgut and differentiated into ileum, colon and rectum D. Both gizzard and mandible help in grinding the food particles.

Answer: B

80. Acrosome of sperm is derived from :-

A. Golgi body

B. Mitochondria

C. Ribosomes

D. Centriole

Answer: A

81. Identify the WRONGLY matched pair

A. Typhoid -Widal test

- B. Plague Viral disease
- C. Malignant malaria Plasmodium

falciparum

D. Common cold - Rhinovirus

Answer: B

82. The unique characteristic of phylum annelida is

A. Coelom

B. Nephridia

C. Hermaphrodite

D. Alimentary canal is complete

Answer: B

83. which of the following helps in transmission of impulse across the synapse ? A. Na^+ B. K^+

C. Ca^{2+}

D.
$$Mg^{2+}$$

Answer: C



84. A hormone with seat of activity in liverchanging glucose into glycogen is produced by :

A. thymus

B. pancreas

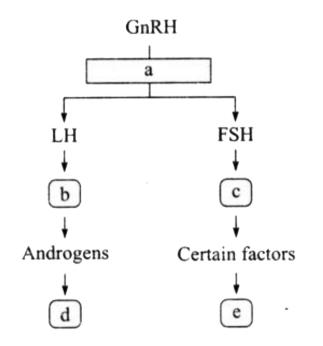
C. pituitary

D. parathyroid

Answer: B

85. Identify labels a- e in the flow-chart given

below.



A. a-anterior pituitary, b - Sertoli cell, c -

Leydig cell, d - spermiogenesis, e-

spermatogenesis

B. a-posterior pituitary, b - Leydig cell, c -Sertoli cell, d - spermiogenesis, espermatogenesis C. a-anterior pituitary, b - Leydig cell, c -Sertoli cell, d - spermatogenesis , espermiogenesis D. a-anterior pituitary, b - Leydig cell, c -Sertoli cell, d - spermiogenesis , espermatogenesis

Answer: C



86. At the new place, a person suddenly starts sneezing and wheezing. The statements CORRECTLY correlate this condition
(i) This is an exaggerated response of the immune system.
(ii) Symptoms are watery eyes and running

nose.

(iii) Due to the release of chemicals like adrenaline, steroids and histamine.

(iv) Antibodies produced to these are IgE type.

- A. i,ii,iii,iv are true
- B. i,iii,iv are true
- C. i,ii,iv are true
- D. All are correct except iv

Answer: C

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87. Find out the CORRECT match.



Α

Hormone	Gland	Function
		Stimulates
	eta -cells	glycogenolysis
Glucagon	of	resulting in an
	pancreas	increased blood
		sugar

	Hormone	Gland	Function
~	Calcitonin	Thyroid	Function Decreases blood calcium levels
(outertonini	gland	calcium levels
C .			

	Hormone	Gland	Function
			Stimulate
	Glucocorticoids	Adrenal	gluconeogenesis,
	Giucocorticolas	medulla	lipolysis and
1)			proteolysis

Answer: C

Β.



88. A maximum number of free vertebrae in

humans are found in

A. thoracic region

B. cervical region

C. lumber region

D. coccygenal region

Answer: A

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89. Which of the following assisted reproductive technique is not included under the test-tube baby programme ?

A. GIFT

B. ZIFT

C. IUT

D. IVF

Answer: A



90. In the TCA cycle, GTP is formed during

which of these reactions:

A. Citric acid \rightarrow alpha-ketoglutaric acid B. Malic acid \rightarrow oxalo-acetic acid C. alpha - ketaglutaric acid \rightarrow Succinyl Co Α D. Succinyl-Co A \rightarrow Succinic acid Answer: D Watch Video Solution