

BIOLOGY

BOOKS - NTA MOCK TESTS

NTA NEET TEST 112

Biology

- **1.** Identify the hormone which performs the following functions -
- I. Maintenance of water and electrolyte

bal	lan	ce

II. Regulation of BMR

III. Regulation of erythropoiesis

A. Thyroxine

B. Adrenaline

C. ACTH

D. Estrogen

Answer: A



- 2. If the mother is Rh-ve and the father is Rh+ve, the condition of erythroblastosis foetalis may occur. This condition may be avoided by administrating anti Rh antibodies to
 - A. foetus, just after the birth.
 - B. mother, just after the birth.
 - C. mother, just before the birth.
 - D. both foetus and mother, just after the birth.

Answer: B



- **3.** Which of the following are true with reference to taxonomical aids?
- 1. Separate taxonomic keys are required for each taxonomic category.
- 2. Herbarium is a store house of collected plant and animal specimens.
- 3. Each statement in the key is called couplet.
- 4. Keys are used for identification purpose.

- A. A and B
- B. A and D
- C. A and C
- D. C and D

Answer: D



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4. Identify the incorrect information.

A. Stroke volume = 70 ml

B. Duration of cardiac cycle = 0.8 seconds

C. Cardiac output = 5 lit /sec

D. Heart rate = 72 beats /min.

Answer: C



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5. During which stage of sewage treatment microbes are not used?

A. Primary treatment

- B. Secondary treatment
- C. Tertiary treatment
- D. Both a and c

Answer: D



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6. In the process of hemodialysis, when antiheparin is being added?

A. After the blood is taken out from an artery

B. Before the clear blood is pumped back to the body through a vein

C. Into the body before the blood is taken out for the process

D. Into the body after the cleared blood in injected into the veins.

Answer: B



7. The correct combination of characters regarding slime molds is

A. parasitic, plasmodium with true walls, spores dispersed by air currents

B. parasitic, plasmodium without walls, spores dispersed by water

C. saprophytic, plasmodium without walls, spores dispersed by water

D. saprophytic, plasmodium without walls, spores dispersed by air currents.

Answer: D



- 8. Read the following statements (A D).
- A Solidification of faeces in the rectum, reduces the urge for defaecation.
- B Vomiting is a reflex action
- C Electrolytes like Cl are absorbed in the gut

by simple diffusion D - Micelles are formed in gut lumen How many of the above statements are correct? A. None B. One C. Two D. Three **Answer: D Watch Video Solution**

9. Which set of hormones is steroidal in nature?

A. Cortisol and estradiol

B. Insulin and glucagon

C. Adrenaline and non-adrenaline

D. Thyroxine and calcitonin

Answer: A



10. In plants, which of the following disease is caused by bacteria?

- A. Mosaic disease of tobacco
- B. Citrus canker
- C. Late blight's of potato
- D. Potato spindle tuber disease

Answer: B



11. Expiration is the result of A contraction of internal intercostal muscles. B. relaxation of internal intercostal musceles and diaphragm. C. contraction of external intercostal muscels and relaxation of diaphragm. D. relaxation of external intercostal

Answer: D

muscles and diaphragm.

12. Plants requiring exposure to light for less than the critical photoperiod for flowering are

A. The short - day plants (SDP)

B. The long plants (LDP)

C. The day - neutral plants (DNP)

D. All of these

Answer: A



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13. What will be the effect on the oxygen dissociation curve, if the temperature is decreased?

A. The curve will be shifted right

B. The curve will be shifted left

C. The curve will became a straight line

D. It is unpredictable

Answer: B

14. Choose the correct sequence of events with respect to the fungal sexual reproductive cycle.

- A. Karyogamy, Plasmogamy and Meiosis
- B. Plasmogamy, Karyogamy and Meiosis
- C. Meiosis, Plasmogamy and Karyogamy
- D. Meiosis, Karyogamy and Plasmogamy

Answer: B

15. Bacteria on its outer layer contains

A. glycocalyx

B. cell membrane

C. cell wall

D. all of these

Answer: A



16. In DNA fingerprinting , the 'probe' refers to

A. a radioactively labeled single - stranded

DNA molecule

B. a radioactively labeled single - stranded protein molecule

C. a radioactively labeled double - stranded

RNA molecule

D. a radioactively labeled double - stranded

DNA molecule

Answer: A



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17. Natural parthenogenesis occurs in

A. frogs to form females

B. honeybees to produce drones

C. cockroaches to form only males

D. earthworms

Answer: B



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18. Match the scientists present in columns I with their contribution in column II, and choose the correct combination from the

option given.

	Column I		Column II
	(Scientists)		(Contribution)
a.	Ivanowsky	1.	Contagium vivum fluidum
b.	Pasteur	2.	Crystallization of viruses
c.	Beijerinck	3.	Discovery of viruses
d.	Stanley	4.	Term virus

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

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

C.
$$a - 3, b - 4, c - 1, d - 2$$

D.
$$a - 4$$
, $b - 3$, $c - 1$, $d - 2$

Answer: C



19.	The	major	androgen	present in	n humans	is
		· · · · · · · ·		P		

A. testosterone

B. estrogen

C. androsterone

D. progesterone

Answer: A



20. One of the commonly used plant growth

hormone is pineapple to promote flowering is

- A. ethylene
- B. abscisic acid
- C. zeatin
- D. indole-3-acetic acid

Answer: D



21. Which statement is true about bryophytes ?

A. They are non-photosynthetic

B. Zygote produces gametophyte on germination

C. Spores form gametophyte plant on germination

D. They have vascular tissue

Answer: C



22. The least level of chromosome organization is

A. solenoid

B. 30 nm fibre

C. nucleosome

D. none of these

Answer: C



23. Arrange the following terms in the correct developmental sequence: Pollen grain, sporogenous tissue, microspore tetrad, pollen mother cell, male gametes

A. Sporogenous tissue - pollen mother cell microspore tetrad - pollen grain - male
gamete

B. Microspore tetrad - Sporogenous tissue - pollen mother cell - pollen grain - male

gamete

C. Sporogenous tissue - pollen mother cell - pollen grain - male gamete - microspore tetrad

D. Sporogenous tissue - pollen grain - male gamete - pollen mother cell - microspore tetrad

Answer: A



- **24.** Which of the following statement is incorrect for gymnosperm?
 - A. Leaves may be simple or compound
 - B. In Cycas, the pinnate leaves persist for a many years
 - C. Thick cuticle and sunken stomata of needle-like leaves also help to reduce water loss
 - D. In conifers, the needle-like leaves reduce

Answer: B



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25. A ground substance secreted by connective tissue accumulated between cells and fibres is

- A. polysaccharide
- B. lipid
- C. protein
- D. steroid

Answer: A



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26. Match the items in Column I with their user in Column II and choose the right option.

	Column I		Column II
(A)	ELISA	(i)	Antigen-antibody interaction
(B)	PCR	(ii)	Gene amplification
(C)	Biolistics		Direct introduction of recombinant DNA
(D)	Micro- injection	(iv)	DNA coated on gold or tungsten.

A.
$$A-(ii),B-(iv),C-(i),D-(iii)$$

B.
$$A - (i), B - (ii), C - (iii), D - (iv)$$

 $\mathsf{C.}\,A - (i), B - (iv), C - (ii), D - (iii)$

 $\mathsf{D}.\,A-(i),B-(ii),C-(iv),D-(iii)$

Answer: D



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27. Which of the following is not a correct dominant-recessive trait pairs of Pisum sativum?

A. Axial-terminal flower position, tall-dwarf stem height

B. Yellow-green pod colour, round-wrinkled seed shape

C. Full-consticted pod shape, Yellow-green seed colour

D. Violet-white flowe colour, inflated constricted pod shape

Answer: B



28. The acromion process can be observed in

- A. pelvic girdle
- B. pectoral girdle
- C. carpals
- D. tarsals

Answer: B



29. Living	mechanical	tissue	is
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- A. collenchyma
- B. parenchyma
- C. sclerenchyma
- D. complex tissue

Answer: A



30. O group mother with O group child sues AB group man for fathership of child. What is true?

A. The claim is correct

B. Father is true but mother is not

C. Both parent are false

D. Mother is true but the father's claim is

wrong

Answer: D



31. Which of the following cells is usually dead and without a protoplasm?

A. Parenchyma

B. Sclerenchyma

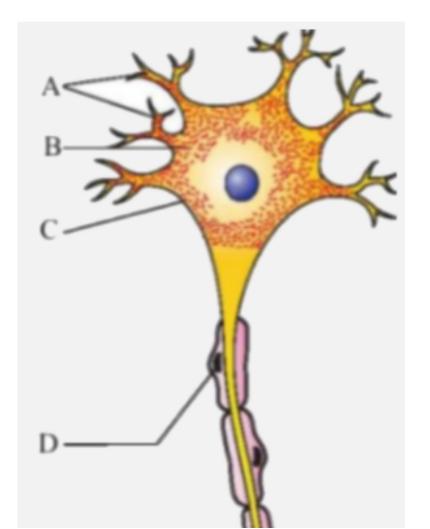
C. Aerenchyma

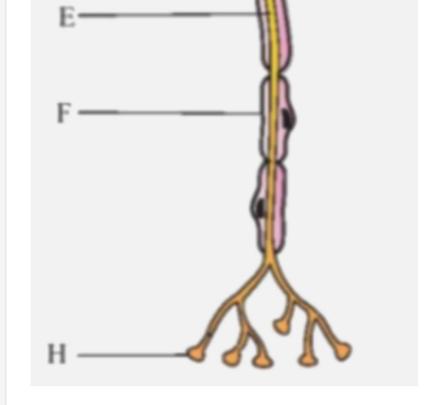
D. Collenchyma

Answer: B



32. A structure of a neuron is given in the diagram below. Select the incorrect statement with reference to the same.





- A. A typical neutron comprises of only three parts A, C and E.
- B. B represents the granular bodies or Nissl's granules found in the cyton of

the neuron.

C. D are located on E, which secrete F.

D. H possesses both dendrites and neurotransmitters

Answer: D



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33. When pollens of one plant fall on the stigma of another flower of the same plant, it is known as:

- A. Dichogamy
- B. Herkogamy
- C. Geitonogamy
- D. Autogamy

Answer: C



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34. In the Morgan's experiment on Drosophila, the strength of linkage between y and w is

- A. higher than that of the genes w and m
- B. lower than that of the genes w and m
- C. same as that of the genes w and m
- D. could not be predicted with reference to wand m

Answer: A



35. Which of the following vitamins is present in the protein found in rods?

- A. Vit A
- B. Vit B
- C. Vit C
- D. Vit D

Answer: A



- **36.** Select the correct statement from the following with reference to the work by Cohen and Boyer
 - A. Cohen and Boryen were the first scientists to introduce a recombinant DNA in the year 1975
 - B. They isolated the antibiotic resistance gene by dissolving a piece of DNA from a plasmid.

C. The antibiotic resistance gene was linked to the plamid vector using the enzyme

D. The antibiotic resistance gene was isolated from the native plasmid of Salmonella typhimurim.

Answer: D



37. The genotypes of a husband and wife are I^AI^B and I^Ai . Among the blood types of their children, how many different genotypes and phenotypes are possible?

- A. 3 genotypes, 3 phenotypes
- B. 3 genotypes , 4 phenotypes
- C. 4 genotypes ,3 phenotypes
- D. 4 genotypes , 4 phenotypes

Answer: C



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38. How many of the following features belong to skeletal muscles?

I. Striped appearance

II. Voluntary nature

III. Not under the control of CNS

IV. Primarily involved in locomotory actions.

A. one

B. two

C. three

D. four

Answer: C



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39. Which of the following secondary metabolites are wrongly matched with their categories?

A. Toxin - Ricin

B. Drug - Curcumin

C. Alkaloid - Codeine

D. Lectin - Abrin

A. Only A

B. A and B both

C. A and C both

D. Only D

Answer: D



40. Which of the following amino acids has hydrogen in its R group?

- A. Alanine
- B. Serine
- C. Glycin
- D. Cysteline

Answer: C



- **41.** Which one of the following statements regarding enzyme inhibition is correct
 - A. Competitive inhibition is seen when a substrate competes with an enzyme for binding to an inhibitor protein.
 - B. Competitive inhibition is seen when the substrate and the inhibitor compete for the active site on the enzyme.
 - C. Non-competitive inhibition of an enzyme can be overcome by addeing a large

amount of substrate.

D. Non-competitive inhibitors bind at the active site on the enzyme surface.

Answer: B



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42. Choose the wrong statement from the following.

- A. Failure of segragation of chromatides during cell divisin result in aneuploidy
- B. Additional copy of 'X'b chromosome in male result in Klinefelter's syndrome.
 - C. Closely located genes in a chromosome always assort independently resulting in recombinations
 - D. Failure of cytokinesis after DNA replication results in polyploidy

Answer: C

43. Which of the following features is not related to the cockroach?

A. Body divisible into head, thorax and abdomen

B. Two pairs of wings are found

C. Three pairs of jointed legs are present on abdomen

D. Pressence of anal cerci in both sexes.

Answer: C



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44. A mother is afflicted by Down's syndrome caused by an extra copy of chromosome 21 Father is normal percentage of offspring affected by the disorder would be

A. 1

B. 0.75

C. 0.5

D. 0.25

Answer: C



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45. Select the incorrect statement from the following.

A. Most of the parasites are also pathogens.

- B. Intestinal perforation and death may occur in severe cases of typhoid fever.
- C. Plague is cause by virus.
- D. Rhinoviruses causes common cold.

Answer: C



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46. An example of gene therapy is

- A. Production of injectable hepatitis B
- B. Production of vaccines in food crops like potatoes which can be eaten
- C. Introduction of gene for adenosine

 deaminase in persons suffering from

 Severe Combined Immuno-deficiency

 (SCID)
- D. Production of test tube babies by artificial insemination and implantation

of fertilized eggs

Answer: C



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47. Which set of drugs is incorrectly matched with its group ?

- A. Opioids-Morphine, Heroin
- B. Coca alkaloids Cocaine
- C. Cannabinoids Barbiturates, LSD

D. Stimulants -Caffeine, Cocaine

Answer: C



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48. Who dedicates the type of animals that can be supported in any area?

A. pH, mineral composition and topography

B. Topography, soil composition and grain size

C. Type of vegetation

D. Sediments characteristics

Answer: C



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49. Which of these statements is not true?

- A. Crossing over is the exchange of genetic material between two homologous chromosomes.
- B. The enzyme which is involved during crossing over is called recombinase.
- C. Recombination between homologous chromosomes is completed by the end of diakinesis.
- D. Synaptonemal complex is formed during zygotene.

Answer: C



- **50.** Read the following statements (A E) and answer the question following them .
- A. Cancer and AIDS, both are incurable diseases.
- B. Ionizing radiations like UV rays causes DNA damage and may cause cancer.
- C. Cocaine is also known as crack.
- D. Adolescence period is between 12-18 years of

age.

E. CO (Carbon monoxide) content in the blood increases on smoking.

How many of the above statement are correct ?

A. One

B. Two

C. Three

D. four

Answer: D



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51. Which one of the following is an example of cleistogamy?

A. Sunflower

B. Vallisneria

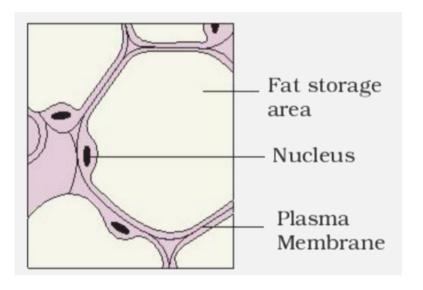
C. Commelina

D. Calatropics

Answer: C



52. Observe the given diagram of a connective tissue identify it which of the following statements is incorrect regarding the given tissue?



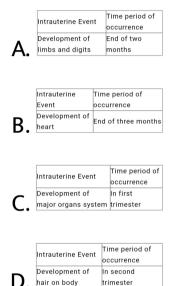
A. It is modifie for storage

- B. It is a type of loose areolar tissue.
- C. It is present below the skin as a support framework for epithelium.
- D. Excess of nutrients are converted to fats in thus tissue

Answer: C



53. Which intruterine event is incorrectly matched with its time of occurrence ?



Answer: B



54. The process in which the fitness of one species (measured in terms of 'r') is significantly lower in the presence of another species, is called

A. predation

B. parasitism

C. commensalism

D. competition

Answer: D



55. Which of these is incorrect about oogenesis?

A. Meiosis-I is an unequal division

B. Menopause occurs around 50 years of age

C. It starts at puberty

D. Poler bodies are formed.

Answer: C



56. Identify the step which belong to the Kreb's cycle.

A. Pyruvate is converted to Acetyl CoA

B. Release of GTP on conversion of succinyl-

CoA to succinate

C. Passing on of the electrons removed as part of the hydrogen atoms to molecular

oxygen with simultaneous synthesis of

ATP

D. All of these

Answer: B



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57. During succession, in the successive seral stages, there is a/an

A. Change in the diversity of species of organisms

B. Increase in the number of species and organisms

C. Increase in the total biomass

D. All of the above

Answer: D



58. At least _____of sperms should have normal shape for normal fertility.

- A. 0.1
- B. 0.3
- C. 0.6
- D. 0.8

Answer: C



- **59.** Choose the correct statement/s about amphibolic pathways.
 - A. Fatty acids are used as a substrate when they are converted into acetyle CoA to enter the respiratory pathways.
 - B. A pathway is said to be amphibolic when it can only perform catabolic activities like the breakdown of proteins into amino acids.
 - C. Glycerol enters the Kreb's cycle as PGAL.

D. Both (A) and (B)

Answer: A



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60. T.W. Engelmann split the light inot its components using a

A. green glass

B. convex lens

C. prism

D. concave lens

Answer: C



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61. Select the correct statement.

A. Pusa Sawani variety of Okra is resistant to shoot and fruit borer.

B. Bollworms do not prefer the rough leaved cotton varieties

C. Development of resistance in mungbean
to yellow mosaic virus was induced by
mutation

D. Both (A) and (C)

Answer: D



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62. Select the incorrect statement.

A. Ecological diversity in India is more diverse than Norway.

B. In India about 5000 varieties of mangoes are found.

C. Among vertebrates, more than half of the species belong to fishes

D. India is one of the 12 mega diversity countries of the world

Answer: B



63. Select the set of STDs.

A. AIDs and chickenpox

B. Chikungunya and dengue

C. Malaria and syphills

D. Genital warts and Hepatitis-B

Answer: D



- **64.** How many statements are incorrect?
- (i) "Bt" in "Bt-cotton" indicates Bacillus thuringensis bacteria from which cry gene is taken.
- (ii) Golden rice is a biofortified rice i.e., vitamin

 A enriched rice.
- (iii) The transgenic Brassica napus seeds are used to produce statins.
- (iv) Transgentic tobacco is developed to resistant against Meloidegyne incognita by RNAi technology.

A. one

- B. two
- C. three
- D. four

Answer: A



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65. Which set of contraceptives have similar mechanism of action?

A. Cu - 7, Vaults

- B. Cu -T, Multiload 375
- C. Cervical caps, Saheli
- D. LNG-20, Condoms

Answer: B



- **66.** Overgrowth of algae results in:
 - A. Increased level of dissolved oxygen
 - B. Decreased biological oxygen demand

- C. Mortality of fishes
- D. All of the above



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67. An inverted pyramid of number and an inverted pyramid of biomass are respectively seen in:

A. Grassland Tree ecosystem

- B. Sea and Tree ecosystem
- C. Tree and Sea ecosystem
- D. Sea and Grassland ecosystem



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68. In green plants, during photosynthesis water act as:

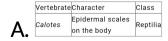
A. Hydrogen acceptor

- B. Oxygen acceptor
- C. Hydrogen donor
- D. Electron acceptor

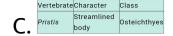


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69. Select the incorrect pairing



	Vertebrate	Character	Class
В.	Neonhron	Skin usually without oil glands	Aves





70. Lateral branches with short internodes giving rise to roots below and leaves above at nodes are observed in:

A. Pea, Citrus

- B. Mustard, Salvia
- C. Chrysanthemum, Banana
- D. Eichhonia, Pistia

Answer: D



- 71. Nitrogenase in an enzyme used in:
 - A. Respiration
 - B. Nitrogen oxidation

- C. Nitrogen reduction
- D. Both (B) and (C)



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72. Flame cells and metagenesis are found respectively in:

- A. Taenia and Hydra
- B. Ascaris and Starfish

- C. Taenia and Obelia
- D. Earthworm and Obelia



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73. The puffed up appearance of dough in bakery is due to

A. CO_2 production during fermentation by yeast

B. CO_2 producting during aerobic

respiration by yeast

C. Death of yeast

D. Spoiling of the dough due to death of yeast and production of many gases.

Answer: A



74. In E.coli, the lac operon gets switched on when:

A. Lactose is present and it binds to the repressor

B. Repressor binds to operator

C. RNA polymerases blind to the operator

D. Lactose is present and it binds to RNA polymerase

Answer: A

75. According to Darwin, which of the following variations enable the individual to reproduce and leave more progeny?

A. Heritable

B. Non-heritable

C. The organism that are more adoptable

to use the resource

D. Both (A) and (C)

Answer: D



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76. Which one of the following methods is commonly used to maintain the genetic of a given plant?

- A. By propagating through seed germination
- B. By propagating through vegetative multiplication

- C. By generating hybrids through intergeneric pollination
- D. By treating the seeds with gamma radiations

Answer: B



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77. Select the incorrect statement about DNA.

- A. DNA is acidic in nature due to presence of phosphate group.
- B. DNA act as genetic material in majority of the organisms an it is structurally more stable as compared to RNA.
- C. In bacteriophage λ , 48502 base pairs are found in DNA.
- D. F. Meischer first identified the DNA in 1829.

Answer: D

- **78.** From the following, identify the two correct statement with reference to meiosis.
- I. Meiosis involves two sequential cycles of nuclear and cell division called meiosis I and meiosis II but only a single cycle of DNA replication.
- II. Development of chiasmata occurs in diakinesis.
- III. Separation of two basic sets of

chromosomes.

IV. No division of centromere.

A. II, III

B. II, IV

C. III, IV

D. I, III

Answer: D



79. With respect to Miller's experiment, which of the following condition is not applicable?

A. Temperature =
$$800^{\circ} C$$

$$CH_4, NH_3, H_2 \text{ and } H_2O$$

C. Orgaic compounds obtained = Nitrogen compound like nucleotides

D. Electrodes = To produce spark

Answer: C

80. According to the concept of species-area relationship.

A. The number of species in an area increase with the size of the area.

B. The value of Z lies in the range of 0.3 to

0.4, regardless of the taxonomic group or the region.

C. The relationship is for a rectangular hyperbola curve is described by the equation $\log S = \log C + Z \log A.$

D. The larger the area the greater the extinction rate.

Answer: A



81. Identify the incorrect statement from the following.

A. Reservoir pool for phosphorus cycle is earth's crust whereas atmosphere is the reservoir pool for carbon cycle.

B. During carbon cycle and phosphorus cycle, there is very little respiratory release of carbon and phosphorus.

C. Atmospheric inputs of phosphorus through rainfall are much smaller than carbon inputs.

D. Gaseous exchanges of phosphorus between organism and enviornment are negligible.

Answer: B



82. Which of the following is not considered a sacred groove?

A. Khasi and Jainta Hills in Meghalaya.

B. Western Ghats in Karnataka & Maharashtra.

C. Paudi and Gadhwal areas of Madhya Pradesh.

D. Aravali Hills in Rajastan.

Answer: C

83. Select the incorrect statement.

A. Excess use of herbicides, pesticides, etc.,

has only resulted in selection of

resistant varieties in a much lesser time

scale.

B. Analogous structures are a result of convergent evolution.

C. When more than one adaptive radiation

appeared to have occurred in an isolated

geographical area (representing

different habitats), it results in divergent

evolution

D. A number of marsupials, each different from the other evolved from an ancestral stock, but all within the Australian island continent.

Answer: C

84. A compound leaf is shown in the diagram.



Select the option with correct identification of the type of leaf and its example.

- A. Pinnately compound, Peepal
- B. Pinnately compound, Neem
- C. Palmately compound, Banana
- D. Palmately compound, silk cotton

Answer: B



85. Match the entries in Column - I with those of Column - II and chosse the correct answer

	Column - I		Column - I I
(A)	Cleistogamy	(i)	Insect pollination
(B)	Anemophily	(ii)	Bud pollination
(C)	Entomophily	(iii)	Wind pollination
(D)	Xenogamy	(iv)	Bat pollination
		(v)	Cross-pollination



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86. In Griffith's transforming principle, if heat-killed S-strain is injected into mice, then:

- A. Transformation of S strain into R strain will occur
- B. Transformation of R strain into S strain will occur.

C. Mice will die

D. Mice will live

Answer: D



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87. Organic compound synthesis in the plant is transported in which of the following ways in flowering plants:

A. Leaves to other parts only

- B. From leaves to other part and storage organ
- C. Re exported from storage organ to other part
- D. Both (B) and (C)

Answer: D



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88. Select the incorrect match

- A. Electrical synapse Rare in body
- B. Arachnoid Thin inner meninge
- C. Medulla Important centres for gastric secretions
- D. Scala media Middle chamber of cochlea

Answer: B



- **89.** All the following are correct statement about a small pond ecosystem, except :
 - A. This is fairly a self-sustainable unit.
 - B. All the four basic components of an ecosystem are well exhibited
 - C. The abiotic component is the water with all the dissolved organic and inorganic substances and the rich soil deposit at the bottom of the pond.

D. This ecosystem performs all functions of any ecosystem except the unidirectional flow of energy.

Answer: D



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90. Eco San' toilets can be seen working in:

A. Kerala

B. Andhra Pradesh

C. New Delhi

D. Tamil Nadu

Answer: A

