

India's Number 1 Education App

BIOLOGY

NTA MOCK TESTS ENGLISH

NTA NEET SET 109



1. Identify the correct value.

A. RBC count = 5.5 million $/mm^3$ of blood

B. Hb count = 12 - 16 gm/100 ml of blood

C. Platelet cound = 1.5 to 3.5 lac/100 ml of

blood

D. Neutrophils = 60 - 65% of total WBC.

Answer: C

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2. Blood cholesterol reducing agent is:

A. Statins

B. lipase

C. protease

D. zymase

Answer: A

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3. The vectorless gene transfer includes

A. Microinjection

B. electroporation

C. biolistics

D. all of these

Answer: D



4. Statement A: Atherosclerosis is a type of

Coronary Artery Diseases(CAD).

Statement B: Monocytes are the least abundant granulocytes,

A. Only statement A is corrent

B. only statement B is correct

C. Both statements A and B are correct

D. Both statements A and B are incorrect

Answer: A

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5. Identify in order the plants showing alternate, opposite and whorled phyllotaxy.

- A. Alstonia, Calotropis and China rose
- B. China rose, Alstonia and Claotropis
- C. Calotropis China rose and Alstonia
- D. China rose, Calotropis and Alstonia

Answer: D

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6. What is the correct location of the human

kidneys?

A. Between last lumbar and second sacral

B. Between third thoracic and last lumbar

C. Between last thoracic and third sacral

D. Between last thoracic and third lumbar

Answer: D

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7. Read the following statements -

A - Speciation in microbes may occur within a

few days.

B. Anteater and numbat show convergent evolution.

C. Branching descent is the concept of Darwin.

How many statements are incorrect?

A. None

B. One

C. Two

D. All

Answer: A



8. Which of the following statement is correct regarding biodiversity ?

A. Medicinal plant Rauwolfia vomitoria growing in the Himalayan range show diversity in the synthesis of chemical colchicine in higher concentration and potential. B. Eastern Ghat have greater species

diversity of amphibians than Western

ghat.

C. At the ecosystem level, India , has

greater ecosystem diversity than

a Scandivavian country like Norway.

D. Biodiversity is the term popularised by

the sociobiologist David

Tilman.

Answer: C

9. Which of the following genes were introduced in cotton to protect it from cotton bollworms ?

A. cry I Ac

B. cry II Ab

C. both (a) and (b)

D. cry I Ab

Answer: C

10. Matthias Schleiden examined a sizable amount of plants and revealed the presence of

A. a - cell which forms tissue

B. a nucleus inside the cell

C. a centromere in the chromosome

D. all of these

Answer: A

11. "The Evil Quartet" is sobriquet used to describe

A. four major causes of biodiversity losses

B. four major causes of forest loss

C. four major causes of air pollution

D. four major causes of population

explosion

Answer: A

- **12.** Select the correct statement-
 - A. Miller experiment is related to organic evolution.
 - B. Placental mammals in Australia are

result of adaptive radiation.

- C. Mutations are directional.
- D. Vertebrate hearts represent Analogous

organs.

Answer: B



13. In alimentary cannal , pyloric sphincter prevents the entry of food from -

A. oesophagus to stomach

B. stomach to intestine

C. ileum to colon

D. bile duct to the intestine

Answer: B



14. The plasma membrane was discovered by whom and in which year?

A. M. Schleiden, 1839

B. T. Swhwann, 1839

C. Robert Hook, 1838

D. Robert brown, 1839

Answer: B

15. The RNAi process, found only in in eukaryotes, is initiate by

A. ds RNA fragments

B. da DNA fragments

C. ss DNA fragments

D. ss RNA fragments

Answer: A

16. Match the column I (Ecologist with column

II (Concept) and choose

the correct option.

1	Column I (Ecologist)		Column II (Concept)
(a)	R. May		Effect of species richness
			on productivity
(b)	A.V. Humboldt	12	Effect of area exploration
			on species richness
(c)	D. Tilman	3.	Global species estimation
(d)	P. Ehrlich		Effect of the decline of
			species on ecosystem

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

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

Answer: D

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17. What are the modes of exchange of gases $(O_2 \text{ and } CO_2)$ at the level of alveoli and tissue respectively?

A. Active transport, active transpot

B. Diffusion, diffusion

C. Diffusion, active transport

D. Active transport, diffusion

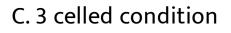
Answer: B



18. Mature male gametophyte of Angiosperm shows :

A. 7 celled, 8 nucleate condition

B. 8 celled, 7 nucleate condition



D. 6 celled condition

Answer: C



19. Which of the following statement is incorrect?

A. isolated metabolic reactions in vitro are

not living things but surely living

reactions

B. All organisms from the prokaryotes to the most complex eukaryotes have selfconsciousness. C. The sum total of all the chemical reactions curing in our body is metabolism. D. Metabolic reactions can be demonstrated outside the body in cell-free system

Answer: B



20. The process of mineralisation by micro organisms helps in the release of

A. Organic nutrient from the humans

B. Inorganic nutrients from detritus and

formation of humas

C. Both organic and inorganic nutrients

from detritus

D. Inorganic nutrients from humus

Answer: D

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21. Identify the incorrect statement

A. External nostrils leads to nasal chamber.

B. Inner pleural membrane is in contact

with thoracic lining.

C. Rights from the lateral boundary of

thoracic chamber.

D. Exchange of gases in alveoli occurs by

simple diffusion

Answer: B

22. The first cellular forms of life appeared on

earth about

A. 2000 mya

B. 500 mya

C. 4500 mya

D. 3000 mya

Answer: A

23. Which of the following statement is not true ?

A. Food chains are generally short with a

few trophic levels as only 10% of the energy is transferred to higher trophic level from lower one.

B. The pyramid of biomass in the sea is

generally inverted as the biomass of fish

for exceeds that phytoplankton.

C. Pyramid of energy is mostly upright but

sometimes it may be inverted

D. Pyramid of numbers and biomass may be

either upright or inverted

Answer: C

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24. Exine of pollen contains large amount of :

A. Lecithin

B. Sporopollenin

C. Lignin

D. Suberin

Answer: B

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25. Causative agents of sleeping sickness and malaria are included respectively in which classes of protozoa?

A. Flagellated and amoeboid protozoa

- B. Ciliated protozoa and sporozoa
- C. Flagellated protozoa and sporozoa
- D. Amoeboid and cillated protozoa

Answer: C

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26. Identify the correct set of a genus of animals that represent eutherians-

A. Eryx, Balenoptera, Pan

B. Cavia, Felis, Pteropus

C. Macropus, Desmodus, Leo

D. Rhea, Elephas, Delphinus

Answer: B

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27. which of the following is not the function

of tapetum ?

A. Secretion of enzyme and hormone

- B. Formation of ubisch's body
- C. Release of pollen
- D. Secretion of pollen kit substance.

Answer: C

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28. The complex tissues are made up of

A. same type of cell

B. more than one type of cell

C. cell haivng different structure

D. None of these

Answer: B

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29. Among the following statements, incorrect

statement is

A. The oceanic reservoir regulate the amount of carbon dioxide in the atmosphere B. It is estimated that $4 imes 10^{10}$ kg of carbon is fixed in the biosphere through photosynthesis annually C. Of the total quantity of global carbon, 71% carbon is found dissolved in ocean D. Carbon constitutes 49% of the dry weight of organism and is next to the

water

Answer: B

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30. Some bacteria oxidize various inorganic substances such as nitrates, nitrites , and ammonia and use the released energy for their ATP production? These bacteria are called

A. archaebacteria

B. photosynthetic autotrophs

C. chemosythetic autotrophs

D. heterotrophs

Answer: C

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31. The cells in the embryo sac located at the micropylar end are :

A. Synergids only

B. Antipodals

C. Egg apparatus

D. Funicle

Answer: C

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32. concluded that the presence of cell

wall is a unique character of plant cells .

A. M. Schleiden

B. T. Swhwann

C. A. V. Leeuwenhoek

D. Robert Hook

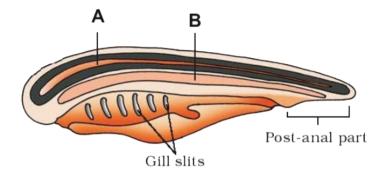
Answer: B

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33. The typical body plan of a chordate is given

in the following diagram. Given labellings A

and B, respectively, are :



- A. Nerve cord and notochord
- B. Nerve cord and myotomes
- C. Notochord and vertebral column
- D. Notochord and nerve cord

Answer: A

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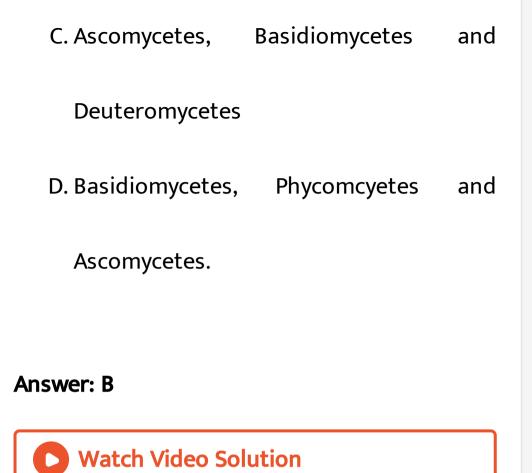
34. Agaricus, alternaria and Aspergillus are genera of fungi which are included in three different classes. The respective order of these classes will be:

A. Phycomycetes, Ascomycetes and

Basidiomycetes

B. Basidiomycetes, Deuteromycetes and

Ascomycetes



35. Choose the correct option with respect to the genetic makeup of the ABO blood grouping system in humans.

A. 4 Alleles, 4 phenotype and 6 genotype

B. 3 Alleles, 6 phenotype and 4 genotypes

C. 4 Alleles, 6 phenotype and 4 genotypes

D. 3 Alleles, 4 phenotypes and 6 genotypes

Answer: D

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36. The endosperm is completely consumed by

the developing embryo in the seeds of :

- A. Maize and rice
- B. Rice and castor
- C. Castor and maize
- D. Pea and beans

Answer: D

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37. Multiple choice questions (MCQs)

choose the correct option

Given below are four methods (A-D) and their

modes of action (a-d) in achieving contraception. Select their correct matching from the four options that follow

	Method		Mode of Action
Α.	The pill	I	Prevents sperm
			reaching cervix
B.	Condom	11	Prevents
			implantation
C.	Vasectomy	III	Prevents
			ovulation
D.	Copper-T	IV	Semen contains
			no sperms

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

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

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

Answer: D



38. Find out the correctly matched option of the causative agent and their disease.

A. Prion-Bovine

Spongiform

Encephalopathy

B. Virus - Citrus Canker disease

C. Viroids - Cr- Jacob disease in human

D. Bacteria- small pox

Answer: A

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39. Select the incorrect statement from the following.

A. Other than sexual intercourse, STDs can

be transmitted through infected medical

devices, blood transfusion or from					
mother to foetus					
B. Infected females may often be					
asymptomatic and hence, may remain					
undetected for long					
C. Failure of timely detection and					
treatment may lead to ectopic					
pregnancies, pelvic inflammatory					
diseases and infertility					

curable with proper treatment

Answer: D

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40. In Drosophila melanogaster, what percentage of recombination is shown between the genes white and yellow, and what percentage of linkage is shown between the genes white and miniature wing, respectively?

A. 98.7% and 62.8 %

B. 1.3 % and 37.2%

C. 1.3 % and 62.8%

D. 98.7% and 37.2%

Answer: C

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41. Choose the incorrectly matched plant with

its vegetative propagule.

A. Eichhornia - offsets

B. Agave - bulbil

C. Kalanchoe - suckers

D. Banana - rhizomes

Answer: C

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42. The following three kinds of leaves were exposed to light :

I. Variegated leaf

II. Green leaves partially covered with black

paper

III. Green leaf

Presence of starch was seen in

A. Only in the green leaves

B. Both green and variegated leaves

C. All the leaves in which green parts

exposed to light

D. Only variegated leaf







43. Clot buster is obtained from a genetically

modified bacterium belonging to the genus

A. Saccharomyces

B. Monascus

C. Trichoderma

D. Streptococcus

Answer: D

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44. Which of the following statements is incorrect regarding sex determination in animals?

A. Grasshoppers, male = autosomes + XO,

female - autosomes +XX

B. Drosophila, males = autosomes + XY,

female = autosomes +XX

C. Birds, females = autosomes + ZW, males

= autosomes + ZZ

D. Insects (XO type), all sperms = one set of

autosomes + X

Answer: D



45. Which of the following statements is not

true for class phaeophyceae?

A. Vegetative reproduction takes place by

fragmentation

B. The protoplast contains, in addition to

plastids, a centrally located vacuole and nucleus.

C. Sexual reproduction may be isogamous,

anisogamous or oogamous.

D. Asexual reproductive by uniflagellate

zoospores

Answer: D

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46. In the process of transformation, divalent ions are used to make the host component. The function of such ions is to

A. increase the efficiency of DNA entering

the bacterium

B. make the DNA hydrophobic so that it

enters the bacterium

C. force the DNA inside the bacterium by applying heat

D. break the DNA into smaller fragments

for better uptake into the bacterium

Answer: A

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47. Which of the following shows point matution?

A. Alteration in DNA sequence

B. Deletion of segment of DNA

C. Change in a single base pair of DNA

D. Gain of a segment of DNA

Answer: C

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48. Select the incorrect statement from the following.

A. Bird flu, which is normally seen as a

common disease of

domenticated fowls, is a viral disease. B. Outcrossing is the practice of animal mating within the same breed, with no common ancestors on either side of their pedigree up to 4-6 generations. C. Rohu and common carp are some common freshwater fishes used for consumption. D. Pusa komal is a crop variety of chilli which is resistant to bacterial blight.

Answer: D



49. Read the following statements and choose the correct option I. Failure of segregation of chromatids during cell division results in aneuploidy (II) Chromosomal disorders are mainly determined buy alteration or mutation in a single gene (III) Thalassemia and cystic fibrosis are

Mendelian disorders

(IV) Sickle cell anemia is an X- linked trait Itbvrgt (V) Haemophilia is an autosome linked recessive disease

A. A and C are correct

B. C and D are correct

C. B and D are correct

D. A, C and D are correct

Answer: A

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50. In Engelmann's experiment, bacteria were used to

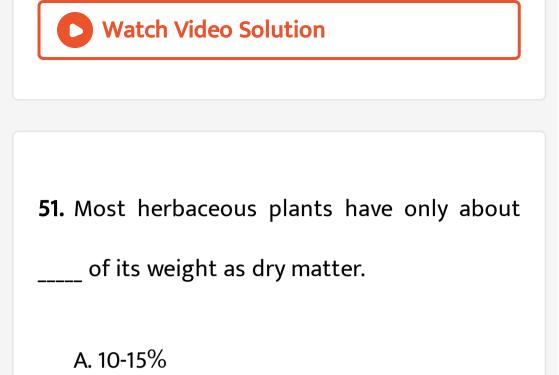
- A. split light into its spectral components.
- B. detect the sites of O_2 evolution.
- C. absorb the spectra of chlorophyll is a

and b using Cladophora.

D. detect the sites of CO_2 evolution and

monitor the algal photosynthesis.

Answer: B



B. 90-92%

C. 30-40%

D. 1-5%

Answer: A





52. Among the following groups of plants, the correct set of archegoniate plants is:

A. Bryophyta, pteridophyta,

Gymnosperms, angiosperms

B. Algae, bryophyte, pteridophyte

C. Bryophyta, peridophyte, angiosperm

D. Bryophyta, pteridophyta, gymnosperm

Answer: D



53. "A disease which shows its transmission from unaffected carrier female to some of the male progeny". Find the nature of the trait.

A. Autosomal dominate

B. Autosomal recessive

C. Sex-linked dominant

D. Sex-linked recessive

Answer: D



54. Read the given statement about the human reproductive system.

(A) The uterus is an inverted pear-shaped organ.

(B) Each testis possesses 150 testicular tubules.

(C) Mammary tubules open into the mammary ducts.

How many of the given statements are incorrect ?

A. None

B. One

C. Two

D. Three

Answer: B



55. Select the correct statement about the RNAi method.

A. RNAi strategy was taken up to prevent the infestation of nematodes in the roots maize plants. B. This method involves the use of a complementary dsRNA molecule that binds to ans prevents translation of the mRNA C. Only RNA genomes of viruses can be used as a source for the complementary RNA

D. Mobile genetic elelments called

transposons can replicate only through

a DNA intermediate

Answer: B

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56. Resource partitioning is a mechanism which has been used to promote co-existence among closely related species rether than exclusion. In MacArthur's studies, e showed that species of warblers living on the same tree avoided competition due to A. behavourial difference in forgaing

patterns.

- B. Timing differences in their feeding patterns.
- C. Both behavourial and timing differences
 - in foraging and feeding patterns, respectively.

D. Certain differences in behaviour which

had nothing to do with foraging for

feeding

Answer: A

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57. The index to the plant species found in a

particular area is provide in:

A. Flora

B. Monographs

C. Manuals

D. Catalogue

Answer: A

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58. Match the columns:

	Column - A		Column - B
Α.	Hypothyroidism	1.	Sleep awake cycle
В.	Vasopressin	2.	Source pituitary gland
C.	Melatonin	r∡ .	Reduction in water loss from the
			body
D.	MSH	4.	Irregular menstrual cycle

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

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

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

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

Answer: C

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59. In a eukaryotic cell during transcription enzymes RNA polymerase I, II and III are used respectively for the formation of:

A. m- RNA , t - RNA and 5S r- RNA

B. t-RNA, 28S r- RNA and m-RNA

C. 5.8S r-RNA, hn- RHA and and t- RNA

D. 18Sr- RNA , t-RNA and m- RNA

Answer: C

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60. Which of the following is not related to

follicular phase of the menstrual cycle?

A. Development of Graafian follicle

B. Regeneration of lost endometerium

C. Release of estrogen hormone

D. Endometrium becomes secretory

Answer: D

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61. Insulin acts upon:

A. Hepatocytes but no effect on adipocytes

B. Adipocytes but no effect on hepatocytes

C. Hepatocytes and adipocytes both

D. Neither hepatocytes nor on adipocytes

Answer: C

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62. Read the following statements and choose

the incorrect statement.

A. Mango tree do not and cannot grow in
tropical countries like Canada and
Germany.
B. Snow leopards are not found in Kerala
forests

C. Tuna fish are rarely caught beyond

tropical latitudes in the ocean.

D. Both (B) and (C) are correct

Answer: A

63. All of the following hormones are released from GIT except:

A. Gastrin

B. CCK

C. Erythropoetin

D. Secretin

Answer: C

64. In cellular respiration, from 180 g of glucose which of the following is formed ?

A. $264gCO_2 + 190gH_2O + 686Kcal$

 ${\tt B.}\,264gCO_2 + 108gH_2O + 686Kcal$

C. $390gCO_2 + 108gH_2O + 391Kcal$

D. $390gCO_2 + 264gH_2O + 391Kcal$

Answer: B

65. Corpora quadrigemina is found in

.....portion of

A. Ventral, Forebrain

B. Ventral, Midbrain

C. Dorsal, Forebrain

D. Dorsal, Midbrain

Answer: D

66. How many nucleosomes are present in DNA

of a human cell?

A. $6.6 imes10^9$

B. $3.3 imes10^9$

 ${\sf C.6.6 imes10^7}$

D. $3.3 imes10^7$

Answer: D

67. In which animal, nerve cell is present but

brain is absent ?

A. Sponge

B. Earthworm

C. Cockroach

D. Hydra

Answer: D

68. Suppose the gene of interest is inserted as Pstl site in pBR322, the resulting plasmid will confer resistance to :

A. Ampicillin

B. Penicillin

C. Ampicillin and tetracycline

D. Tetracycline

Answer: D

69. Select incorrect pairing:

- A. Apocarpous carpels free lotus, rose
- B. Syncarpous carpels fused mustard,

tomato

- C. Axile Placentation lemon, tomato
- D. Formation of false septum mustard,

Dianthus

Answer: D

70. In Arcata marshes, cleaning of wastewater involves :

A. Utilization of microorganism only for pollution control

B. Filteration chlorination like chemical

process

C. Removal of dissolved heavy metals

through biological process



treatment

Answer: C



71. Macronutrients are present in plant tissue

in an amount :

A. gt 10 mol/kg of dry matter

B. gt 10 mmol/kg of dry matter

C. lt 10 nmol/kg of dry matter

D. It 10 mmol/kg of dry matter

Answer: B

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

A. Infection in nasal cavity, headache, pain in stomach B. Infection in alveoli, chills , fever and cough C. Sore throat, nasal discharge and constipation D. Intestinal infection, persistent fever.

Answer: B

73. Match the following and mark the correct

option.

	Column I		Column II
(A)	Fast muscle fibres	(i)	Myoglobin
(B)	Slow muscle fibres	(ii)	Lactic acid
(C)	Actin filament	(iii)	Contractile unit
(D)	Sarcomere	(iv)	I-band

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

Answer: C



74. Ti plasmid is being used as cloning vectors

for:

A. Animals

B. Plants

C. Bacteria

D. Both (A) and (B)

Answer: B



75. Read the following statements carefully and find the incorrect statements:

A. More than 1 percent impurities make domestic sewage unfit for human use.

B. Less BOD causes mortality of fish and other aquatic creatures.

C. Presence of large amounts of nutrients in water also causes excessive growth of planktonic algae, called an algal bloom.D. Algai bloom causes deterioration of the

water quality an decreases fish mortality.

E. Some bloom-forming algae are extremely toxic to human beings and animals.

F. Eichhornia crassipies is the world's most

problematic aquatic weed.

A. A, C , E and F

B.C, E and F

C. A, B and D

D. All are correct

Answer: C





76. Which is the longest phase of cell cycle

A. Interphase

B. Mitotic phase

C. Meiotic phase

D. Both (B) and (C)

Answer: A

77. Which of the following parts are used for the development of fruit in mango and coconut?

A. Polycarpellary superior ovaries and is

one seeded

B. Polycarpellary superior ovaries and are

many seeded

C. Monocarpellary superior ovaries and are

one seeded

D. Monocarpellary inferior ovaries and are

many seeded

Answer: C



78. Which part of the skull is connected with

the vertabral column?

A. Temporal bone

B. Occipital condyles

C. Parietal bone

D. Mandible

Answer: B



79. Read the statements (A - E) and answer the

question following them.

A - Rheumatoid arthritis is an auto-immune disease.

B - During allergy, IgA type antibodies

increases in plasma.

C- Injection given to patients of snakebite, possess antibiotics.

D- Humoral immunity is because of B-cells.

E- Interferons are an example of a cytokine barrier.

Identify the number of true statements?

A. One

B. Two

C. Three

D. Four

Answer: D



80. In flowering plants, the substance that would need to be transported are :

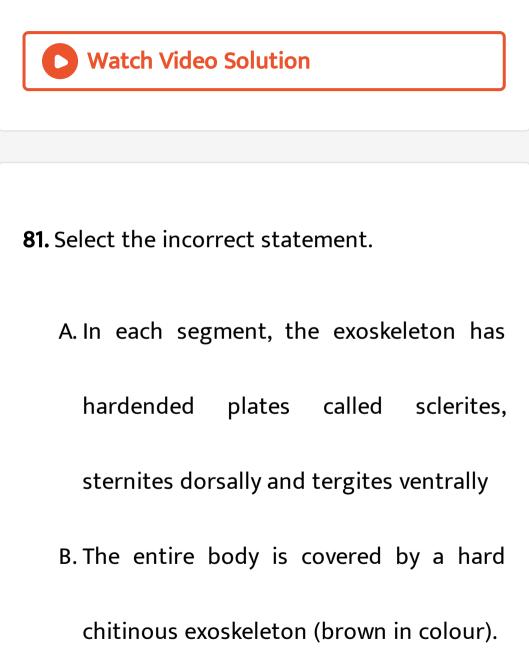
A. Water and mineral nutrients

B. Organic nutrients

C. Plant growth regulators

D. All of these





C. Head is triangular in shape and liesanteriorly at right angles to thelongitudinal body axis.D. A pair of thread - like antennae arisefrom membranous sockets lying in front

of eyes.

Answer: A

82. In which of the following option members of the same family are present?

A. Gram, Indigofera, petunia, colchicine

B. Soyabean, mulathi, ashwagandha and

Asparagus

C. Tomato, chilli, belladonna and tobacco

D. Gloriosa , Aloe , Sesbania and Trifolium

Answer: C



83. In prophase I, the stage that closely resembles prometaphase of mitosis is :

A. Diplotene

B. Chaismata

C. Leptotene

D. Diakinesis

Answer: D

84. Apical dominance can be overcome by application of :

A. GA

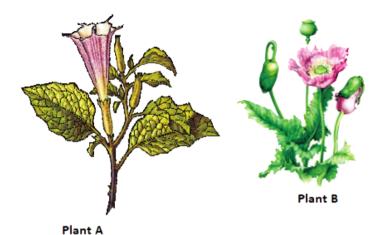
B. Cytokinin

C. Ethylene

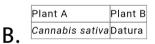
D. Auxin

Answer: B

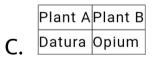
85. Identify the given plants:



Plant A Α. Erythroxylum cocaDatura



Plant B



Plant APlant B Datura *Cannabis sativa* D.

Answer: C



86. The mucosal lining of which organ differs from others in concerned with the number of layers of the cell (simple/startifide):

A. Stomach

- B. Small intestine
- C. PCT
- D. Oesophagus

Answer: D



87. who's the correct 1 word environmental

heterophyllous development in plants.

A. Cotton

B. Larkspur

C. Coriander

D. Buttercup

Answer: D





88. Find the correct option :

	Column: A		Column: B
(A)	Parenchyma		Living tissue that provides
			mechanical support
(B)	Collenchyma	2.	Food storage
(C)	Sclerenchyma	3.	Dead tissue that provides
			mechanical support

B. (A) - 2, (B) - 1, (C) - 3

C. (A) - 1 & 2, (B) - 2, (C) - 3

D. None of these

Answer: D

