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India's Number 1 Education App

## BIOLOGY

## BOOKS - NTA MOCK TESTS

## NTA NEET SET 54

## Biology

1. Which of the following is not relevant to the
structure of double helical DNA
A. The helix makes one complete spiral turn
every $34 \AA$
B. The diameter of the helix is $20 \AA$
C. The distance between adjacent nucleotide is $3.4 \AA$
D. Each strands of helix has a backbone made up of alternating ribose sugar and phosphate

## Answer: D

2. Choose the incorrect statement about phycomycetes.
A. Members are found in aquatic habitats.
B. Spores are endogenously produced in
sporangium.
C. A zygospore is formed by reduction
division.
D. They show all type of syngamy.

## Answer: C

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3. Some characters are given below
i. Bilaterally symmetrical
ii. Triploblastic
iii. Segmented
iv. Coelomate

Which of the two phyla are characterized by the above all characters?
A. Annelida and Arthropoda
B. Annelida and Mollusca
C. Arthropoda and Mollusca
D. Arthropoda and Echinodermata

Answer: A

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4. In $C_{4}$ plants, Calvin cycle operates in
A. Stroma of bundle sheath chloroplasts

# B. Grana of bundle sheath chloroplasts 

C. Grana of mesophyll chloroplasts
D. Stroma of mesophyll chloroplasts

## Answer: A

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5. as compared to a dicot root, a monocot root has
A. Many xylem bundles.
B. Relatively thicker periderm.
C. Inconspicuous annual rings.
D. More abundant secondary xylem

## Answer: A

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6. Examine the diagram and identify the correction option.

A. C-Transformation does not occur, no change and only $R$-strain will be observed.

B. A-Transformation occurs and new R-

strain will be converted to S-strain
C. B-Transformation occurs and all the Sstrain will be transformed to R-strain D. B-Transformation does not occur and new - S - strain appears mixed with R strain

## Answer: A

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7. Potatoes are
A. Collenchymatous tubers
B. Parenchymatous tubers
C. Sclerenchymatous tubers
D. None of these

## Answer: B

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## 8. Nor epinephrine is secreted from

A. Zona glomerulosa

## B. Zona fasciculata

C. Zona reticularis
D. Suprarenal medulla

## Answer: D

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9. The volume of air in the dead space fo
human lungs is normally
A. 230 mL
B. 210 mL
C. 190 mL
D. 159 mL

## Answer: D

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10. Which one of the following is not characteristic feature of bryophytes ?
A. Dominant gametophytic generation
B. Filamentous rhizoids
C. Amphibious habitat
D. Formation of accessory spores

## Answer: D

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11. Which of the following option is incorrect w.r.t. to the given diagram?
A. Well exposed stamens
B. Pollen grains are light and sticky
C. Feathery stigma to trap pollen grains
D. It is quite common in grasses

## Answer: B

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12. What is true about Nereis, scorpion, cockroach and silver fish ?
A. They all posses dorsal heart
B. None of them in aquatic
C. They all belong to the same phylum
D. They all have joined paired appendages

## Answer: A

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13. The table below gives the populations (in
thousands) of ten species ( $\mathrm{A}-\mathrm{J}$ ) in four areas (a-
d) consisting of the number of habitats given
within brackets against each. Study given
within brackets against each. Study the table and answer the question which follows

Which area out of a to $d$ shows maximum
species diversity?
A. b
B. C
C. d
D. $a$
14. Ozone hole is maximum over
A. India
B. Europe
C. Antarctica
D. Africa

Answer: C

## 15. column I lists the components of boduy defense and column II lists the corresponding descriptions. Match the two columns. Choose

 the correct option from those given
## Column I

A. Active natural immunity
B. First line of defense
C. Passive natural immunity r
D. Second line of defense
q. Complement proteins and interferons
Direct contact with the pathogens that have entered inside
s. Surface barriers
t. Antibodies transferred through the placenta

Column II
p. Injection of gamma globulins
through the placenta

$$
\text { A. } \begin{array}{llll}
A & B & C & D \\
4 & 3 & 5 & 2 \\
A & B & C & D \\
3 & 4 & 2 & 5
\end{array}
$$

## $\begin{array}{llll}A & B & C & D\end{array}$ <br> C. $\begin{array}{llll}3 & 4 & 5 & 2\end{array}$ $\begin{array}{llll}A & B & C & D\end{array}$ D. $\begin{array}{llll} & 5 & 3 & 2\end{array}$

## Answer: C

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16. In Funaria, the number of peristome teeth
in exostome is
A. 8
B. 16
C. 32
D. 64

## Answer: C

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17. which of the following taxonomical ranks contain organisms least similar to one another
A. Class
B. Genu

## C. Family

D. Species

Answer: A

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18. Which of the following is not found in birds?
A. Hind limb

B. Fore limb

## C. Pelvic girdle

D. Pectoral girdle

Answer: B

## D Watch Video Solution

19. The ovary is half inferior in flowers of
A. Peach
B. Cucumber

## C. Cotton

D. Guava

Answer: B

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20. Given below are four matchings of an animal and its kind of respiratory organ
(i). Silverfish - Trachea
(ii). Scorpion - Book lung
(iii). Sea squirt - pharyngeal gills
(iv). Dolphin - Gills

The correct matchings are
A. II and IV
B. III and IV
C. I and IV
D. I , II and III

Answer: D

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## 21. Bacteriophage is made up to

A. Carbon and nitrogen
B. DNA
C. Nucleoprotein ( Nucleic acid + protein )
D. Protein only

Answer: C
22. Choose the correct statement
A. All Proteins have 18 amino acids
B. Both ends of a protein are similar
C. All proteins are soluble
D. Proteins are formed by amide C - N bonds

## Answer: D

# 23. Which is related with ringworm 

(i) Microsporum
(ii) Trichophyton
(iii) Epidermophyton
A. i
B. i,ii
C. i,iii
D. i,ii, iii

## Answer: D

24. Single cell protein can be useful in all, except
A. Reducing environmental pollution
B. Decreasing pressure on agriculture
C. Preventing shift from meat to grain as
diet by human beings
D. Being acceptable as food in future

Answer: C
25. Which one of the following statements is totally wrong about the occurrence of notochord, while the other three are correct?
A. It is present only in larval tail in

Ascidians
B. It is replaced by a vertebral column in
adult frog

# C. It is absent throughout life in humans 

from the very beginning
D. It is present throughout life in

Amphioxus

## Answer: C

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26. In which one of the following reactions,
oxidative decarboxylation does not occur ?
A. Malic acid $\rightarrow$ Pyruvic acid
B. Pyruvic acid $\rightarrow$ Acetyl Co-A
C. Glyceraldehyde 3- phosphate $\rightarrow$ 1,3 bisphosphoglyceric acid
D. $\alpha$ ketoglutaric acid $\rightarrow$ Succinyl Co-A

## Answer: C

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27. Stratified squamous epithelium is found in

# A. Pharynx 

B. Trachea

C. Ileum
D. Bowman's capsule

Answer: A

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28. The entry in the table is wrongly matched, identify
A. a
B. b
C. c
D. d

Answer: C

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## 29. Heterospory is found in

A. Selaginella
B. Isoetes

## C. Marselia

D. All the above

## Answer: D

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## 30. The blubber is formed by

A.




## Answer: C

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31. If producer is a large tree that supports a number of herbivorous animals which are
further attacked by ectoparasites, the pyramid

## of number shall be

A. Inverted
B. Upright
C. Irregular
D. Spindle shaped

Answer: A
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32. Superovulation and embryo
transplantation techniques are being used for improving
A. the quality of milk in various breeds of cows.
B. the quality of meat in various breeds of bull.
C. breeds of rabbits and sheep.
D. All of these

## Answer: D

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33. Find the correctly matched pair.
A. Pineal gland - doesn't influence menstrual cycle
B. Interstitial cells - erythropoietic
C. Corpus luteum - secretes oxytocin

# D. Cholecystokinin - stimulates pancreatic 

## enzyme secretions

## Answer: D

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34. How many amino acids will be coded by following given or more than one cytosine represent the intron?

AUG CCC CAC CAC UUA UAU AUA GGC GAC AAA

GCG UUU CAU UAA
A. 7
B. 8
C. 10
D. 11

Answer: A

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35. The number of sex chromosomes is found
A. Super female
B. Turner's syndrome
C. Klinefelter's syndrome
D. Down's syndrome

## Answer: D

## D Watch Video Solution

36. The scapula is a large triangular flat bone situated in the dorsal part of the thorax between
A. Second and fifth ribs
B. Second and seventh ribs
C. Third and eighth ribs
D. Fourth and seventh ribs

## Answer: B

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37. Given below a diagram of a type of WBC. Identify and select the correct option.
A. It is basophil and its (i) No. $=0.5-1 \%$
(ii) function - To secrete histamine, Heparin and seratonin

B. It is Neutrophils and its (i) No. $=60-65$

\%
(ii) function :- To destruct microbes
C. It is Eosinophils and its (i) No. $=2-3 \%$
(ii) function - protection against infection
D. It is nutrophils and its (i) No. $=6-8 \%$
(ii) function - phagocytosis

Answer: B
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38. The logistic population growth is expressed by the equation

$$
\begin{aligned}
& \text { A. } d t / d N=N r\left(\frac{k-N}{K}\right) \\
& \text { B. } d N / d t=r N\left(\frac{k-N}{K}\right)
\end{aligned}
$$

C. $d N / d t=r N$
D. $d N / d t=r N\left(\frac{N-K}{N}\right)$

Answer: B

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39. Find out the wrongly matched pair.
A. Secondary metabolite - Anthocyanin
B. Protein - Insulin
C. Chitin - polysaccharide

D. Cellulose - Heteropolymer

## Answer: D

40. The first movements of the foetus and appearance of hair on its head are usually observed during which month of pregnancy?

A. Fourth month

B. Sixth month
C. Third month
D. Fifth month

Answer: D

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41. Two crosses between the same pair of genotypes or phenotypes in which the source of the gametes are reversed in one cross, is known as-
A. Reverse cross
B. Test cross
C. Reciprocal cross
D. Dihybrid cross

## Answer: C

42. A plant placed near a window bends outward because
A. It tip is able to get more oxygen
B. Its tip is able to obtain more light
C. It tip is able to receive necessary warmth
D. Its tip has auixn which is responsible for phototropic movement.

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43. Which one of the following pairs is mismatched ?
A. Fossil fuel burning - release of $\mathrm{CO}_{2}$
B. Nuclear power - radioactive wastes
C. Solar energy - green house effect
D. Biomass burning - relase of $\mathrm{CO}_{2}$

Answer: C
44. Which one of the following correctly matches a sexually tansmitted disease (STD) with its pathogen?
A. AIDS - Basillus anthrocis
B. Syphilis - Treponema pallidum
C. Uretheritis - Entamoeba gingivalls
D. Gonorrhoea - Leishmania donovani
45. Biolistics (gene-gun) is suitable for
A. DNA finger printing
B. disarming pathogen vectors
C. transformation of plant cells
D. Constructing recombinant DNA by
joining with vectors.

## Answer: C

46. Select the correct set of statements with respect to biodiversity .
a. Diversity increases from lower to higher latitude.
b. The most important cause of "The Evil Quarter " is habitat loss.
c. The IUCN Red list documents the extinction of 87 plants species .
d. Indigenous plants of aquatic habitat are eliminated by exotic species Clarias.
A. $b \& c$
B. $a \& d$
C. a \& c
D. $c \& d$

Answer: A

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47. Match the following columns

Column I

1. Photolysis of water
2. Diazotrophy
3. Cytochrome-C oxidase iii. Manganese
$D$. biosynthesis of IAA $\quad i v$. Molybdenum
$v$. Boron
$\begin{array}{llll}A & B & C & D\end{array}$
A.
$\begin{array}{llll}3 & 2 & 1 & 5\end{array}$
$\begin{array}{llll}A & B & C & D\end{array}$
B.
$\begin{array}{llll}3 & 4 & 2 & 1\end{array}$
$\begin{array}{llll}A & B & C & D\end{array}$
C.
$\begin{array}{llll}5 & 2 & 3 & 4\end{array}$
$\begin{array}{llll}A & B & C & D\end{array}$
D.
$\begin{array}{llll}4 & 1 & 3 & 2\end{array}$

Answer: B

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48. Which of the following statements are false / true
(A) Calcitonin regulates the metabolism of calcium
(B) Oxytocin stimulates contraction of uterine muscles during birth
(C ) Grave's disease is caused by malfunctioning of adrenal gland
(D) ADH stimulates absorption of water and increase the urine productions
A. I and III are true, II and IV are false
B. I and II are true, III and IV are false
C. I and IV are false, II and IV are true
D. I, II and III are true, IV only false

## Answer: B

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49. DNA fingerprinting refers to
A. Analysis of DNA samples using imprinting devices
B. Techniques uses for the amplification of
different specimens of DNA
C. Techniques used for identification of
fingerprinting of individuals
D. Molecular analysis of profiles of DNA
samples

## Answer: D

50. Population growth curve in most animals, except humans, is
A. S-shaped
B. J-shaped
C. J-shaped with tail
D. S - shaped with tail

Answer: A
51. Which one of the following experiments suggests that simplest living organisms could not have originated spontaneously from nonliving matter?
A. Larvae could appear in decaying organic matter
B. Microbes could appear in stored meat
C. Microbes appeared , from unsterilized organic matter

# D. Meat was not spoiled, when heated and 

## kept sealed in a vessel .

## Answer: D

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52. Fever in malaria is due to
A. enter of cryptomerozoltes into red blood corpuscles .
B.entry of sporozoites into blood capillaries.
C. enter of merozoites into red blood corpuscles.
D. release of merozoites from red blood corpuscles.

Answer: D
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53. Choose an option with the correct statements from the list below :
i. The telomere is heterochromatic in nature.
ii. The telocentric chromosome has
centromere close to its end.
iii. Satellite is located near primary constriction.
iv. Submetacentric chromosomes are L-shaped.
A. i\&ii
B. ii \& iii
C. iii \& iv

D. i, ii \& iv

## Answer: D

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54. Castor is a .........seed .
A. Monocot and endospermic
B. Dicot and albuminous
C. Dicot and perispermic
D. Monocot and Albuminous

Answer: B

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55. In India, human population is heavily weighed towards the younger age groups as a result of
A. Short life span of individuals and low birth rate
B. Long life span of individuals and low birth rate
C. Short life span of individuals and high birth rate

# D. Long life span of individuals and high 

 birth rate
## Answer: C

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56. A condition where an individual heterozygous for two pairs of linked genes ( AaBb ) possesses the two dominant genes on
one homologous chromosomes pair and two

## recessive on the other it is said to be

A. Cis-arrangement
B. Trans - arrangement
C. Partly cls party trans
D. More than one option is correct

Answer: A

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## 57. In which one of the following pollination is

 autogamous ?A. Geitonogamy
B. Xenogamy
C. Anemophily
D. Cleistogamy

Answer: D
(D) Watch Video Solution
A. Alternate phyllotaxy and actinomorphic
flower
B. Opposite phyllotaxy and zygomorphic
flower
C. Whorled phyllotaxy and actinomorphic
flower
D. Opposite phyllotaxy and actinomorphic
flower

## D Watch Video Solution

59. When the pollens of one flower falls on the
stigma of another flower of the same plant
then genetically it is known as
A. Dichogamy
B. Herkogamy
C. Geitonogamy
D. Autogamy

## Answer: C

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60. Match the column:

|  | Column-(A) |  | Column-(B) |
| :--- | :--- | :--- | :--- |
| (i) | Use \& disuse Theory | (A) | Hugo-de-Vries |
| (ii) | Survival of the fittest | (B) | Lamarck |
| (iii) | Spark Discharge apparatus | (C) | Darwin |
| (iv) | Mutation | (D) | Stanley Miller |

A. $i-B, i i-C, i i i-A, i v-D$
B. $i-B, i i-C, i i i-D, i v-A$
C. $i-C, i i-D, i i i-A, i v-B$

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

Answer: B

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61. Which one o fthe following orgnas in the
human body is most affected due to shortage of oxygen?
A. Lungs
B. Heart

## C. Kidney

D. Brain

## Answer: D

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62. In which of the following the pollen tube enters via chalaza?
A. Ottelia
B. Casuarina

## C. Cucurbita

## D. Both (A) and (C)

Answer: B

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63. Which of the following statements is false
regarding proteins?
A. A Protein is heteropolymer and not a
homopolymer
B. Collagen is the most abundant protein in the animal world

C. RUBISCO is the most abundant protein

in the whole biosphere
D. The first amino acid in the polypeptide
chain is called as C-terminal amino acid
and the last. amino acid is called as N terminal amino acid.

## Answer: D

64. In the developmental history of mammalian heart, it is observed that it passes through a two-chambered fish-like heart, three-chambered frog-like heart and finally four-chambered stage. To which hypothesis can this above cited statement be approximated
A. Biogenetic law
B. Hardy-Weinberg law
C. Lamarck's principal

## D. Mendelian principles

## Answer: A

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65. One of the example of the action of the autonomous nervous system is
A. Swallowing of food
B. Pupillary reflex
C. Peristalsis of the intestine

## D. Knee-jerk response

## Answer: C

## D Watch Video Solution

66. If you suspect major deficiency of antibodies in a person, to which of the following would you look for confirmatory evidence
A. Serum globulins
B. Fibrinogen in the plasma
C. Haemocytes
D. Serum albumins

## Answer: A

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67. In vitro fertilization is a technique that involves the transfer of which one of the following into the fallopian tube?
A. Embryo only , upto 8 cell stage
B. Embryo of 32 cell stage
C. Sperm and ovum
D. Either zygote or early embryo upto 8 cell stage

## Answer: D

## - Watch Video Solution

68. Which of the following microorganisms is best suited as a cloning vector to introduce nematode specific genes in plants?
A. Phage $\lambda$
B. Retrovirus
C. E. Coil
D. Agrobacterium tumefaceins

Answer: D

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## 69. Select the correct statement .

# A. The contraction of internal intercostal 

muscles lifts up the ribs
B. The RBCs transport oxygen only
C. The thoracic cavity is anatomically an air
tight chamber
D. Healthy man can inspire approximately

5000 mL of air per minute

# 70. Basal metabolic rate is under control of 

A. Thyroxine
B. ADH
C. Aldosterone
D. Growth hormone

Answer: A

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71. Most active phagocytic white blood cells are
A. Neutrophils and eosinophils
B. Lymphocytes and macrophages
C. Eosinophils and lymphocytes
D. Neutrophils and monocytes

Answer: D
(D) Watch Video Solution
72. Fertilization is internal in

A. Toads

B. Frogs
C. Dog fish

D. Cat fish

Answer: C

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73. The R.Q. for anaerobic respiration is
A. 1
B. 0
C. 0.9
D. Infinity

## Answer: D

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74. In humans, deoxygenated blood flows from:
A. Left auricle to left ventricle during auricular systole
B. Right auricule to right ventricle during atrial systole
C. Right ventricle to aorta during
ventricular systole
D. Pulmonary vein to left auricle during auricular systole

## Answer: B

75. Which one of the following is a most efficient device to eliminate particular matters
from the industrial emissions?
A. Scrubbers
B. Pyrolysis
C. Incineration
D. Electrostatic precipitator

Answer: D

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76. Overlapping region between two ecosystems is called
A. Biome
B. Ecotone
C. Niche
D. Photic zone

Answer: B
77. Water lost in guttation is
A. Pure water
B. Impure water
C. In the form of vapour from

D. Either ( pure water ) or (Impure water)

Answer: B
78. Which statement is true for angiosperms ?
A. Microspore is the resultant of mitotic
division.
B. Microspore is thee $1^{\text {st }}$ cell of
gametophytic generation .
C. Microspore is the resultant of double
fertilization.
D. Microspore is the first cell of endosperm

Answer: B
79. Tricarpellary syncarpous gynoecium is found in flowers of
A. Liliaceae
B. Solanaceae
C. Fabaceae
D. Poaceae

Answer: A
80. Effective filtration pressure in glomerulus is maintained due to
A. Powerful pumping action of the heart.
B. Secretion of adrenaline
C. afferent arteriole being slightly larger
than efferent arteriole .
D. Vacuum develops in collecting duct and
sucks the blood .
81. Most gymnosperms are
A. Xerophytic
B. Hydrophytic
C. Halophytic
D. Epiphytic

Answer: A

## 82. Which stage of Plasmodium is infective for

Mosquito
A. Trophozoite
B. Gametocyte
C. Ookinete
D. Sporozoite

Answer: B

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83. Mitosis occurs in
A. Haploid individuals
B. Diploid individuals
C. Both haploid individuals and diploid individuals

D. In bacteria only

## Answer: C

84. Which of the following statements is correct about the working of steroid hormone?

# A. They enter into target cells and binds 

with the specific receptors and activates
specific genes to from a protein .
B. They bind to cell membrane receptors.
C. They catalyze the formation of cAMP
D. None of the above
85. Most cancers are treated by combination of :-
(a) Surgery
(b) Radiotherapy
(c) Chemotherapy
A. i and ii

B. i and iii

C. ii and iii

## D. i, ii and iii

## Answer: D

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86. What is meant by the degeneracy of codons
A. One amino acid is coded by one code
B. One amino acid can be coded by more
than one code

## C. One code controls one code

## D. One code can control more than one

 amino acid
## Answer: B

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87. An organic substance that can withstand environmental extremes and cannot be degraded by any enzyme is
A. Cuticle
B. Sporopollenin
C. Lignin
D. Cellulose

Answer: B

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88. Several hormones like hCG, hPL, estrogen, progesterone are produced by
A. Ovary
B. Placenta
C. Fallopian tube
D. Pituitary

Answer: B

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89. One of the following is used in the baking of the bread
A. Rhizopus stolonofer
B. Zygosaccharomyces octosporous
C. Saccharomyces cerevisiae
D. Saccharomyces ludwigii

## Answer: C

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90. A person is wearing spectacles with concave lenses for correcting vision. While not
using the glasses the image of a distant object in his case will be formed .
A. One the blind spot.
B. behind the retina.
C. In front of the retina .
D. On the yellow spot

Answer: C

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