# ©゙" doubtnut 

## BIOLOGY

## BOOKS - NTA MOCK TESTS

## NEET MOCK TEST 15

## Biology

1. In majority of the angiosperms, pollen is released in a twocelled stage. The two cells are
A. the gamete and generative cell
B. the vegetative cell and tube nucleus
C. two male gametes
D. the vegetative cell and generative cell

## Answer: D

## - Watch Video Solution

2. Which set of hormones are secreted during pregnancy only?
A. Estrogen, hPL, Relaxin
B. Progesterone, Cortisol, hCG
C. hCG, hPL, Relaxin
D. Cortisol, Progestogens, Relaxin

## Answer: C

3. Which of the following is the correct description of the mechanism of action of a copper IUD?
A. These inhibit ovulation and implantation as well as alter
the quality of cervical mucus to prevent or retard entry of
sperms.
B. These increase phagocytosis of sperms within the uterus
and the certain ions released from it suppress sperm motility and the fertilising capacity of sperms.
C. Ovum and sperms are prevented from physically meeting.
D. These prevent conception by blocking the entry of sperms through the cervix.

## Answer: B

4. Intentional or voluntary termination of pregnancy before full term is called medical termination of pregnancy (MTP) or induced abortion. Which of the following is incorrect about MTP?
A. MTP has a significant role in decreasing the population.
B. Government of India legalised MTP in 1971 with some strict conditions to avoid its misuse.
C. $M T P_{s}$ are considered relatively safe during the first trimester in comparison to second trimester abortions.
D. MTP is not allowed if the pregnancy is the result of rape.

## Answer: D

5. If the two genes are having $\%$ of recombination less than $50 \%$, then the progeny of $F_{2}$ generation will show
A. higher number of the recombinant types
B. segregation in the expected $9: 3: 3: 1$ ratio
C. segregation in 3:1 ratio
D. higher number of the parental

## Answer: D

## - Watch Video Solution

6. Identify parts labelled $A, B$, and $C$ in the given diagram and select the correct option.


| A | B | C |
| :--- | :--- | :--- |
| Negatively <br> charged DNA | Positively charged <br> histone octamer | H1 <br> histone |

A.
B.

| A | B | C |
| :--- | :--- | :--- |
| H1 | Negatively <br> histone <br> Charged DNA | Positively charged <br> histone octamer |

C. histonenisisene octamer fratased owd
D.

| A | B | C |
| :--- | :--- | :--- |
| H1 | Negatively charged <br> histone | Negatively <br> histone octamer |

Answer: C
7. Select the two correct statements out of the four (1-4) given below about lac operon.

1. Glucose or galactose may bind with the repressor and inactivate it
2. In the absence of lactose the repressor binds with the operator region
3. The z-gene codes for permease
4. This was elucidated Francois Jacob and Jacque Monod The correct statements are :
A. I and II
B. I and III
C. II and IV
D. I and II

## - Watch Video Solution

8. Sometimes the change in allelic frequency is so different in the new sample of the population that they become a different species. The original drifted population create a different population. This is called
A. Founder effect
B. Bottleneck effect
C. Metapopulation effect
D. Gene migration

## Answer: A

9. How many of the following diseases are transmitted by contaminated food and water?
[Typhoid, Ringworms, Pneumonia, Common cold, Dengue, Amoebiasis, Chikungunya]
A. One
B. Two
C. Three
D. Four

## Answer: B

## D Watch Video Solution

10. Select the incorrect statement from the following.
A. Through vaccines, antigenic proteins of pathogen or dead or weakened pathogens are introduced in the body.
B. Anti-venom provides active immunity.
C. Anti-histamines control allergy
D. Both (a) and (b)

## Answer: B

## D Watch Video Solution

11. If the protoplast of tomato is fused with potato protoplast and grown as new plant, it will be known as
A. Explant
B. Somaclones
C. Callus
D. Somatic hybrid

## Answer: D

## D Watch Video Solution

12. Mark the incorrect statement.
A. Insect and pest infestation is one of the major causes for
large scale destruction of crop plants.
B. Breeding method for insect pest resistance involves the special steps that are not similar to use in other agronomic traits such as yield or quality.
C. Malnutrition of micronutrients and vitamins can be termed as hidden hunger.
D. Somaclones are genetically identical to original plants.

## Answer: B

## - Watch Video Solution

13. Which of the following describes out-crossing ?
A. Mating of more closely related Individuals within the
same breed for 4-6 generations.
B. This is the practice of mating of animals within the same
breed, but having no common ancestors en either side of their pedigree up to 4-6 generations.
C. Superior males of one breed are mated with superior females of another breed (of same species).
D. Male and female animals of two different species are mated.

## Answer: B

## - Watch Video Solution

14. Monascus purpureus is a yeast used commercially in the production of
A. Ethanol
B. Streptokinase for removing clots from the blood vessels
C. Citric acid
D. Blood cholesterol lowering statins

## Answer: D

## - Watch Video Solution

15. Which of these is not the feature of a cloning vector?
A. Ori supporting high copy number
B. Selectable marker
C. Resistant to the action of restriction enzymes
D. Presence of cloning site

## Answer: C

16. Primers used in PCR must be:
A. $3^{\prime}$-end specific
B. 5'-end specific
C. It can be 3 '-end specific or 5 '-end specific.
D. Primers are not needed in PCR.

## Answer: A

## D Watch Video Solution

17. The variant of cry genes used to control corn borers is
A. crylAc
B. crylAb
C. cryllAb
D. Both (a) and (b)

## Answer: B

## - Watch Video Solution

18. Which of the following locations acts as the reservoir for nitrogen cycle?
A. Atmosphere
B. Sedimentary bedrock
C. Soil
D. Fossilised plant and animal remains

## Answer: A

19. All of the following contributed to Mendel's success, except
A. Mendel's selection of pea plant for experiments
B. Application of mathematical knowledge
C. Working on small sampling size at a time
D. Taking one character at a time.

## Answer: C

## - Watch Video Solution

20. Select the incorrect statement.
A. A genus comprises of a group of related species which has more characters in common in comparison to species
of other genera.
B. Higher the category, greater is the difficulty of determining the relationship to other taxa at the same level.
C. Going higher from species to kingdom, the number of common characteristics goes on increasing.
D. All organisms, including plants and the animal kingdom, have species as the lowest category.

## Answer: C

## - Watch Video Solution

21. Which organism does not produce oxygen during photosynthesis?
A. Anabaena
B. Funaria
C. Higher plants
D. Rhodospirillum

## Answer: D

## - Watch Video Solution

22. Which one is smallest among the following
A. TMV
B. Bacteriophage
C. Neurospora
D. E. coli

## - Watch Video Solution

23. The second-largest phylum of invertebrate animals is:
A. Annelida
B. Aschelminthes
C. Mollusca
D. Platyhelminthes

## Answer: C

24. Select the set of incorrect statements.
I. The circulatory system in Platyhelminthes has a single opening.
II. Annelids are the first animals to have true coelom and metamerism (true segmentation).
III. The space between the hump and the mantle is called the mantle cavity in which gills are present.
IV. Most of the echinoderms are bisexual.
A. I, II
B. III, IV
C. II, III
D. I, IV

Answer: D
25. How many of the following shows zygomorphic flowers with valvate/imbricate aestivation?

Indigofera, Lupin, Petunia, Aloe, Colchicum autumnale, Sesbania,
Trifolium, Solanum
A. 3
B. 4
C. 5
D. 6

## Answer: B

26. growth/annual rings are formed by the activity of
A. Cambium
B. Secondary xylem
C. Phellogen
D. Xylem and phloem

## Answer: A

## - Watch Video Solution

27. How many spermathecae are found in the male cockroach?
A. One
B. One pair
C. 2 pairs
D. none

## Answer: D

## D Watch Video Solution

28. In Periplaneta americana, the blood vascular system is of
$\qquad$ type. Blood vessels are $\qquad$ B $\qquad$ . The visceral organs are located in $\qquad$ C $\qquad$ - _____C $\qquad$ is filled
with a fluid which is composed of $\qquad$ D $\qquad$ and
$\qquad$ E $\qquad$ .
$\begin{array}{lllll}A & B & C & D & E \\ \text { Alosed } & \text { absent } & \text { Enterocoel } & \text { Plasma } & \text { Haemocytes }\end{array}$
B.
A
B
C
$D \quad E$
open Poorly developed Haemooel RBC Haemolymph
C.
D.
$A \quad B$
C
D
$E$
open Poorly developed Haemooel plasma Haemocytes

## Answer: A

## - Watch Video Solution

29. The axoneme is found in
A. Cilia
B. Flagella
C. Microbodies
D. Both $(A)$ and $(B)$

## - Watch Video Solution

30. Assertion : Competitive inhibitor is also called as substrate analogue.

Reason : It resembles the enzymes in structure.
A. Both 1 and 2 are correct
B. 1 is correct and 2 is incorrect
C. 1 is incorrect and 2 is correct
D. Both are incorrect.

## Answer: B

- Watch Video Solution

31. Analyze the events occurring during every stage of the cell cycle, how the amount of DNA content (C) per cell changes and select the correct option.
A. DNA content becomes doubled during $S$ phase of cell cycle
B. DNA content is reduced to half during anaphase
C. DNA content remain same during meiosis I
D. Both (a) and (b)

## Answer: D

## - Watch Video Solution

32. Which of the following statement is incorrect?
A. Different substances move independently along their concentration gradient in mass flow.
B. Active absorption of ions from the soil by the root is mainly affected by respiratory activity of root.
C. The translocation of organic solutes in sieve tube members is supported by mass flow.
D. Root pressure develops due to active absorption.

## Answer: A

## - Watch Video Solution

33. How many electron and protons are required to fix a dinitrogen?
A. 32 each
B. 8 each
C. 6 each
D. 4 each

## Answer: B

## - Watch Video Solution

34. ATP as well as NADPH $+H^{+}$both are required during the conversion of _____ in $C_{3}$ cycle
A. RUBP $+\mathrm{CO}_{2} \rightarrow \mathrm{PGA}$ (2 molecules)
B. $P G A \rightarrow P G A L$
C. $P G A L \rightarrow D H A P$
D. Frucotse 1,3-biphosphate $\rightarrow$ Glucose

## Answer: B

## - Watch Video Solution

35. In the election transport chain the correct sequence of eletron acceptor is
A. Cytochrome a, $a_{3}, \mathrm{~b}, \mathrm{c}$
B. Cytochrome b, c, a, $a_{3}$
C. Cytochrome b, $c_{3}$, a, $a_{3}$
D. Cytochrome c, b, a, $a_{3}$

Answer: B
36. Ethylene is highly effective in fruit ripening. It enhances the respiration rate during ripening of fruits, this rise in rate of respiration is called?
A. Respiratory climactic
B. Respiratory quotient
C. Respiratory effect
D. Respiratory quiescence

## Answer: A

## D Watch Video Solution

37. PEM (protein-energy malnutrition) that affects the infants results in
A. Marasmus
B. Kwashiorkor
C. Pot-bellied
D. Obesity.

## Answer: A

## - Watch Video Solution

38. Moist cuticle is the respiratory organ in
A. Insects
B. Earthworms
C. Aquatic arthropods and molluscs
D. Amphibians like frogs

## - Watch Video Solution

39. ECG is a graphical representation of the electrical activity of the heart during a cardiac cycle. Identify the incorrect interpretation.
A. P-wave: Depolarisation of the atria.
B. QRS complex: Ventricular systole.
C. T-wave: Ventricular repolarisation.
D. End of T-wave: End of ventricular systole.

## Answer: B

40. The amount of urine released by humans in a day is
A. 1 to 1.5 litres of slightly acidic ( $\mathrm{pH}-6.0$ ) urine having 45-60 gm of urea.
B. 1 to 1.5 litres of slightly acidic ( $\mathrm{pH}-6.0$ ) urine having $25-30$
gm of urea.
C. 0 to 1 litres of slightly alkaline ( $\mathrm{pH}-7.3$ ) urine having 25-30 gm of urea
D. 1 to 1.5 litres of slightly acidic ( $\mathrm{pH}-6.0$ ) urine having 45-60 gm of urea.

## Answer: B

41. Midbrain is located between
A. Thalamus/hypothalamus of forebrain and pons varolii of hindbrain
B. Thalamus/hypothalamus of forebrain and medulla of hindbrain
C. Olfactory lobe of forebrain and pons varolii of hindbrain
D. Olfactory lobe of forebrain and medulla of hindbrain

## Answer: A

## (D) Watch Video Solution

42. Thymosins play role in
A. Cell-mediated immunity only
B. Humoral immunity only
C. Both cell-mediated and humoral immunity
D. Neither cell-mediated and nor humoral immunity

## Answer: C

## - Watch Video Solution

43. Which set of animals doesn't belong to the same phylum?
A. Roundworm, Hookworm, Filarial worm
B. Earthworm, Leech, Nereis
C. Sea pen, Brain coral
D. Devil fish, King crab, Chiton

## - Watch Video Solution

44. Respiratory quotient for tripalmitin is
A. 0.9
B. 0.7
C. 1.0
D. 1.4

## Answer: B

## D Watch Video Solution

45. The periderm includes
A. Cork
B. Cork cambium
C. Secondary cortex
D. All of these

## Answer: D

## - Watch Video Solution

46. Which of the following is correct about phenylketonuria?
A. It is an example of pleiotropy
B. It is an autosomal dominant disease
C. It is caused due to single gene mutation
D. Both (A) and (C)

## - Watch Video Solution

47. Two features present in meiosis but absent in mitosis are
A. Pairing of non-homologous chromosomes
B. Pairing of homologous chromosomes and recombination between them
C. Replication of chromosome
D. All of these

## Answer: B

## - Watch Video Solution

48. Which of the following animals have different symmetry in comparison to the other three?
A. Pila
B. Pleurobrachia
C. Sycon
D. Asterias

## Answer: A

## - Watch Video Solution

49. Stomata are not found in
A. Algae
B. Mosses

## C. Ferns

D. Liverworts

## Answer: A

## - Watch Video Solution

50. Zygote undergoes cleavage while moving through the isthmus of the oviduct towards the uterus and forms daughter cells called blastomeres. The embryo with 8 to 16 blastomeres is called a $\qquad$ A____ which continues to divide to form $\qquad$ B $\qquad$ in uterus. The blastomeres in the $\qquad$ B are arranged into an outer layer called___ A____and an inner group of cells called the inner cell mass.
A.
A
B

## C

Morula Blastocyst Haemocytoblast
B. $\left|\begin{array}{ccc}\text { A } & \text { B } & \text { C } \\ \text { Morula } & \text { Gastrula } & \text { Haemocytoblast }\end{array}\right|$
C. $\left|\begin{array}{ccc}\text { A } & \text { B } & \text { C } \\ \text { Blastula } & \text { Gastrula } & \text { Trophoblast }\end{array}\right|$
D. $\left|\begin{array}{ccc}\text { A } & \text { B } & \text { C } \\ \text { Morula } & \text { Blastula } & \text { Trophoblast }\end{array}\right|$

## Answer: D

## D Watch Video Solution

51. Mycoplasmas, the smallest cells, are only (i) $\mu \mathrm{m}$ in length while bacteria could be (ii) $\mu \mathrm{m}$. Among multicellular organisms, human red blood cells are about (iii) $\mu \mathrm{m}$ in diameter. Identify (i), (ii), and (iii).
A.
(i) (ii)
(iii)
$\begin{array}{lll}0.5 & 5-7 & 7\end{array}$
B. $\left\lvert\, \begin{array}{lll}\text { (i) } & \text { (ii) } & \text { (iii) } \\ 0.3 & 3-7 & 9\end{array}\right.$
C. $\left|\begin{array}{lll}(\mathrm{i}) & \text { (ii) } & \text { (iii) } \\ 0.3 & 3-5 & 4\end{array}\right|$
D. $\left|\begin{array}{lll}(\mathrm{i}) & \text { (ii) } & \text { (iii) } \\ 0.3 & 3-5 & 7\end{array}\right|$

## Answer: C

## - Watch Video Solution

52. The cellulosic cell wall is observed in members of
A. Protista
B. Plantae
C. Both (a) and (b)
D. Monera

## Answer: B

53. Read the following statements :
i. Open type circulatory systems are found in Arthropods.
ii. Pseudocoelomates are bilaterally symmetrical.
iii. Most of the sponges are radially symmetrical.
iv. Platyhelminthes have a tissue level of organization.

How many of the above statements are incorrect?
A. One
B. Two
C. Three
D. None

## Answer: B

## D Watch Video Solution

54. A man of 'A' bood group marries a woman of 'AB' bood group .Which types of progeny would indicate that man is heterozyguos?
A. O
B. A
C. B
D. $A B$

## Answer: C

## - Watch Video Solution

55. The essential chemical components of many coenzymes are
A. Nucleic acid
B. Carbohydrates
C. Vitamins
D. Proteins

## Answer: C

## - Watch Video Solution

56. Biological organisation starts with
A. Cellular level
B. Organismic level
C. Submicrospic molecular level
D. Tissue level

## - Watch Video Solution

57. Sea fur belongs to phylum A. Members of such phylum have:
A. Bilateral symmetry
B. Blind sac body plan
C. Metamerism
D. Triploblastic nature

## Answer: B

## - Watch Video Solution

58. Which of the following statement is incorrect about the phylum hemichordata?
A. Excretion by proboscis glands
B. Respiration by gills
C. Monoecious
D. Have a rudimentary structure in the

## Answer: C

## (D) Watch Video Solution

59. Cytoskeleton is made up of
A. Callus deposits
B. Cellulosic microfibrils
C. Proteinaceous filaments
D. Calcium carbonate granules

## D Watch Video Solution

60. Callus can form plantlets by altering the concentration of
A. Phytohormones
B. Amino sugars
C. Vitamins
D. Sugars

## Answer: A

61. Which of the following is correct with respect to biofortified food?
A. Wheat variety, Atlas 66, having a high lysine and tryptophan content.
B. vitamin $C$ enriched crop are bitter gourd, bathua, mustard, tomato
C. vitamin A enriched carrots, spinach, French and garden peas
D. iron and calcium enriched broad and lablab

## Answer: B

62. How many of the following structures/organs belong to the male reproductive system of a cockroach?
[Utricular gland, spermatheca, oothecal chamber, Phallic gland, seminal vesicles]
A. None
B. One
C. Two
D. Three

## Answer: D

## D Watch Video Solution

63. Dense connective tissue can be observed at all of the following locations, except
A. Ligament
B. Tendon
C. Beneath the skin
D. Skin

## Answer: C

## - Watch Video Solution

64. Select the incorrect statement.
A. Algin is obtained from Algae.
B. Cyanobacteria form mycorrhizae which helps in the absorption of phosphate
C. Salvinia, Selaginella and Azolla show heterospory.
D. The genome of TMV is RNA.

## Answer: D

## - Watch Video Solution

65. Conducting part of the tertiary bronchi and bronchioles end up in
A. Segmental bronchi
B. Segmental bronchiole
C. Respiratory bronchioles
D. Terminal bronchiole

## Answer: D

66. The process of conversion of organic nitrogen from dead material to ammonia is known as
A. Nitrification
B. Decomposition
C. Denitrification
D. Ammonification

## Answer: D

## - Watch Video Solution

67. Which of the following is incorrectly matched?
A. ABO Blood group in Humans - Multiple allelism.
B. Skin colour in human - Multiple allelism
C. Flower colour in Mirabilis - Incomplete dominance.
D. Phenylketonuria - Pleiotropism.

## Answer: B

## - Watch Video Solution

68. Vasa recta is associated with
A. Most of cortical nephrons
B. Few of cortical nephrons only
C. Juxta medullary nephrons
D. Urinary bladder

## - Watch Video Solution

69. Rubisco enzyme can act both as carboxylase and as oxygenase. In $C_{4}$ cycle it functions as
A. Oxygenase only
B. Carboxylase only
C. Mainly carboxylase activity minimizing oxygenase.
D. Oxygenase but sometimes as carboxylase

## Answer: C

## - Watch Video Solution

70. Which of the following is not a post pollination development?
A. A Formation of callose plugs in pollen tube
B. Division of pollen cell into tube cell and generative cel.
C. Secretion of pectinase and other hydrolytic enzyme.
D. Swelling of tube cell and formation of pollen tube.

## Answer: B

## - Watch Video Solution

71. Which of the following is not the example of synovial joint?
A. Between humerus and pectoral girdle
B. Between atlas and axis
C. Between carpal and metacarpal of thumb
D. Between the adjacent vertebrae

## Answer: D

## D Watch Video Solution

72. How many of the given statements are correct?
A. Hypothalamus is the centre for eating and drinking.
B. Corpus callosum is made up of nerve fibres.
C. ADH is synthesized by the posterior pituitary.
D. Balancing by semicircular canals is done by the macula.
A. One
B. Two
C. Three

## Answer: B

## - Watch Video Solution

73. According to the taxonomic hierarchy, which of the following statements are correct?
A. Felis and Canis are placed under same family.
B. Potato and brinjal belong to the same genus.
C. Classes of plants with few similar characters are assigned to higher category called order.
D. Panther and Felis domestica are placed in different families.

## - Watch Video Solution

74. Dikaryon formation is characteristic of
A. Ascomycetes and Basidiomycetes
B. Phycomycetes and Ascomycetes
C. Basidiomycetes and Zygomycetes
D. Phycomycetes and Deuteromycetes

## Answer: A

75. Analyze the diagram given below, and select the correct option regarding part labeled as C.

A. 70 S subunit formed during eukaryotic translation
B. 70S subunit formed during prokaryotic translation
C. 80 S subunit formed during prokaryotic translation
D. 805 subunit formed during eukaryotic translation

Answer: B
76. The lining of each seminiferous tubule is made up of 2 types of cells - A and B. 'A' cells undergo meiosis and result in sperm formation. ' $B$ ' cells secrete
A. Testosterone
B. Estrogen
C. FSH
D. None of these

## Answer: D

## - Watch Video Solution

77. The largest part of the fallopian tube is
A. Isthmus
B. Fimbriated end
C. Ampulla
D. Uterine part of Fallopian tube.

## Answer: C

## - Watch Video Solution

78. The mRNA Consisting of 282 nucleotides can produce a polypeptide chain of
A. 282 amino acids
B. 120 amino acids
C. 93 amino acids
D. 94 amino acids

## Answer: C

## - Watch Video Solution

79. "Every species has a right to live". What kind of value implies the conservation of biodiversity?
A. Narrowly utilitarian
B. Broadly utilitarian
C. Aesthetic
D. Ethical

## Answer: D

80. In a comparative study of grassland ecosystem and pond ecosystem it may be observed that:
A. The abiotic components are almost similar.
B. The biotic components are almost similar
C. Both biotic and abiotic component are different.
D. Primary and secondary consumers are similar

## Answer: C

## - Watch Video Solution

81. Which of the statement is not applicable to mutations?
A. These are discontinuous variations
B. Usually recessive
C. Usually harmful
D. Predictable

## Answer: D

## D Watch Video Solution

82. Which of the following set shows convergent evolution?
A. Anteater and Numbat
B. Lemur and Bobcat
C. Spotted Cuscus and Wolf
D. Mole and flying Phalanger

## - Watch Video Solution

83. In eukaryotic transcription, heteronuclear RNA (hnRNA) is transcribed by
A. RNA polymerase I
B. RNA polymerase II
C. RNA polymerase III
D. All of these

## Answer: B

## - Watch Video Solution

84. Vertical distribution of different species occupying different levels is called
A. Stratification
B. Eutrophication
C. Productivity
D. Biodiversity

## Answer: A

## - Watch Video Solution

85. Crossing over occurs between
A. Two different genomes
B. Homologous chromosome
C. Sister chromatid
D. Non homologous chromosome.

## Answer: B

## D Watch Video Solution

86. Select the set of opioids.
A. Morphine and hashish
B. Codeine and charas
C. Heroin and marijuana
D. Morphine and heroin.

## Answer: D

87. Blood and bone marrow tests are mainly done for analysis of
A. Leukemia
B. Gastric carcinoma
C. Skin carcinoma
D. Brain tumour

## Answer: A

## (D) Watch Video Solution

88. When both alleles of a pair are fully expressed in heterozygotes, they are called

A. Lethals

B. Codominants
C. Incomplete dominants
D. Recessive allele.

## Answer: B

## - Watch Video Solution

89. The method of breeding, in which superior males of one breed are mated with superior females of another breed is called
A. Inbreeding
B. Inter-specific hybridization
C. Outcrossing
D. Cross Breeding

## Answer: D

## - Watch Video Solution

90. Which layer of uterus exhibits strong contraction during parturition?
A. Perimetrium
B. Myometrium
C. Endometrium
D. Mesovarium.

## Answer: B

