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## BIOLOGY

## BOOKS - NTA MOCK TESTS

## NTA NEET SET 36

## Biology

1. While correcting the biology paper of a student, the teacher found that the had written the scientific name of mango in four place as follows. Which one out of these is the correct way to writing the scientific name?
A. Magnifera indica linn
B. Magniferaindica. linn
C. Magnifer a indicalinn
D. Magniferaindicalinn

## Answer: D

## (D) Watch Video Solution

2. Which of these gases were not used by Stanley Miller in his electric discharge experiment?
A. Methane
B. Hydrogen
C. Water vapour
D. Nitrogen

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3. Which of the following disease is caused by bacteria ?
A. Red rot of sugarcane
B. Late blight of potato
C. Black rot of crucifers
D. Brown rust of wheat

Answer: C
4. The salt concentration is $30-35$ ( salinity in parts per thousand) in
A. inland water
B. sea
C. hypersaline lagoons
D. estuaries

## Answer: B

## - Watch Video Solution

5. In a trihybrid cross, the different types of genotypes obtained in the $F_{2}$ generation is
A. 8
B. 18
C. 27
D. 36

## Answer: C

## D Watch Video Solution

6. In these following correct statement about the heart are
I. The sino-atrial node (SAN) is present in the right top corner of the right atrium
II. Ligamentum arteriosum connects the aorta and pulmonary trunk.
III. Purkinje fibres constituent a portion of the bundle of His .
IV. The pulmonary trunk connects the right ventricle to the lungs
A. I and IV
B. II and IV
C. I, III and IV
D. I, II and III

## Answer: C

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7. According to the central pollution control Board PM 2.5 are responsible for causing the greatest harm to human health.

PM 2.5 stands for
A. Particulate matter which are 2.5 micrometers or less in diameter
B. Particulate matter which are 2.5 micrometers or more in diameter
C. Particulate matter which are 2.5 nanometers or less in diameter
D. Particulate matter which are 2.5 nanometers or more in diameter

## Answer: A

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8. Arrange the following types of soil in increasing order based on the size of the mineral particles in them.
A. Silt $<C l a y<$ Fine sand
B. Clay $<$ Silt $<$ Fine sand
C. Fine sand $<C l a y<$ Silt
D. Silt $<$ Fine sand $<$ Clay

## Answer: B

## - Watch Video Solution

9. Alpha thalassemia is controlled by
A. one gene located on chromosome 11
B. one gene located on chromosome 16
C. two gene located on chromosome 11
D. two gene located on chromosome 16

## Answer: D

## D Watch Video Solution

10. How many time dose a molecule of urea have to pass through the heart in its journey from liver to kidney?
A. 0
B. 1
C. 2
D. 4

## D Watch Video Solution

11. A subspecies of plains zebra that lived in South Africa has recently become extinct is
A. thylacine
B. dodo
C. quagga
D. stellar sea cow

## Answer: C

12. The number of nephrons present in a human being is about
A. one lakh
B. two lakhs
C. ten lakhs
D. twenty lakhs

## Answer: D

## D Watch Video Solution

13. Zoospores are
A. motile , asexual spores found in fungi and algae
B. motile, sexual spores found in fungi and algae
C. non-motile , asexual spores found in fungi and algae
D. non - motile , sexual spores found in fungi and algae

## Answer: A

## D Watch Video Solution

14. Chipko movement in which local women showed enormous bravery in protecting trees by hugging them occurred in
A. 1731 in Jodhpur led by Amrita Devi Bishnoi
B. 1974 in Garhwal Himalayas led by Gaura Devi
C. 1983 in Uttara Kannada led by Pandurang Hegde
D. 1985 in Maharashtra led by Medha Patkar

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15. In Litchi, the third integument which develops from the funicle at the base of the ovule is
A. sarcotesta
B. operculum
C. caruncle
D. aril

## Answer: D

16. By the process of leaching ,.......... nutrients go down into the soil horizon and get precipitated.
A. water soluble, inorganic
B. water insoluble, inorganic
C. water soluble, organic
D. water insoluble, organic

## Answer: A

## - Watch Video Solution

17. Which layer of the anther wall is the not derived from archesporium?
A. epidermis
B. endothecium
C. middle layer
D. tapetum

## Answer: A

## - Watch Video Solution

18. Which of these are common to hydrach succession and xerarch succession?
A. Pioneer species
B. Seral stages
C. Climax community
D. Area where succession begins

## Answer: C

19. The given below punnet squares represents

A. complete dominance and incomplete dominance
B. complete dominance and co-dominance
C. incomplete dominance and co-dominance
D. complete dominance, co - dominance and incomplete dominance

## Answer: C

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20. The first biosphere reserve established in india is
A. Pachmarhi Biosphere Reserve
B. Nokrek Biosphere Reserve
C. Sundarbans Biosphere Reserve
D. Nilgiri Biosphere Reserve

## Answer: D

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21. Select the incorrect statement.
( i ) The essence of the Darwinian theory of evolution in natural selection
(ii) Evolution is a directed process in the sense of determinism
(III) The geological history of the earth is not related to the biological history of the earth
(IV ) During evolution ,the rate of appearance of new forms is linked to the life cycle
A. (i) and (ii)
B. (ii) and (iii)
C. (i) and (iv)
D. (ii) and (iv)

## Answer: B

## (D) Watch Video Solution

22. The part of the embryosac which help in guiding the pollen tube towards it is m....... (P) ........and it is through
A. $P$ is antipodal cells and $Q$ is thigmotaxis
B. $P$ is egg and $Q$ is chemotaxis
C. $P$ is a secondary nucleus and $Q$ is thigmotaxis
D. $P$ is synergids and $Q$ is chemotaxis

## Answer: D

## - Watch Video Solution

23. Observed the following image of a chromosome. It has two dominant genes $A$ and $B$ located as depicted. What will be
the correct gene placement at position i and ii ?

A. i: A and ii: B
B. i: a and ii: B
C. i: and ii: b
D. i: either A or a and ii: either B or b

## Answer: A

## D Watch Video Solution

24. Osmotrophs are components of
A. grazing food chain
B. detritus food chain
C. both grazing and detritus food chains
D. neither grazing nor detritus food chain

## - Watch Video Solution

25. Osmotrophs are components of
A. Grazing food chain
B. detritus food chain
C. both grazing and detritus food chain
D. Neither grazing nor detritus food chain

## Answer: B

## D Watch Video Solution

26. Which of these characters cannot be transferred from a male parent to a male progeny in Drosophila?
A.

B.

C.



## Answer: A

## - Watch Video Solution

27. All of the following are drawbacks of Darwin's theory except
A. This theory explains survival of the fittest but doesn't explain arrival of the fittest.
B. This theory does not explain the development of
C. This theory doesn't explain over - specialization of some organs like tusk of elephants
D. This theory doesn't explain the cause of struggle for existence.

## Answer: D

## (D) Watch Video Solution

28. An animal species has 40 chromosomes in its somatic cells. The number of chromosomes present in the somatic cells of a monosomic individual of the same species is
A. 20
B. 40
C. 39
D. 19

Answer: C

## (D) Watch Video Solution

29. India's share of the global species diversity is
A. $2.4 \%$
B. $8.1 \%$
C. $14 \%$
D. $11 \%$

Answer: B
30. A red colour flower with long corolla tubes, copious amount of nectar and without fragrance would mostly be
A. entomophilous
B. chirophtherophilous
C. ornithaophilous
D. anemophilous

## Answer: C

## - Watch Video Solution

31. From the organisms given below, select the odd one on the basis of symmetry shown by them.
A. Meandrina
B. Taenia
C. Psittacula
D. Limulus

## Answer: A

## - Watch Video Solution

32. The microbe associated with root nodule formation is
A. Trichoderma
B. Rhizobium
C. Azotobacter
D. Monascus

## D Watch Video Solution

33. Determine the correct sequence of the process of nutrition in a human being .
A. Mastication of food and formation of bolus
B. Production of chyme
C. Deglutition
D. Passage of unabsorbed, undigested substances to the
caecum
E. Digestion in the most coiled part of alimentary canal
A. A,C,E,B,D
B. A,E,C,B,D
C. $A, C, B, E, D$
D. $A, B, C, E, D$

## Answer: C

## - Watch Video Solution

34. Match the name of bones with their respective number and select the correct option from the codes given below .

No Name of bones No Number of bones
$I \quad$ Carpals $\quad A \quad 14$

II Metacarpals $B$
III Tarsals $C \quad 8$
IV $\begin{array}{lll}\text { Phalanges } & D\end{array}$
A. I-C,II-D, III-B,IV-A
B. I-A , II-B , III-D, IV-C
C. I-C, II-B, III-D,IV-A
D. I-A , II-D , III-B , IV-C

## D Watch Video Solution

35. The nerve centres which control the body temperature and the urge for eating are contained in
A. Hypothalamus
B. Pons
C. Cerebellum
D. Thalamus

Answer: A

- Watch Video Solution

36. A 35 year old man has extremely long limbs and digits. He also has. Severe disfigurement of the facial features. Which of the following could be a probable cause for it ?
A. Hypersecretion of a hormone from neurohypophysis
B. Hypersecretion of a hormone from neurophypophysis
C. Hypersecretion of a hormone from thyroid gland
D. Hypersecretion of a hormone from adrenal gland

## Answer: B

## D Watch Video Solution

37. Which of the following statements regarding infertility is incorrect?
A. Infertility is the inability to produce children in spite of regular unprotected sexual intercourse.
B. Infertility could be present in the male or female partner or both of them
C. Infertility is caused only due to physical reasons.
D. Assisted Reproductive Technologies can prove to be a great help for infertile couples.

## Answer: C

## D Watch Video Solution

38. Read the given Statements regarding immunization and select the option that identifies the correct ones .
I. The principal of vaccination is based on the memory of the
immune system .
II.The antibodies produced in the body against antigens neutralise the pathogenic agents before the actual infection.
III. Hepatitis B vaccine is prepared by using a virus in recombination DNA technology.
IV. Antibiotics are given directly in elicit a quick immune response.
A. I and III
B. II,III and IV
C. I , II and III
D. I and IV

## Answer: D

39. Complete the following paragraph by selecting the correct options for the blanks A, B , and C
......A.....is the structural and functional unit between the embryo and the maternal body. It is connected to the embryo by ........B....... It also acts as an ................... tissue and secretes many hormones essential for maintaining pregnancy.
A. A: placenta , B: chorionic villi, C: endocrine
B. A: placenta , B: umbilical cord, C: endocrine
C. A: placenta , B: umbilical cord, C: exocrine
D. A: placenta , B: chorionic villi, C: exocrine

## Answer: B

## - Watch Video Solution

40. How many of the following are examples of hormones which interact with intracellular receptors ?
( Cortisol, testosterone, estradiol , thyroxine ,insulin , epinephrine )
A. 5
B. 4
C. 6
D. 3

## Answer: B

## - Watch Video Solution

41. Determine the incorrect statement regarding the process of female gamete production.
I. The oogonia keep on adding in the overy till menopause .
II. The primary oocytes are halted are prophase -I of meiotic division.
III. The fluid-filled cavity present in the secondary follicles is called the atrium.
IV. The secondary oocyte forms a membrane called zone glomerulosa around it.
A. II,III and IV
B. I,III and IV
C. I and II
D. III and IV

## Answer: B

42. Read the following statements. Identify which of them are true and which of them are false and select the correct option.
I. Ascaris, commonly known as pinworm, is responsible for causing ascariasis.
II. The acid present in the stomach acts as a physiological barrier and prevents microbial growth.
III. The pathogen responsible for causing elephantiasis is a fungus belonging to genus Microsporum.

IV Infection diseases like tetanus and pneumonia have been largely controller using vaccines.
A. A - True, B - False , C-True , D-False
B. A -False , B - True, C - False , D - True
C. A -False , B - True, C - True , D - False
D. A -False , B-False, C-True , D-True

## Answer: B

## - Watch Video Solution

43. Select the correct option for blanks $A$ and $b$ and complete the following sentence.
.........A....... and .............. . are alcoholic beverages obtained without distillation.
A. A - wine , B - beer
B. A - whisky , B - rum
C. A - wine , B - whisky
D. A - rum , B - beer

## - Watch Video Solution

44. Read the following statements about adrenal hormones.

Select the correct one.
A. Aldosterone sitmulates the reabsorption of $\mathrm{Ca}^{2+}$ and water from the renal tubules.
B. Cortisol is a major glucocorticoid
C. Glucocorticoids promote cellular uptake and utillisation of amino acids.
D. Androgens helps in the maintenance of body fluid volume and osmotic pressure only.

## D Watch Video Solution

45. In sponges, the water entres the body through minute pores known as
A. Osculum
B. Ostia
C. Spongocoel
D. Spicules

## Answer: B

46. In a myofibril, the band which contains only actin filament is also known as
A. Isotropic band
B. Anisotropic band
C. Inotropic band
D. Dark band

## Answer: A

47. Observe the diagram given below.


Which of the following is a correct match ?
A. A: Pigmented and opaque structure, B : The layer made up of dense, connective tissue
B. B : The layer which has photoreceptor cells, C: The
C. C : The third cranial nerve, D : The central pit present in macula lutea
D. A : Transparent and pigmented structure, D : The central pit present in macula lutea

## Answer: B

## D Watch Video Solution

48. Which of the following methods can prove to be useful to avoid pregnancy caused as a result of rape or casual unprotected sexual intercourse?
A. Insertion of diaphragm within 72 hours of rape
B. Administration of spermicidal jellies within 72 hours of rape
C. Administration of oestrogens rich pills within 72 hours
of rape
D. Administration of combined rich pills within 72 hours of rape

## Answer: D

## - Watch Video Solution

49. The organ which acts as a filter of blood is
A. a small solid structure present in the right side within
B. a large bean - shaped organ present in the left side within the abdomen
C. a lobed organ located near the heart
D. also called MALT

## Answer: B

## (D) Watch Video Solution

50. The 1-3 coiled structures present within the testicular lobules are
A. responsible for the transportation of gametes .
B. responsible for the formation of androgens.
C. the site where sperms are produced
D. the site where defective sperms are destroyed.

## Answer: C

## - Watch Video Solution

51. From the following, how many amino acids contain sulphur in their chemical structure?

Methionine, histidine, threonine, cysteine, alanine, tryptophan, valine
A. Three
B. Five
C. Two
D. Four

## ( Watch Video Solution

52. Mark the correct statement/s about arithmetic growth.
A. In mitosis, only one daughter cell continues to divide while the other differentiates and matures.
B. $L_{t}=L_{0}+r t$
C. The simplest expression of this growth is exemplified by
a root elongating at a constant rate.
D. All of the above

## Answer: D

53. Which of the following reactions does not release $\mathrm{CO}_{2}$ ?
A. Alcohol fermentation
B. Aerobic respiration
C. Lactic acid fermentation
D. Amphibolic pathway

## Answer: C

## - Watch Video Solution

54. In light reaction, pigments are organised into two photochemical complexes called
A. Photosystem - I and Photosystem - II
B. Light harvesting complexes
C. Antennae
D. None of the above

## Answer: B

## - Watch Video Solution

55. Which of the following statements are correct regarding

Deuteromycetes?
I. Deuteromycetes are called perfect fungi.
II. Members of Deutermycetes mycetes were often moved to ascomycetes or basidiomycetes once their sexual stages were studied.
III. Large number of (No Suggestions) are decomposers that help in nutrient cycling.
IV. Their mycelium is aseptate and unbranched.
A. I , II and IV
B. II and III
C. III and IV
D. I , III and IV

## Answer: B

## (D) Watch Video Solution

56. Read the following statements about xylem elements.

Which ones are true?
I. The gymnosperms lack xylem vessels, instead they possess
tracheids.
II. Xylem parenchyma is involved in upward movement of water.
III. Tyloses occurs in xylem fibers.
A. I and II
B. Only I
C. II and III
D. Only III

## Answer: B

- Watch Video Solution

57. Choose the incorrect statement about gymnosperms.
A. The cones bearing megasporphylls with ovules or megsporangia are called female strobili .
B. In gymnosperms , the male and the female gametophytes do not have an independent free - living existence.
C. The gymnosperms are homosporous in nature .
D. One of the gymnosperms, the giant redwood tree Sequoia is one of the tallest tree species.

## Answer: C

## (D) Watch Video Solution

58. Cell A and B are adjacent to each other. Analyse the below table and the choose the correct result.

| Parameters | Cell A | Cells B |
| :--- | :--- | :--- |
| Osmotic pressure | 10 | 8 |
| Turgor pressure | 8 | 4 |

A. Water will move from Cell $B$ to $A$
B. Water will show no movement .
C. Water will move from Cell $A$ to $B$
D. Solute will move across both the cells.

## Answer: C

## D Watch Video Solution

59. Identify the correct match between the types of stem modification and their examples.

Column I Column II
i. Epigyny a.Peach
ii.Perigyny b.China rose
iii.Hypogyny c.Cucumber
A. i-b, ii -a , iii - c
B. $i-a, i i-c, i i i-b$
C. $\mathrm{i}-\mathrm{a}, \mathrm{ii}-\mathrm{b}, \mathrm{iii}-\mathrm{c}$
D. $\mathrm{i}-\mathrm{c}, \mathrm{ii}-\mathrm{a}, \mathrm{iii}-\mathrm{b}$

## Answer: D

- Watch Video Solution

60. Chlamydomonas and chlorella were categorized under which kingdom in the five - kingdom classification?
A. Fungi
B. Protozoa
C. Protista
D. Monera

## Answer: C

## D Watch Video Solution

61. Which of the following is an example of the type of placentation given below?

A. Dianthus and Primrose
B. Sunflower and Marigold
C. Tomato and Lemon
D. Argemone and Mustard

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62. What are the two main components of assimilatory energy produced in Hill's reaction ?
A. ADP and NADH
B. ATP and NADPH
C. Glucose and ATP
D. FAD and NAD

Answer: B
(D) Watch Video Solution
63. The chemiosmotic hypothesis suggests that the ATP are produced on the inner membrane of mitochondria due to :
A. $F_{1}$ particles present between the inner and outer membrane of mitochondria .
B. Involvement of oxygen as the electron acceptor.
C. Creation of a proton electrochemical gradient across inner member of mitochondria.
D. Enzymes present in the mitochondrial matrix.

## Answer: C

## D Watch Video Solution

64. In humans, the activation of sympathetic nervous system stimulates the adrenal medulla to release certain hormones that help in fight and fight response. A similar type of response in plants can be given by
A. auxin
B. Cytokinin
C. Abscisic acid
D. Ethylene

## Answer: C

## D Watch Video Solution

65. Slipper animalcule is an example of
A. Ciliated dinoflagellate
B. Ciliated protozoan
C. Sporozoan
D. Flagellated protozoan

## Answer: B

## - Watch Video Solution

66. Which of the following family can be associated with the characteristics given below?
(i) Racemose inflorescence.
(ii) Vexillary aestivation in corolla.
(iii) Bracteate, complete, bisexual, zygomorphic flower.
A. Solanaceae
B. Papilionaceae
C. Brassicaceae
D. Liliaceae

## Answer: B

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67. Which of the following is not a characteristic features of meristematic cell ?
A. Is shows the ability to divide actively .
B. More than one vacuole is present .
C. It shows prominent nucleus and abundant cytoplasm.
D. The meristematic cell has a thin cell wall due to presence of only cellulose.

## Answer: B

## (D) Watch Video Solution

68. Identify the correct sequence of stages involved in the reproductive cycle of fungi.
A. Karyogamy - Plasmogamy - Zygotic meiosis
B. Plasmogamy - Zygotic meiosis - Karyogamy
C. Zygotic meiosis - Karyogamy - Plasmogamy
D. Plasmogamy - Karyogamy - Zygotic meiosis

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69. Which of the following shows a correct difference between monocots and dicots ?
A.

| Character | Dicotyledon | Monocotyledon |
| :--- | :--- | :--- |
| Venation | Parallel venation | Reticulate venation |

B.
$\begin{array}{lcc}\text { Character } & \text { Dicotyledon } & \text { Monocotyledon } \\ \text { Flower } & \text { Trimerous } & \text { Tetramerous or pentamerous } \\ \text { Character } & \text { Dicotyledon } & \text { Monocotyledon } \\ \text { Vascular bundle } & \text { Ringed } & \text { Scattered }\end{array}$
D. More than one option is correct.

## Answer: C

70. In which of the following would you find retained endospermic tissue even after the formation of the seed?
A. Gram
B. Sunflower
C. Rice
D. Bean

## Answer: C

## D Watch Video Solution

71. Bt toxin is produced by a bacterium called Bacillus thuringiensis (Bt for short). These Bt toxin crystals contain by
a gene named cry which has many variants. Which one from the following produces a toxin that controls corn borer?
A. CryIAc
B. CrylAb
C. CryllAb
D. Both (A) and (C)

## Answer: B

## - Watch Video Solution

72. Read the following statements about animal tissue . Identify the true and false ones and select the correct option.
I. Adhering junctions along with cementing cell together facilitate the cells to communicate with each other by
connecting the plasma
II. Compound epithelium covers the moist surface of the buccal cavity. Pharynx and lining of ducts of salivary glands.
III. The striated muscle fibre is a thin elongated with point ends and multiple nuclei

IV . Cartilage is present in the tip of the nose and between the bodies of adjacent vertebrae.
A. I: False , II: True , III : False , IV : True
B. I: True , II: True , III : True , IV : False
C. I: False, II: False , III : True , IV : False
D. I : True , II: False , III: False , IV : True

## Answer: A

73. The drawing is of a magnified human liver cell.


Which of the following is true about structure labeled X ?
A. It is mainly found in cells associated with the synthesis of lipids and steroid hormones.
B. It is mainly found in cells away from the nucleus and transport its products to the chloroplast.
C.It is mainly associated with nuclear membrane reformation in late anaphase and packaging of protein and synthesis of glycolipids .
D. Is mainly associated with nuclear membrane reformation during telophase stage and transport its synthetic products to dictyosomes in plants .

## Answer: D

## - Watch Video Solution

74. In eukaryotes, which of these rRNA is not synthesized by RNA Polymerase I?
A. 28 S rRNA
B. 5 S rRNA
C. 5.8S rRNA
D. 18 S rRNA

## Answer: B

## - Watch Video Solution

75. Read the given statements and select the option that correctly sorts these with respect to $A$ and $B$ in the given flow chart.
(i) Molecular weight ranging from 18 to 800 daltons (Da) approximately
(ii) Proteins, nucleic acids, polysaccharides and lipids
(iii) Contain chemicals that have molecular weight more than 800 Da
(iv) Has monomers
(v) Generally has polymers

Living tissue


A Filtrate/Acid-soluble pool
B Retentate /Acid-insoluble
fraction or pellet
A. A : 1,2,3 and B : 4,5
B. A : 2,4 and B: 1,3,5
C. A : 1,4 and B : 2,3,5
D. A : 1,3,5 and B : 2,4

## Answer: C

76. Colchicine is a chemical that stop chromatids from separating during mitosis. If a cell is treated with colchicine, at which stage of mitosis will this cell reach but not complete ?
A. Anaphase
B. Metaphase
C. Telophase
D. Cytokinesis

## Answer: B

## - Watch Video Solution

77. Study the given diagram below of the stirred tank fermenter. What is the function of part labeled A ?

A. To maintain optimum pH
B. To control the foam within the reactor
C. To maintain optimum oxygen concentration.
D. To facilitate even mixing

## Answer: B

## D Watch Video Solution

78. A molecule of oxygen diffuses from the alveolar air space into an erythrocyte to from oxyhaemoglobin. How many time dose it need to diffuse through the cell membranes to reach the haemoglobin?
A. 3
B. 5
C. 6
D. 9

## Answer: B

## (D) Watch Video Solution

79. Which of the following is incorrect about a bacterial cell ?
A. The 70S ribosome is mainly associated with plasma
membrane and many a times shows polysome assembly.
B. The filament is the longest portion of the flagella and extends from the cell surface to the outside .
C. The plasma membrane extensions containing chromatophores basically helps in cellular respiration .
D. Gram staining is basically based on the thickness of peptidoglycan layer.

## Answer: C

## - Watch Video Solution

80. One E. Coli bacterium contains a hybrid DNA with one heavy $N^{15}$ Strand and one light $N^{14}$ Strand. It was allowed ti replicate for 3 hours in a medium containing $N^{14}$ What proportion of E. coli which will neither float nor sink in the test tube on ultra - centrifugation with CsCl ?
A. one out of $2^{8}$
B. one out of $2^{9}$
C. one out of $2^{10}$
D. one out of $2^{7}$

## Answer: B

## ( Watch Video Solution

81. Exonucleases, a type of nucleases that degrade nucleic acids, remove nucleotides from
A. Within the polynucleotide chain
B. End of the polynucleotide chain
C. Particular recognition sites on polynucleotide
D. End of the polypeptide chain

## D Watch Video Solution

82. The brain of the cockroach is
A. supra - pharyngeal ganglion
B. sub - pharyngeal ganglion
C. supra-esophageal ganglion
D. sub-esophageal ganglion

## Answer: C

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83. Select the features that are common to animal and plant cells ?

A. (1)
B. (2)
C. (3)
D. (4)

Answer: C
84. Which of these statements about the living state is correct ?
A. Living state is an equilibrium unsteady state to be able to perform work
B. Living state is an equilibrium unsteady state not able to perform work
C. Living state is a non - equilibrium steady state to be able to perform work
D. Living state is a non - equilibrium unsteady state not able to perform work

## Answer: C

85. Read the following statements about genetically engineered plants. Select the ones that are advantageous .
I. The increased yield from genetically engineered plants allows a smaller area of land to be farmed.
II. Generally engineering plants may have improved nutritional value.
III. Some plants can be genetically modified to give resistance to diseases.
IV. There is more research needed on the long term effects of genetically engineered crops on the environment
V. The use of genetically engineered crops may explain the increase in allergies in children
A. I II and III only
B. III , IV and V only
C. II , III and IV only
D. I , IV and V only

## Answer: A

## (D) Watch Video Solution

86. The diagram shows the cell cycle. During which phase do chromosomes condense and become visible ?
cytokonesis

A. A
B. B
C. C
D. D

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87. Which of these will be seen in our respiratory system?
I. The absence of cartilage in small bronchioles allows them to expand.
II. The walls of the alveoli are made of cuboidal epithelium .
III. The recoil of the elastic fibres surrounding the alveoli helps
to move air out during expiration.
IV. The trachea and bronchi are supported by circles of cartilage.
A. I and II
B. I and III
C. II and IV

## Answer: B

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88. The following statements describe the process of translation.
I. An amide linkage is formed between adjacent amino acids.
II. Hydrogen bonds are formed between the anticodon and the codon.
III. mRNA binds to the ribosome.
IV. tRNA enters the ribosome carrying a specific amino acid.

In which order does this process take place?
A. $I I I \rightarrow I V \rightarrow I I \rightarrow I$
B. $I I I \rightarrow I I \rightarrow I \rightarrow I V$
C. $I V \rightarrow I I \rightarrow I \rightarrow I I I$
D. $I V \rightarrow I I \rightarrow I I I \rightarrow I$

## Answer: A

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89. Which of the following option justify that why bacteria are useful in genetic engineering ?
A. They are very small . They do not need large containers .

They have no mitochondria.
B. They reproduce asexually. They can double their numbers in twenty minutes in good conditions. They
have cell walls.
C. They have the same genetic code as other organisms.

They have plasmids. There can multiply faster.
D. Their DNA is not in a nucleus. They have a cell membrane. They have a large surface area to volume ratio.

## Answer: C

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90. The diagram shows the effect of an enzyme working in the human digestive system.
enzymeatPH1.5
and temperature $\operatorname{at} 37^{\circ} \mathrm{C}$
What would reduce the rate of production of amino acids ?
A. removing the amino acids as they are formed
B. increasing the amount of protein
C. raising the temperature to $37.1^{\circ} \mathrm{C}$
D. raising the pH to 4.5

Answer: D

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