

CSIR NET LIFESCIENCES DEC-2008

1. Which of the following pair is isotones?

1. ${}^3\text{H}$, ${}^4\text{He}$ 2. ${}^{15}\text{N}$, ${}^{14}\text{N}$
 3. ${}^{140}\text{Ba}$, ${}^{140}\text{Th}$ 4. ${}^1\text{H}$, ${}^3\text{H}$

2. What would be energy released on breaking H-H covalent bond (generally energy of covalent bond lies in between 100 - 200 Kcal/mol)

1. $4.36 \times 10^5 \text{ J/mol}$ 2. $1 \times 10^{-19} \text{ J/mol}$
 3. $5 \times 10^{-19} \text{ J/mol}$ 4. $8 \times 10^{19} \text{ J/mol}$

3. The mode of sex determination in humans is

1. Haploidy-diploidy 2. **XX-XY**
 3. ZZ-ZW 4. Genic balance

4. The region of visible light which is most useful for photosynthesis is

1. **Blue, red** 2. Green, red
 3. Violet, blue 4. Green, blue

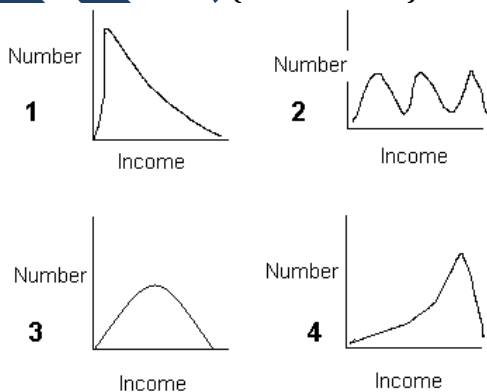
5. Why the inner planet's surfaces are made up of rocky denser metals, whereas the outer planets are made of mainly light gases which is lesser denser than the outer planets

1. Inner planets are formed earlier
 2. Sun rays pushes gases far apart
 3. Centrifugal force attract denser planet near sun
4. Inner planets are near to sun, thus high temperature has blown most of lighter gases.

6. In the following algorithm loops how many times internal loops will be executed

- ```
i=0
j=0
while i= 1 to 100
 i = 1,100,2
 j = 1,100,2
stop
```
1. 100                                      2. 501  
 3. 151                                      4. infinity

7. Correct graphical representation for frequency of Indian population according to their annual income is (IFAS Answer 1)



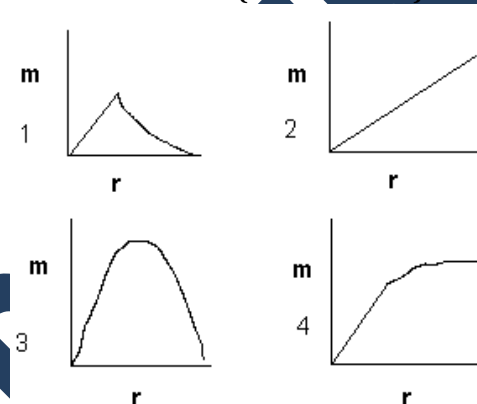
8. Among the following maximum reflectance s(albedo effect) will be observed at

1. **Ice covered land**                2. Ocean  
 3. Vegetation land                4. Deserts

9. A charged particle having mass 'm' and charged 'q' is moving through constant electric field 'E' the time to cover given path will depends on

1.  $m^{-1/2}$                                 2.  $q^{-1/2}$   
 3.  $E^{-1/2}$                                 4.  **$M^{-1/2} q^{-1/2} E^{-1/2}$**

10. A current (I) carrying solenoid of length 'l', radius 'a', the charge in magnetic field along axis of solenoid 'r' will be (IFAS Answer 1)



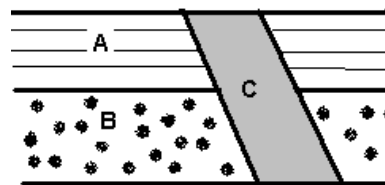
11. Correct algorithms for computing distance (X=u\*t) for time 1 to 100 sec. will be (considering constant speed)

1. **Do i =1to100**                      2. Do t=1 to 100  
 $x(t)=x*i$                                  $x=u*t$   
 $i =i+1$                                      $t=t+1$   
 3. Do i=1to100                      4. Do t=1 to 100  
 $x(t)=u*t$                                  $x=u*t$   
 $i =i+1$                                      $t=u+1$

12. Among the following which salt occurs in human body

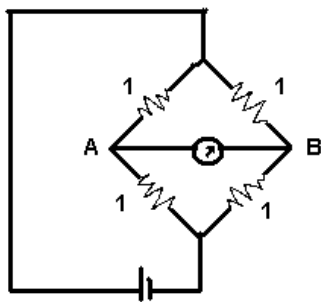
1. **NaCl**                                    2. KCN  
 3. HCN                                      4.  $\text{H}_2\text{SO}_4$

13. Rock 'A' is layered on rock 'B' and rock 'C' is intrusion through A and B as shown in diagram the correct explanation for diagram is



1. 'A' is younger than B & C is younger than A  
 2. 'B' is younger than A & C is younger than B  
 3. 'C' is younger than A & C is younger than A  
 4. 'C' is younger than B & A is younger than C

14. Current passing through A-B in amperes as shown in diagram will be

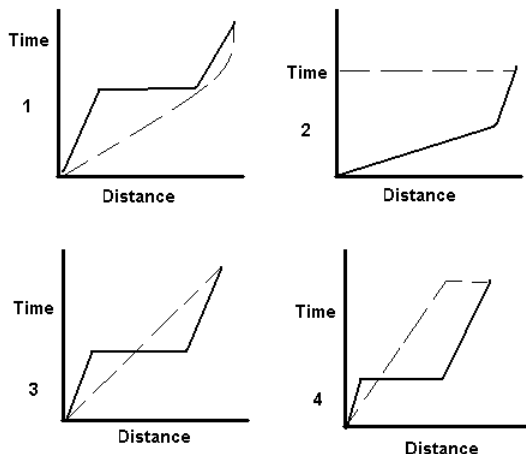


1. 0  
2. 1  
3. 2  
4. 0.5

15. If 7g of NaOH is dissolved in 350 ml water the molarity of resultant solution will be

1. 0.5M  
2. 2.5M  
3. 50 M  
4. 25M

16. A race was held between Hare & tortoise. Hare run fast & took rest in middle and then completed race while tortoise moved at constant speed and completed race earlier than hare. The correct representation of this story is (-----represent tortoise and \_\_\_\_\_ for hare) (IFAS Answer 4)



17. A bacterial population become half after one minute, the reduction in population depends on population at time 't', what would the remaining population after 2 min of original population

1.  $\frac{1}{4}$   
2.  $\frac{1}{2}$   
3.  $\frac{1}{8}$   
4.  $\frac{1}{16}$

18. Fog, which is commonly observed during winter and causes problem to flight take off mainly seen at

1. Low altitude with pollution  
2. High altitude with no pollution  
3. High latitude with pollution  
4. Low latitude without pollution

19. The algorithm computes

X=0  
N=0  
T=0

For i =1 to N  
Sum (X) =x+i  
STOP

1. Computes sum for array 'N'  
2. Computes product of array 'N'  
3. Computes factorial of array 'N'  
4. Calculates sum of any integers

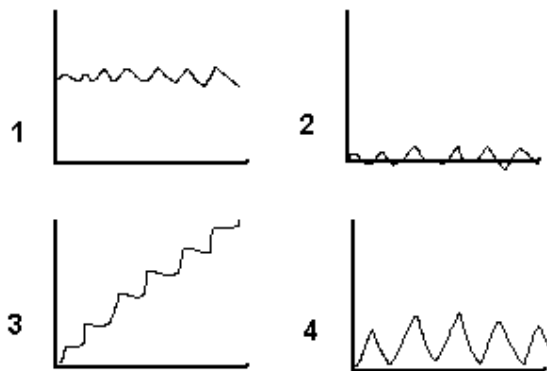
20. An apple falls from a tree, to hit apple from a bullet gun fired (distance between apple & gun is 100 m both are at height 5m)

1. exactly at apple  
2. slightly above the apple  
3. slightly beneath the apple  
4. 1 m below original position of apple

21. Minimum daily variation in temperature will be observed at (IFAS, Jodhpur)

1. Bangalore  
2. Shimla  
3. Cochin  
4. Nagpur

22. Correct graphical representation for function  $x + \sin x$  ( $x > 0$ ) (IFAS Answer 1)



23. In equation  $\sin 2x$ , value of x cannot be

1. 0  
2. -1  
3. 1  
4. 2

24. What would be effect of increasing humidity on rate of transpiration?

1. Rate of transpiration will decrease  
2. Rate of transpiration will increase  
3. Initially low then it will be high  
4. It will be unaffected

25. Maximum evaporation in ocean will occur at

1. Poles  
2. Equator  
3. Wetlands  
4. Evenly at all places



36. Currently among the following which is used as a fuel for nuclear reactor

1.  $^{232}\text{Th}$                       2.  $^{238}\text{Pu}$   
3.  $^{233}\text{U}$                         4.  $^{238}\text{U}$

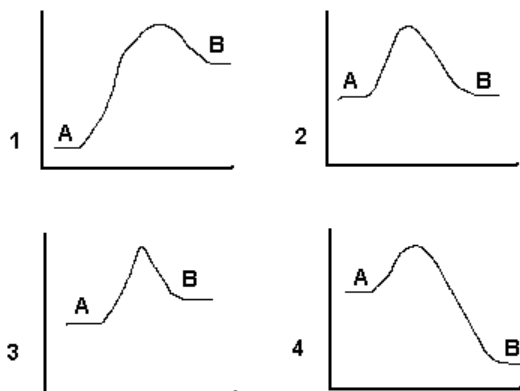
37. NaCl can be electrolyzed on electrode, but ethanol cannot because

1. **Ethanol has covalent bond**  
2. Ethanol is polar  
3. Ethanol has hydrogen bonding  
4. Ethanol is electrically neutral.

38. Which of the following which is most porous:

1. **Sand**                              2. Clay  
3. Loamy soil                        4. Granite

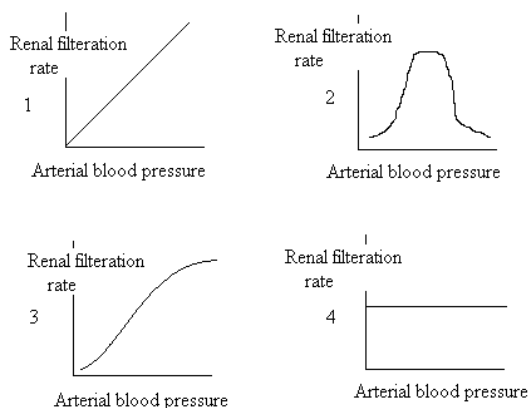
39. Which graph represents the endothermic reaction with minimum activation energy? ('A' Substrate  $\rightarrow$  'B' Product) (Answer 3)



40. The process of photosynthesis which leads to formation of glucose is a type of

1. Oxidation                      2. **Reduction**  
3. Condensation                4. Fixation

41. A perfuse kidney isolated from organism. What would be the effect of applying increasing arterial pressure on renal filtration rate? (Answer 3)



42. For 99 % confidence interval the value of  $\bar{Y}$  can be represented as

1.  $\bar{Y} \pm 1.53 \text{ SD}$                       2.  $\bar{Y} \pm 2.58 \text{ SD}$   
3.  $\bar{Y} \pm 2.56 \text{ SE}$                       4.  $\bar{Y} \pm 1.53 \text{ SE}$

43. The statistical test which can be utilized to validate the statement "Peoples having high cholesterol suffer more from hypertension"

1. Students't' test  
2. Regression analysis  
3. **Pearson correlation coefficient**  
4. ANOVA

44. Among the following which plant family has been extensively used for phyto-remediation

1. Poaceae                              2. **Brassicaceae**  
3. Malvaceae                        4. Anonaceae

45. Defective gene in Amyotrophic lateral sclerosis is

1. Rb                                      2. P53  
3. **hC12**                                      4. TGF

46. Vector for transmission of disease Kalazar is

1. *Aedes*                                      2. *Anopheles*  
3. *Glossina*                                4. ***Phlebotomus***

47. First successful vaccine against cancer has been prepared for

1. Oral cancer                              2. **Cervical cancer**  
3. Breast cancer                        4. Colon cancer

48. Atrial natriuretic factor secreted from atria is

1. **Hormone**                                      2. Neurotransmitter  
3. Enzyme                                      4. Growth factor

49. Substrate for angiotensinogenase is

1. **Angiotensinogen**                      2. Angiotensin I  
3. Angiotensin II                        4. Renin

50. Among the following in which mutant lines,  $\lambda$  lysogen phages will form clear bacterial plaques

1. **cI<sup>-</sup>**                                              2. cII<sup>-</sup>  
3. INT<sup>-</sup>                                              4. XIS<sup>-</sup>

51. Among the following which is not involved in plant defense signaling pathway

1. **Gibberlic acid**                              2. Ethylene  
3. Salicylic acid                              4. Jasmonic acid

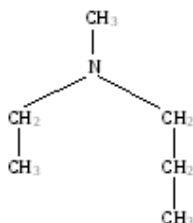
52. Factor responsible for formation of early embryonic axis during early developmental pathway of plants is

1. **Auxin gradient**  
2. Morphogens  
3. Orientation of embryo sac  
4. Plane of Cell Division

53. During germination of barley seeds, enzymes for mobilization of reserve material to developing embryo are secreted from

1. Endosperm
2. Embryo
3. **Aleurone layer**
4. Embryonic leaves

54. Which statement is correct for given compound?



1. It is always optically active
2. It is always optically inactive
3. **It will be optically active if N is protonated**
4. It will be always optically neutral

55. Electrical activity of brain during brain mapping can be recorded by

1. fMRI
2. ECG
3. **EEG**
4. Polygraphy

56. Recently gene therapy for mutated gene has been experimentally proven in mouse utilizing

1. Winged P elements
2. **Cre-Lox system**
3. Non-homologous recombination
4. Ac-Ds Elements

57. Which technique can not be utilized for studying response mechanism for both B and T cell immune responses

1. Complement Fixation
2. Western blotting
3. **Cytotoxicity assay**
4. ELISA-PLOT

58. Among the following which is not a cell adhesion protein

1. Cadherin
2. Integrin
3. Selectin
4. **Immunoglobulin**

59. Which of following is not coded by MHC Genes?

1. Components of Complement pathway
2. **Immunoglobulin**
3. Glycoproteins
4. Antigen presenting proteins

60. Which is least likely to occur for removal of cancers cells?

1. T-Cell based cytotoxicity
2. Complement fixation
3. **Autophagy**
4. Phagocytosis

61. Leukemia inhibiting factor has been utilized in animal cell culture for

1. Stimulating growth of cell
2. **Differentiation**
3. Morphogenesis
4. Arrest cells at mitosis

62. Dorsal lip of amphibian is equivalent to chicks

1. **Hensen node**
2. Primitive groove
3. Animal pole
4. Vegetal pole

63. Homeotic genes are responsible for

1. Maintaining gaps in segments
2. Provide gradient in developing embryo
3. Codes morphogens
4. **Mutation results in formation of organ at unusual locations**

64. Mosaic developmental pattern is always

1. **Autonomous**
2. Non autonomous
3. Conditional
4. Regulative

65. The specialized structure pecten for clear eye sight is characteristic feature of

1. **Birds**
2. Amphibian
3. Nocturnal mammals
4. Aquatic mammals

66. Which of the following is not correctly matched

1. Chanocytes- Porifera
2. Malpighian tubules-Arthropods
3. Clitellum-Annelids
4. **Cnidocytes-Mollusc**

67. Cytoplasmic streaming results into mobility of substances and organelles involves interaction of

1. Tubulin, kinesin
2. Tubulin, myosin
3. Actin, kinesin
4. **Actin, Myosin**

68. The main force in membrane resealing of ruptured biomembrane in aqueous environment is

1. **Hydrophobic forces between membrane lipids**
2. Covalent forces between membrane lipids
3. Force between protein and lipids
4. Ionic interactions between membrane lipids

69. What would happen if lysosome membrane leaks its digestive enzyme in cytosol

1. **Acid hydrolases will be inactivated**
2. Acid hydrolases will digest the cellular components
3. pH of cell will increase
4. It will cause I-cell disease

70. The maximum ionic interaction would be observed

1. In presence of polar solvent
2. In presence of mixture of water and alcohol
3. Almost equal in all kinds of solvents
4. **When ionic compound is out of the solvents**

71. Regulation of trp operon by binding of tryptophan to trp repressor is termed as

1. **Repression**
2. Induction
3. Anti termination
4. Attenuation

72. In salt tolerance plant the excess salt is transported to vacuole by

1. **Na-H<sup>+</sup> Antiporter**
2. Na-K<sup>+</sup> Pump
3. Na-Cl symporter
4. Na-H<sup>+</sup> Ppase

73. Post translational modification take place in

1. Nucleus
2. Mitochondria
3. Ribosome
4. **Endoplasmic reticulum**

74. Which technique can not be utilized for detection of microdeletion on Y chromosome

1. Karyotyping
2. PCR
3. **Microarray**
4. Hybridization

75. Individuals having X chromosome and short arm of Y chromosome are Y is male while individuals having X chromosome and long arm of Y chromosome are female. This shows that

1. **Genes for maleness are located on short arm of Y chromosome**
2. Genes for maleness are located on long arm of Y chromosome
3. Genes for maleness are located on X chromosome
4. Male determining genes are not located on Y chromosome

76. if a cell has 'c' as the DNA content of cell and 'n' as the number of chromosomes, then just immediately before the cell division in case of mitosis what would be value of 'c' and 'n'

1. 2c and 4n
2. **4c and 2n**
3. 4c and 4n
4. 2c and 2n

77. Which equation best describes the bacterial population growth (IFAS Answer 1)

1.  $\frac{dN}{dt} = KN$
2.  $\frac{dN}{dt} = N$
3.  $\frac{dt}{dN} = KN$
4.  $\frac{dN}{dt} = K$

78. Genetic disorder xeroderma pigmentosum is due to error in

1. Base excision repair mechanism
2. **Nucleotide excision repair mechanism**
3. Direct repair mechanism
4. DNA replication mechanism

79. In Lederbergs experiment which one of the following option they have used to prove their historical experiment

1. One auxotroph and one prototroph
2. Two auxotroph and two prototroph
3. **Two auxotrophs**
4. Two prototrophs

80. Among the following which is inhibitor of 80S ribosome

1. Tetracycline
2. Streptomycin
3. **Cyclohexamide**
4. Chloromphenicol

81. Diphtheria toxin causes

1. **ADP ribosylation of EF-2**
2. ADP ribosylation of EF1 $\alpha$
3. Blocking activity of RNA polymerase
4. Blocking DNA replication process

82. Effect of release of IP<sub>3</sub> during signal transduction pathway is

1. Closure of Ca<sup>2+</sup> channel in ER
2. **Increase in intracellular Ca<sup>2+</sup> level**
3. Increase of extracellular Ca<sup>2+</sup> level
4. Inactivation of calmodulin proteins

83. Dorsal mutant in Drosophila will result in

1. **Dorsalization of ventral side**
2. Ventralization of dorsal side
3. There would be no effect
4. Anterior-posterior pattern formation will be effected

84. Intracellular negative potential and extracellular positive potential occurs in

1. **In all cells**
2. In neurons
3. In kidney cells
4. In liver cells

85. A major functional difference between the succinyl CoA-synthetase of plant and animal cell mitochondria is that it

1. Does not produce ATP in plant cell.
2. Produce UTP in plant cell.
3. **Produces ATP in plants and GTP in animal.**
4. Produces GTP in plants and ATP in animals.

86. Among the following which is not monitored as daily potential pollutant

1. CO
2. **CO<sub>2</sub>**
3. SO<sub>2</sub>
4. NO<sub>x</sub>



87. In plant lateral root initiates from

1. **Pericycle**
2. Cortex
3. Pith
4. Endodermis

88. Oxygenase activity of RUBISCO generates

1. Two molecules of PGA (3C)
2. Two molecules of Phosphoglycolate (2C)
3. **One molecule each of PGA and phosphoglycolate**
4. Two molecules each of PGA and phosphoglycolate

89. Plant family having characteristic umbel inflorescence is

1. Asteraceae
2. Acanthaceae
3. **Apiaceae**
4. Poaceae

90. Dendrogram in numerical taxonomy represents

1. **Phenetic similarities**
2. Phlogenetic similarities
3. Evolutionary similarities
4. No similarities

91. A plant with genotype  $r^+h^+/r^-h^-$  was test crossed. Out of total 280 progeny 260 are  $r^+h^+/r^-h^-$  and  $r^-h^+/r^-h^-$ . The recombination frequency will be

1. 92.8
2. 46.4
3. **7.2**
4. 3.6

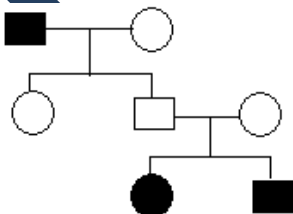
92. Genetic mapping reveals that distance between two genes 'A' and 'B' is 10 cM. What is chance of getting Aabb progeny if AaBb is test crossed?

1. **5 %**
2. 10 %
3. 45 %
4. 90 %

93. The regulators of circadian rhythms in plants is

1. Phycobillins
2. Phytochromes
3. **Phototropins**
4. Cryptochromes

94. The following pedigree represents the inheritance of a rare disorder.



Based on the above pedigree, what is the most likely mode of inheritance?

1. Autosomal dominant
2. X-linked recessive
3. X-linked dominant
4. **Autosomal recessive**

95. Quantitative inheritance defines

1. Variation in phenotype
2. **Variation in genotype**
3. Variation in environment
4. Variation in genes

96. Which of the following which is not intrinsic flour

1. Tryptophan
2. Phenyl alanine
3. Tyrosine
4. **Histidine**

97. Among the following which group has maximum number of endangered and critically endangered species as per IUCN red data list?

1. **Amphibian**
2. Reptile
3. Mammals
4. Aves

98. Germination of moth bean in dark is an example of

1. Photomorphogenesis
2. **Skotomorphogenesis**
3. de-etiolation
4. Shading effect

99. Birds besides lungs have highly branched air sacs. The major function of air sac is to

1. Increase surface area for gas exchange
2. Help in ventilation during inhalation
3. Help in ventilation during exhalation
4. **Help in ventilation during both inhalation and exhalation**

100. Which is correct hierarchical sequence in taxonomy?

1. **Phylum-Class-Order-Family-Genus**
2. Class-Phylum-Order-Family-Genus
3. Phylum-Class-Family-Order-Genus
4. Phylum-Class-Order-Genus-Family

101. Among the following which molecule has been frequently used for molecular systematics

1. Insulin
2. **Cytochrome C**
3. Globin
4. Collagen

102. Rate of molecular evolution would be least in

1. **Non-synonymous change in codon**
2. Synonymous change in codon
3. Flanking regions of genes
4. Introns of genes

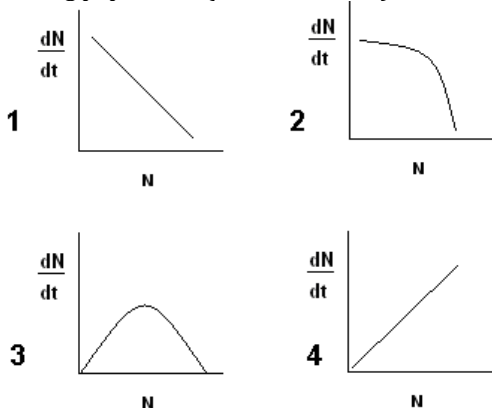
103. The most probable place where life would have originated

1. Outer space
2. Barren rocks
3. In oceans
4. **Deep hydrothermal vents**

104. In population of 10 million individuals birth rate is 19 per 1000 and death rate is 14 per 1000. Annual rise in population would be

1. **50,000**
2. 5,000
3. 14,000
4. 500,000

105. Which of the following curves represents the general relationship between population size (N) and growth rate (dN/dt) for logistically growing population (IFAS Answer 3)



106. Which factor is least responsible for genetic drift?

1. Migration
2. Founder effect
3. Bottleneck
4. **Restriction of resources**

107. In spite of the prevalence of herbivory, the earth continues to be largely green because

1. the number of herbivore species is low.
2. herbivores are very inefficient feeders.
3. herbivore numbers are kept low by their predators.
4. **herbivory promotes plant growth.**

108. Biomass turnover time is the ratio between biomass and productivity of an ecosystem. Which of the following forests should have highest biomass turnover time?

1. Tropical dry forests
2. **Tropical wet forests**
3. Temperate deciduous forests
4. Boreal forests

109. Smooth movement of bacteria during chemotaxis is due to

1. Due to tumbling
2. Phosphorylation of CheY
3. **Movement of  $H^+$  across plasma membrane**
4. Phosphorylation of Che A

110. Which statement is least likely to be observed amongst the animals showing extensive parental care

1. Male polygamous
2. Sexual dimorphism
3. Difference in body size of male and female
4. **No investment in selection of mates by females**

111. Mucous which covers the epithelial lining of stomach and protects it from protease activity is secreted by

1. **Goblet cells**
2. Parietal cells
3. Microvilli
4. Aciner cells

112. In a population with two alleles 'b' and 'B' having allele frequency 0.7 and 0.3 in Hardy-Weinberg equilibrium, how many individuals in a sample of 250 can be expected to be heterozygous (bB)?

1. 52
2. **105**
3. 21
4. 42

113. Starling birds orient themselves by sunlight during migration. If they are kept in captivity with artificial light source from one direction, then

1. They will stop migration
2. They will orient toward light source
3. **They will orient themselves with change in  $15^\circ$  angle every hour from direction of light**
4. Moves all around the artificial light

114. Maximum density of dopamine and nor-adrenergic receptor occurs at

1. **Cerebellum**
2. Cerebellum
3. Medulla oblongata
4. Spinal cord

115. Chitin occurs in cell wall of

1. Bacteria
2. Arthropods
3. **Fungus**
4. Mollusck

116. The emergence of polarity of an embryo is the result of

1. Positive and negative charges interacting in early development.
2. cytoplasmic differences between cells.
3. **cytoplasmic determinants within cells.**
4. All of the above

117. Which anticancerous drug is obtained from *Catharanthus roseus*?

1. Taxol
2. **Vincristine**
3. Colchicine
4. Serpentine



118. The principle for formation of image in phase contrast microscopy

1. interference of light waves
2. Negative staining of object
3. Use of fluorescent probes
4. **Enhancing contrast by differentiating the change in phase of light passed through specimen coming from  $\frac{1}{2}$  angle of cone of light entering through objective lens.**

119. Yeast with petite colony when crossed with wild type generates no petite colony. The most probable mode of inheritance is

1. Chloroplast
2. **Mitochondria**
3. Episomal
4. Nuclear

120. An oligonucleotide DNA sequence tagged with fluorescent tag used to identify unknown gene by hybridisation is termed as

1. **Probe**
2. Reporter gene
3. Ligand
4. C-DNA

121. A protein which is to be degraded in proteasome is tagged with

1. Polyglycine
2. Polyproline
3. **Ubiquitin**
4. Formyl methionine

122. Bacteria divides by

1. **Binary fission**
2. Mitosis
3. Fragmentation
4. Meiosis

123. Shigella enters into host cell by process of

1. Cell-Cell fusion
2. Calthrin coated pits
3. By exploiting host cell organelles
4. **Phagocytosis**

124. Among the following which activity is absent in bacterial DNA polymerase I

1. 5'→3' Polymerase activity
2. **3'→5' Polymerase activity**
3. 5'→3' Exonuclease activity
4. 3'→5' Exonuclease activity

125. In a hybridization experiment a plant shows phenotypic ratio of 15:1. How many genes control the trait for observed phenotypic ratio?

1. One
2. **Two**
3. Three
4. Polygene

126. A cross between a red eyed male fly and white eyed female fly produces red eyed female and white eyed male progenies. While reciprocal cross produces all offsprings with red eyes. The trait for eye color is

1. Sex linked traits
2. Sex influenced trait
3. Sex linked homogametic male
4. **Sex linked heterogametic male**

127. In which biogeographic region you would find Nilgiri-tahr trees

1. Shola grasslands
2. Nilgiri forests
3. Shola grasslands and nilgiri forests
4. **at high altitudes of south-western ghats**

128. Characteristic dominant grasses in Brahmaputra, Ganga and Punjab plains respectively are

1. **Alphinia, Echinochloa, Cenchrus**
2. Saccharum, Alphinia, Sachharum
3. Cenchrus, Echinochloa, Sachharum
4. Sachharum, Cenchrus, Alphinia

129. When release factor binds to stop codon on m-RNA during translation, the synthesized peptide chain is transferred to

1. t-RNA
2. **Water**
3. H<sup>+</sup>
4. Amino acids

130. Location of Glutamate synthetase, an important enzyme in nitrogen assimilation is

1. Only cytoplasm
2. Only chloroplast
3. **Both in cytoplasm and chloroplast**
4. In Endoplasmic reticulum

131. Which is true for  $\beta$ -oxidation of fatty acids

1. Formation of malonyl CoA
2. Formation of acetoacetyl ACP
3. **Transport of acyl CoA into mitochondria**
4. Use of NADPH<sub>2</sub>

132. Which radioisotope is generally incorporated in thymine to study DNA replication process

1. <sup>32</sup>P
2. <sup>35</sup>S
3. **<sup>3</sup>H**
4. <sup>14</sup>C

133. Which technique is used to study de novo RNA SYNTHESIS?

1. Southern blotting
2. Northern blotting
3. Micorarray
4. **RT-PCR**

134. Enzymes accelerates rate of reaction by

1. Lowering number of transition states
- 2. Lowering the activation energy of highest transition state**
3. Providing energy to substrate
4. Providing more chance to substrates to react together

135. Enzymes donot interfere with

1. Free energy of reaction
2. Rate of reaction
3. Activation energy of transition state
- 4. Reaction equilibrium**

136. When oxygen-haemoglobin curve shift to left it represents

1. Decrease in pH
2. Decrease in CO<sub>2</sub> level
- 3. Rise in concentration of 2,3 BPG**
4. more affinity for oxygen

137. The major role of 2,3 BPG formed during glycolysis in RBC is for hemoglobin is

1. Increasing affinity for oxygen
- 2. Decreasing affinity for oxygen**
3. Increasing affinity for CO<sub>2</sub>
4. Decreasing affinity for CO<sub>2</sub>

138. As we move from one geographical region to next neighbouring region, species diversity tends to change. It is termed as

1.  $\alpha$ -Diversity
- 2.  $\beta$ -Diversity**
3.  $\gamma$ -Diversity
4.  $\delta$ -Diversity

139. Covalent bond formation between two atoms takes place by

1. Transfer of electron from one atom to other
2. One side sharing of electrons
- 3. Electron sharing by both interacting atoms**
4. Affinity between two atoms

140. Globular protein when treated with organic solvent get denatured. The main interaction which is affected on treatment with organic solvent is

1. Hydrogen bonds
2. Covalent bonds
3. Ionic interactions
- 4. Hydrophobic interactions**

• IFAS is not responsible for any errors or confusion.

• Any suggestion/correction is welcome

Mail us: [ifasnet@gmail.com](mailto:ifasnet@gmail.com)

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