BIOLOGY

BOOKS - VGS BRILLIANT BIOLOGY (TELUGU ENGLISH)

HEREDITY AND EVOLUTION

Exercise

1. How are new characters produced ?

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2. Are they (the new characters) inherited?

3. Do the new characters have any role in the process of evolution?

4. What are variations ? How do they help organisms?

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5. Dwarf pea was treated with gibberellic acid. It became as tall pea plants. If these pea plants are crossed with pure tall plants. What will be the phenotype ratio in F_2 generation?

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6. One experimenter cut the talls of parent rats, what could be the traits in offsprings?

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7. How did Augustus Weisemann disprove the theory of Inheritance of acquired character proposed by Lamarck ?

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8. In a mango garden a farmer saw one mango tree with full of mango fruits but with a lot of pests. He also saw another mango tree without pests but with few mangoes. But the famer wants the mango tree with full of mango fruits and pest free. Is it possible to creatwe new mango tree which the farmer wants? Can you explain how it is possible?

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9. Explain monohybrid experiment with an example. Which law of inheritance can we undrestand? Explain.

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10. State the law of independent assortment.

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11. Explain the Darwin's theory of Natural selection with an example. What do you understand by the term natural selection ? Write drwin's theory of evolution.

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12. What are variations? Explain with a suitable example.

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13. What variations generally have you observed in the species of cow?

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14. What are the characters Mendel selected for his experiments on pea plant?

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15. In what way Mendel used the word Traits? Explain using an example.

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16. What are the differences that Mendel observed between parent and F2 generation?

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17. Male is responsible for sex determination of baby - do you agree ? If so write your answer with a flow chart.

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18. It is unfair to blame women in determining sex of new born baby. Do you agree ? Explain with the help of a flow chart.

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19. Write a bref note on Homologos and analogous organs.

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20. How do scientists utillse the information about fossils?

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21. Mendel selected a pea plant for his experiments. Mention the reasons for the selection of these plants.

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22. The scienctist who proved incorrectnes of the Theory of Lamarck by culting the tails of rats.

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23. With the help of vien information write your comment on evidence of evolution. Mammals have forelimbs as do birds, reptiles and amphibians. The basic structure of the limbs is similar, though it has been modified to perform different functiions.

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24. Draw a checker board show the law of independent assortment wit a flow chart and explain the ratio

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25. Explain the process to understand monohybrid cross of Mendel experiment with a checker board.

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26. Prepare a chart showing evolution of man through ages

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27. Nature selects only desirable characters. Prepare a cartoon.

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28. What is your undertanding about survival of the fittest ? Give some situatios or examples that you observe in your surroundings.

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29. The process of acquiring character or trait is called .....

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30. mendel's experiment explains about .....

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31. the four characters observed in the experments on law of independent assortment are .....

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32. If we cross pollinate red flower plant with white flower we will get ..... percent of recessive trait plants.

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33. TT or Yy, Tt or Yy are responsible for a ..... character.

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34. Famale baby having 23 pairs of autosomes at the age of 18 years, has how many pairs of autosomes and of sex charomosomes?

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35. The population grows in ..... Progression whereas food sources grow in ..... Progression.

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36. A goat which walks properly can't live for a long time. According to darwin, this represents .....

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37. What is the study of fossils called?

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38. Which of the following is not a variation in rose plant?

A. Coloured petals

B. Spines

C. Tendrils

D. Leaf margin

Answer:

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39. According to mendel, alleles are

A. Pair of genes

B. Responsible for character

C. Production of Gametes

D. Recessive factors

Answer:

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40. Natural selection means

A. Nature selects desirable characters

B. Nature rejects undesirable characters

C. Nature reacts with an organism

D. A, B

Answer:

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41. Palaeontologists deal with

A. Embryological evidences

B. Fossil evidences

C. Vestigial organ evidences

D. All

Answer:

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42. What will happen if sperm containing X chromosome fertilizes the ovum?

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43. Were all your traits similar to that of your parents?

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44. Do embryological evidences indicate that frogs have evolved from ancestors of fish?

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45. Does the life history of every individual exhibit the structural features of its ancestors?

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46. Is variation all about apparent differnce ? Or is it about some subtle differences as well that we most often overlook?

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47. How do parent plants pass on their traits to the seeds?

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48. Will the seeds from tall plants always produce new tall plants?

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49. Who decides the sex of the baby -mother or father ?

Watch Video Solution

50. How does the evolution of organisms have taken place?

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51. Think why ancient human beings travelled from one place to other and how they travelled.

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52. How does the evolution of organisms have taken place?

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53. Is the sex also a character or trait? Does it follow mendel's law of dominance?

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54. Are birds and bats more closely related to each other than to sauirrels or lizards?

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55. In a forest there are two types of deer, in which one type of deer can run very fast . Whaereas second type of deer can not run as fast as the first one. Lions, tigers hunt der for their food. Imagine which type of deer is going to survive in the ofrest, which type of deer population is going to be eliminated? And why ?

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56. Who decides the sex of the baby -mother or father ?

Watch Video Solution

57. What examples you will give to prove that Lamarckism is not correct ?

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58. Which chromosomes determine the sex in human beings?

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59. Which one is not a vestigial organ in man?

Watch Video Solution

60. Who decides the sex of the baby -mother or father ?

Watch Video Solution

61. Explain sex determination in humans with the help of flow chart.

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62. Define and terms phenotype and genotype.

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63. What questions you will ask a palaeontologist about fossils?

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64. How does the embryological evidences support that Evolution has taken place?

Watch Video Solution

65. What happens if there is no evolution?

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66. When a cross in made between tall plant with yellow seeds (TtYy) and tall plant with green seed (Ttyy), what proportions of phenotype in the offspring could be expected to be

(a) tall and green.

(b) dwarf and green.

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67. Explain sex determination in humans with the help of flow chart.

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68. What are Mendel's laws of inhertitance? What are the reasons to choose pea plant for his experiment?

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69. What is phenotype and genotype ? Explain them with the help of mendel's monohy-brid cross.

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70. What provides the evidences for the evolution?

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71. What are variations ? How do they help organisms?

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72. What is F1 generation?

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73. What is F2 generation?

Watch Video Solution

74. What is F3 generation

Watch Video Solution

75. What is phenotype ratio?

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76. What is genotype ratio ?

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77. State the law of independent assortment.

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78. What is allele?

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79. What are genes?

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80. What are homozygous alleles?

Watch Video Solution

81. What is heterozygous allele?

Watch Video Solution

82. What is law of dominance?

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83. State the law of segregation.

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84. What are inherited traits?

Watch Video Solution

85. What is heredity?

Watch Video Solution

86. What is inheritance?

Watch Video Solution

87. What are autosomes?

Watch Video Solution

88. What are allosomes?

Watch Video Solution

89. What are acquired characters ?

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90. what is inheritance of acquired characters?

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91. What is meant by survival of the fittest?

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92. What is micro evolution?

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93. What is macro evolution or speciation?

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94. Homologous organs explain

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95. Give example for analogous organs.

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96. What is embryology?

Watch Video Solution

97. What are fossils?

Watch Video Solution

98. What is palaeontology?

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99. What is the metod used to determine the age of the fossil ?

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100. What is human evolution?

Watch Video Solution

101. What is the cause of variations?

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102. Which one of the following options gives one correct example each of convergent evolution and divergent evolution?

Convergent evolution	Divergent evolution

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103. What is convergent evolution?

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104. Where were the fossils of dinosaurs collected?

Watch Video Solution

105. what are vestigial organs?

Watch Video Solution

106. indentify the scientist. He was the first person to propose the theory of evolution. He took girffee to explain his theory.

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107. Who proposed theory of inhertitance of acquired characters?

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108. Who proved that bodily changes are not inherited?

Watch Video Solution

109. Who proposed the theory of natural selction?

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110. What does the theory of natural selection state?

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111. How many vestigial organs are present in man

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112. Give an exmaple for vestigial organ in our body.

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113. Who is called as moving museum of vestigial organs'?

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114. How can one change adopted perform different functions?

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115. Why are traits acquired during the lifetime of an individual not inherited?

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116. What factos could lead to rise of a new species?

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117. Can the wing of abutterfly and the wing of a bat be considered homologous organs?Why or why not ?

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118. If the sperm bearing 'Y' chromosome fertilizes the egg, the child born will not be entirely like his father, whyu is it so?

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119. Name the chemicals which were essential for origin of species.

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120. Name two organisms in which sex determination is regulated by environmental factors.

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121. If you meet a historian to clarify your doubt on Man has first born in African continent', what type of questions will you ask him /her

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122. Write Phenotypic and Genotypic ration of table given at side

Observe the following table and write phenotypic and genotypic ratio.

♀ \ ♂	Y	y
Y	YY	Yy
y	Yy	yy

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123. Write the Phenotypic and Gynotypic ratio when heterogygous (Yy) pea plant is hybridized with the same kind of plant.

Watch Video Solution

124. What is the difference between phenotype and Genotype?

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125. What are the differences between homozygous and heterozygous?

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126. How do traits get expressed according to mendel?

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127. Write a short note on the law of " inheritance of acquired characters".

Watch Video Solution

128. Write a short note on the theory of Natural selection"

Watch Video Solution

129. What is meant by survival of the fittest?

Watch Video Solution

130. Write a brief note on homologous organs.

Watch Video Solution

131. Some organisms or species adapt better and survive in a community of organisms. Why do you think this may happen ?

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132. Why man is called a moving museum of vestigial organs?

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133. What shall be the genotypic ratio in F_2 generation of monohybrid cross?

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134. The human hand , cat paw and horse foot when studied in detail show show the same structure of ones and point towards a common origin.

i. What do you conclude from this?

ii. What is the term given to such structures?

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135. The human hand , cat paw and horse foot when studied in detail show show the same

structure of ones and point towards a common origin.

i. What do you conclude from this?

ii. What is the term given to such structures?

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136. If a trait 'A' exists in 10% of a population of an asexually reproducing species and a trait 'B' exists in 60% of the same population, which trait is likely to have arisen earlier?

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137. Write Phenotypic and Genotypic ration of table given at side

Observe the following table and write phenotypic and genotypic ratio.

♀ \ ♂	Y	y
Y	YY	Yy
y	Yy	yy

Watch Video Solution

138. What are the hypothesis assumptions and outcomes of mendel's experiments with pea plants?

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139. Define and explain Variations with examples.

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140. What should be the perecentage of each type of plants in F2 generation produced in dihybrid crossbetween pea plants with yellow, mooth seeds and green wrinkled seeds?

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141. Keep in mind Mendel's exprriments and write what you know about the following concepts?

a. Pure breed

b. Phenotype

c. Genotype

d. Alleles

Watch Video Solution

142. Keep in mind Mendel's exprriments and write what you know about the following concepts?

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b. Phenotype

c. Genotype

d. Alleles

Watch Video Solution

143. Keep in mind Mendel's exprriments and write what you know about the following concepts?

a. Pure breed

b. Phenotype

c. Genotype

d. Alleles

Watch Video Solution

144. Keep in mind Mendel's exprriments and write what you know about the following concepts?

a. Pure breed

b. Phenotype

c. Genotype

d. Alleles

Watch Video Solution

145. What is natural selection ? How does it direct the evolution ? Explain with an example.

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146. what is genetic drift? Explain how it provides diviersity in the population. ?

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147. Write the Darwin's theory of evolution in a nutshell?

Watch Video Solution

148. How are new species evolved?

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149. What are fossils?

Watch Video Solution

150. What is human evolution?

Watch Video Solution

151. What is meant by law of dominance? To know more about law of dominance, what kind of questions you will ask?

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152. What are the hypothesis assumptions and outcomes of mendel's experiments with pea plants?

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153. The cross beteen Hybrid tall (Tt) and dwarf (tt) what will be F1 generation progency write phenotypic and genotypic ratio

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154. What will be phenotypic and genotypic ratio if cross between pure Red (RR) and hybrid Red (Rr)?

Watch Video Solution

155. Draw the diagram of monohybrid cross and explain it.

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156. How would you appreciate Grego Johann Mendel's contribution to the genetics?

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157. How would you appreciate Grego Johann Mendel's contribution to the genetics?

Watch Video Solution

158. How would you appreeciate charles Robert Darwin for his work on evolution?

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159. Write a small essay supporting that genes are the cause to form different characters in organisms.

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160. Sujatha 's in -laws worried for having daughter in her second delivery. How will you make them agree that she is not all responsible for hafing daughter?

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161. Palaeontologists deal with

A. embryo

B. fossils

C. living seeds

D. fruits

Answer:

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162. Read the sentence, find the error and rewrite it. The origin of species was written by A.R Wallace.

A. Charles Darwin

B. Jean Baptist Lamarck

C. Charles Lyell

D. Gregor Johann Mendel

Answer:

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163. He studied on rats by cutting their tails. Name that scientist.

A. Darwin

B. Lamarck

C. Weisman

D. Mendel

Answer:

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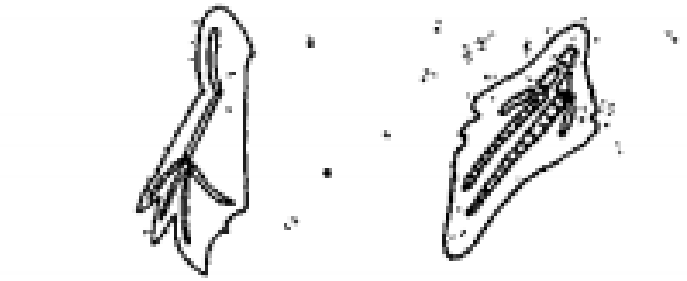
164. The following body parts are examples for.....



Forelimb of a whale wing of a bat

A. Analogous organs

B. Homologous organs

C. Catalogous organs

D. Anabolic organs

Answer:

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165. Wing of bat and wing of birds are the example for

A. Analogous organs

B. Vestigial organs

C. Hind limbs

D. Homologous organs

Answer:

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166. Which of the following is a correct statement

A. Gene is a segment of DNA.

B. Gene is a segment of Endoplasmic Reticulum.

C. Gene is a segment of Acetic acid

D. Gene is a segment of Golgi complex.

Answer:

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167. The sex of the child is determined

A. "X" chromosome in a sperm.

B. "X" chromosome in an ovum.

C. "Y" chromosome in an ovum.

D. "Y" chromosome in a sperm.

Answer:


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168. In Mendel's monohybrid cross, the phenotypic ratio in F_2 generation is

A. 1:2:1

B. 3:1

C. 1:2:1:2:4:2:1:2:1

D. 9:3:3:1

Answer:

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169. Who is called the father of genetics?

A. Mendel

B. Watson

C. Lamarck

D. Darwin

Answer:

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170. What are the characters Mendel selected for his experiments on pea plant?

A. Rose plant

B. Been plants

C. Pea plant

D. Mango trees

Answer:

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171. How many pairs of contrasting characters in pea plants were studied by Mendel in his experiments?

A. 3

B. 5

C. 7

D. 9

Answer:

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172. According to Mendel, each character is expressed due to a pair of alleles or traits,which are known as.....

A. Dominant

B. Recessive

C. Both

D. None of these

Answer:

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173. What is the perecentage of plants that exhibit dominant character in F2 generation?

A. 1

B. 0.25

C. 0.5

D. 0.75

Answer:

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174. The phenotype means.....

A. Extremely visible characters

B. Internal characters

C. Changing characters

D. New characters

Answer:

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175. What is the genotypic ratio of monhybrid cross?

A. 0.04306712962963

B. 0.16736111111111

C. 0.12569444444444

D. 0.043761574074074

Answer:

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176. What is the genotypic ratio of monhybrid cross?

A. 0.04306712962963

B. 0.16736111111111

C. 0.12569444444444

D. 0.043761574074074

Answer:

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177. How many characters are responsible for producing a particular character or trait, according to Mendel?

A. 1

B. 2

C. 3

D. 4

Answer:

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178. if both the alleles ae same for a character, this condition is said to be

A. Heterozygous

B. Homozygous

C. Mixed

D. None of these

Answer:

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179. If the alleles are different for a character, then this condition is said to be ?

A. Heterozygous

B. Homozygous

C. Opposite

D. None of these

Answer:

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180. One of the allele is dominant over other which law of mendel explain this?

A. Law of segregation

B. Law of independent assortment

C. Law of dominance

D. Law of natural selection

Answer:

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181. Each parent passes a randomly selected copy of only one of the allele to an offspring wchih law of mendel explain this?

A. Law of natural selection

B. Law of dominance

C. Law of independent assortment

D. Law of segregation

Answer:

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182. State the law of independent assortment.

A. Watson

B. Lamarck

C. Mendel

D. Darwin

Answer:

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183. The process of transmision of parental characters to the offspring is

A. Transmission

B. Heredity

C. Trait

D. Pass on

Answer:

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184. Factors or alleles of Mendel are now known as ....

A. DNA

B. RNA

C. Genes

D. Nucleic acid

Answer:

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185. What is the number of chromosomes in human beings?

A. 20

B. 21

C. 22

D. 23

Answer:

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186. chromosomes whose number and morphology do not different between males and females of a species are called.....

A. Allosomes

B. Autosomes

C. Homosomes

D. Heterosomes

Answer:

Watch Video Solution

187. How many number of pairs of autosomes are present in humans?

A. 23

B. 1

C. 2

D. 22

Answer:

Watch Video Solution

188. How many number of pairs of allosomes are present in humans?

A. 23

B. 1

C. 2

D. 22

Answer:

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189. What is the number of chromosomes in human beings?

A. XX

B. XY

C. XZ

D. YY

Answer:

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190. identify the mis-matched pairs

1. allosomes in males-xx

2. Allosomes in females-xy

3. factors- Genes

A. XX

B. XY

C. ZX

D. YY

Answer:

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191. Gamets produsedby woman have

A. Only X chromosomes

B. Only Y chromosomes

C. Both X and Y chromosomes

D. Any one of X or Y chromosome

Answer:

Watch Video Solution

192. gamets produsedby man have

A. Only X chromosomes

B. Only Y chromosomes

C. Can not be decided

D. Any one of X or Y chromosome

Answer:

Watch Video Solution

193. What will happen if sperm containing X chromosome fertilizes the ovum?

A. Boy

B. Girl

C. Cannot be decided

D. Transgender

Answer:

Watch Video Solution

194. If the sperm bearing 'Y' chromosome fertilizes the egg, the child born will not be entirely like his father, whyu is it so?

A. Boy

B. Girl

C. Gamete from mother

D. Transgender

Answer:

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195. Sex of the offspring depends on the fertilizing ovum in

A. Gamete from father

B. Gamete from grandfather

C. Errors in DNA copying

D. Family history

Answer:

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196. Variations in offspring are caused by .

A. Sexual reproduction

B. Asexual reproduction

C. Height of the individual

D. Both A & C

Answer:

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197. Which of the following is a inherited trait ?

A. Low weight due to starvation

B. Loss of body parts in accident

C. Lamarck

D. Body growth due to exercise

Answer:

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198. indentify the scientist. He was the first person to propose the theory of evolution. He took girffee to explain his theory.

A. Mendel

B. Darwin

C. Inheritance of acquired characters

D. Weismann

Answer:

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199. How would you appreciate Jean Baptist Lamarck for his contribution to the biology?

A. Malthus theory

B. Natural selection

C. Darwin

D. Survival of the fittest

Answer:

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200. The scientist who disproved the theory of inhertiance of acquired characters.

A. Lamarck

B. Weismann

C. Dogs

D. Mendel

Answer:

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201. Augustus Wesemann conducted his experiments on

A. Cats

B. Rats

C. Darwin

D. Giraffe

Answer:

Watch Video Solution

202. Who proposed the theory of natural selction?

A. Lamarck

B. Weismann

C. HBS Beagle

D. Mendel

Answer:

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203. In the world survey ship, Darwin travelled a number of places. Name the shipin which he travelled.

A. Titanic

B. HMS Eagle

C. Andaman islands

D. HMS Beagle

Answer:

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204. Darwin finches are found in

A. Galapagous Islands

B. Indonesian islands

C. Jean Bapitst Lamarck

D. Maldives

Answer:

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205. Who wrote the book principles of geology'?

A. Charles Lyell

B. Charles Darwin

C. Running

D. Malthus

Answer:

Watch Video Solution

206. forelimb of whale is for swimming whereas in horse it is used for .....

A. Flying

B. Digging

C. Africa

D. Grasping

Answer:

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207. In which continent the first human appeard?

A. America

B. Asia

C. Vestigial organs

D. Australia

Answer:

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208. Wing of bat and wing of birds are the example for

A. Homologous organs

B. Analogous organs

C. Vestigial organs

D. all the above

Answer:

Watch Video Solution

209. Wing of bat and wing of birds are the example for

A. Homologous organs

B. Analogous organs

C. Fossils

D. none of these

Answer:

 Watch Video Solution

210. Name the evidences of ancient life forms which have been preserved by natural processes.

A. Homologous organs

B. Analogous organs

C. Geology

D. Vestigial organs

Answer:

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211. what is the study of the development of an organism from egg to adult stage?

A. Embryology

B. Palaeontology

C. Ecology

D. Zoology

Answer:

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212. What is the study of fossils called?

A. Embryology

B. Palaeontology

C. Oxygen dating

D. Anatomy

Answer:

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213. Name the method, which helps in determining the age of fossils.

A. Hydrogen dating

B. Nitrogen dating

C. Medak district

D. Carbon dating

Answer:

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214. Fossils of the dinosaurs, ketosaurs are colleced from this district.

A. Mahaboob Nagar district

B. Adilabad district

C. 150000

D. Krishna district

Answer:

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215. When did early human like form appear on the earth?

A. 750000

B. 250000

C. 300000

D. 50000

Answer:

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216. Homo sapiens appeared about years ago

A. 1.8 million

B. 10000

C. Fossils

D. 2.5 million

Answer:

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217. The factors responsible for character and units of heredity are.

A. Variations

B. Genes

C. Vestigial organs

D. Gametes

Answer:

Watch Video Solution

218. Organs which are not useful to the organsims are called

A. Homologous organs

B. Analogous organs

C. 180

D. Digestive organs

Answer:

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219. How many vestigial organs are present in man

A. 110

B. 1

C. Thumb

D. 7

Answer:

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220. Which of the following is not a vestigial organ in human beings?

A. Pinna

B. Hair on skin

C. Heredity

D. Appendix

Answer:

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221. The process of acquiring character or trait is called .....

A. Adaptation

B. Evolution

C. Evolution

D. Mutation

Answer:

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222. Explain the process to understand monohybrid cross of Mendel experiment with a checker board.

A. Heredity

B. Variations

C. Wrinkled and yellow

D. Mutation

Answer:

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223. the four characters observed in the experments on law of independent assortment are .....

A. Round and yellow

B. Wrinkled and green

C. Dominant

D. A and B only

Answer:

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224. TT or Yy, Tt or Yy are responsible for a ..... character.

A. Recessive

B. Aggressive

C. 22 pairs of sex chromosomes 1 pair of autosomes

D. Independent

Answer:

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225. Famale baby having 23 pairs of autosomes at the age of 18 years, has how many pairs of autosomes and of sex charomosomes?

A. 22 pairs of autosomes and 1 pair of sex chromosomes

B. 20 pairs of autosomes and 3 pairs of sex chromosomes

C. Mathematical

D. 20 pairs of sex chromosomes and 3 pairs of autosomes

Answer:

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226. The progression in population growth is

A. Geometrical

B. Arithmetic

C. Mathematical

D. None of the above

Answer:

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227. The population grows in ..... Progression whereas food sources grow in ..... Progression.

A. Geometrical

B. Arithmetic

C. Survival of the fittest

D. None of the above

Answer:

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228. A goat which walks properly can't live for a long time. According to darwin, this represents .....

A. Natural selection

B. Inheritance of acquired characters

C. Jumping

D. All the above

Answer:

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229. forelimb of whale is for swimming whereas in horse it is used for .....

A. Running

B. Walking

C. Difference in characters within non related groups of organisms

D. All the above

Answer:

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230. Why variations are important ? How are variations useful for an organism or a population?

A. Differences in characters within very closely related groups of organisms

B. Similarities in characters within very closely related groups of organisms

C. Mixed coloured seeds

D. Similarities in characters within non related groups of organisms

Answer:

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231. In pea plants, yellow seeds ar dominant to green. If a heterozygous yellow seeded plant is crossed with a green seeded plant, what raito of yellow and green seeded plants would you expected in F_1 generation?

A. Yellow

B. Green

C. 9 : 3 : 3 : 1

D. 75% yellow, 25% green

Answer:

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232. What is the genotypic ratio of monhybrid cross?

A. 0.12569444444444

B. 0.04306712962963

C. Dominant

D. 0.04375

Answer:

Watch Video Solution

Watch Video Solution

233. The characters that are expressed in the first generation are called

A. Recessive

B. Expressive

C. 0.04375

D. All the above

Answer:

Watch Video Solution

234. What is the phenotypic ratio of dihybrid cross?

A. 0.125694444444444

B. 0.04306712962963

C. The factors for each part of characters will pass from parent to offspring.

D. 9:3:3:1

Answer:

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235. State the law of segregation.

A. One of the allele is dominant over other

B. Only one of the two factors for a character will pass from parent to offspring

C. Transmission of characters from male parent to offsprings.

D. The factors for each pair of characters will pass from parent to offspring.

Answer:

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236. The science of heredity is known as

A. Transmission of characters from parents to offsprings

B. Transmission of characters from offsprings to parents

C. Genetic drift

D. Transmission of characters from female parent to offsprings

Answer:

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237. The process in which the transmission of traits from one generation to another is called..

A. Variations

B. Inheritance

C. Mendel

D. None of the above

Answer:

Watch Video Solution

238. Who hypothesised that each character is expressed due to a pair of factors or alleles.

A. Lamarck

B. Weismann

C. Traits

D. Malthus

Answer:

 Watch Video Solution

239. Segments of deoxyribonucleic acid are called

A. Factors

B. Characters

C. Both Genes and Factors

D. Genes

Answer:

Watch Video Solution

240. The expression of trait and character are controlled by

A. Genes

B. Factors

C. 42

D. None

Answer:

Watch Video Solution

241. What is the number of chromosomes in human beings?

A. 44

B. 46

C. Mesosomes

D. 40

Answer:

Watch Video Solution

242. chromosomes whose number and morphology do not different between males and females of a species are called.....

A. Autosomes

B. Allosomes

C. The sperm carries Y chromosome fertilizes the ovum with Y chromosome

D. Centrosomes

Answer:

Watch Video Solution

243. The baby will be boy if

A. The sperm carries Y chromosome fertilizes the ovum

B. The sperm carries X chromosome fertilizes the ovum

C. Mutations

D. The sperm fertilizes the ovum

Answer:

Watch Video Solution

244. Variations develop during sexual reproduction occurs due to this in meiotic division

A. Genetic drift

B. Genetic Recombination

C. Mutations

D. All of the above

Answer:

Watch Video Solution

245. What do you call the changes in the frequency of genes in small populatons?

A. Genetic drift

B. Crossing over

C. Non somatic tissue

D. Genetic recombination

Answer:

Watch Video Solution

246. One of the following traits of the parents cannot be passed on to their future generations. This trait is

A. Reproductive tissue

B. Non-reproductive tissues

C. That are present in forefather

D. All the above

Answer:

Watch Video Solution

247. What are acquired characters ?

A. Developed during lifetime of an organism

B. That comes from birth

C. Weismann

D. Present in F_1 generation offsprings

Answer:

Watch Video Solution

248. How did Augustus Weisemann disprove the theory of Inheritance of acquired character proposed by Lamarck ?

A. Lamarck

B. Darwin

C. Natural selection

D. Mendel

Answer:

249. Elongation of neck and fore limb in giraffe is an example for

A. Survival of the fittest

B. Inheritance of acquired characters

C. August Weismann

D. All the above

Answer:

250. Who tested the theory of inheritace of a aquired characters by his experiments on rats for 22 generations?

A. Darwin

B. Hugo devries

C. Passed to its F_2 generation offsprings

D. Virchow

Answer:

Watch Video Solution

251. How will you appreciate the contribution of August Weiseman to the cell biology?

A. Passed to its offsprings

B. Won't be passed to its offsprings

C. Eagles

D. None of the above

Answer:

Watch Video Solution

252. The birds identified by Darwin in Galapagous Islands

A. Parrots

B. Doves

C. Charles Lyell

D. Finch birds

Answer:

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253. Who wrote the book principles of geology'?

A. August Weismann

B. Lamarck

C. Weismann

D. Haeckel

Answer:

Watch Video Solution

254. Who felt that large changes occureed due to accumulation of small changes?

A. Charles Darwin

B. Lamarck

C. Law of segregation

D. Charles Lyell

Answer:

Watch Video Solution

255. According to Darwin during the struggle for existence, these organisms alone will survive

A. Natural selection

B. Survival of the fittest

C. Jean Baptist Lamarck

D. Law of dominance

Answer:

Watch Video Solution

256. Who concluded that natural selection contributed to arising of new species?

A. Alfred Russel Wallace

B. August Weismann

C. Micro evolution

D. Malthus

Answer:

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257. What do you name the small changes within the species?

A. Macro evolution

B. Eco evolution

C. The process of formation of family

D. Bio evolution

Answer:

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258. What is macro evolution or speciation?

A. The process of species formation

B. The process of genus formation

C. Chewing

D. The process of formation of order

Answer:

Watch Video Solution

259. Forelimb of bat is for flying whereas in mole it is used for

A. Digging

B. Cutting

C. Vestigial organs

D. Jumping

Answer:

 Watch Video Solution

260. Organs that are common in embryonic origin and have the same fundamental structure but perform different functions are called

A. Heterologous organs

B. Homologous organs

C. Digestive organs

D. Digestive organs

Answer:

 Watch Video Solution

261. Homologous organs explain

A. Divergent evolution

B. Convergent evolution

C. Resergent evolution

D. Recessive evolution

Answer:

Watch Video Solution

262. We are structurally different but functionally similar. Who are we?

A. Vestigial organs

B. Homologous organs

C. Analogous organs

D. Judician organs

Answer:

 Watch Video Solution

263. Analogous organs arise due to

A. Divergent evolution

B. Convergent evolution

C. Resergent evolution

D. Recessive evolution

Answer:

 Watch Video Solution

264. Name the evidences of ancient life forms which have been preserved by natural processes.

A. Vestigial organs

B. Measles

C. Fossils

D. All the above

Answer:

Watch Video Solution

265. Carbon dating is related to

A. Fossils

B. Living animals

C. Dead animals

D. Human beings

Answer:

 Watch Video Solution

266. Appendix is the vestigial organ in human being but useful for

A. Monkey

B. Rabbit

C. Crocodile

D. Alligator

Answer:

 Watch Video Solution

267. Who is called as moving museum of vestigial organs'?

A. Human being

B. Monkey

C. Elephant

D. Tiger

Answer:

Watch Video Solution

268. Genetic drift provides

A. Evolution in the population

B. Diversity in the population

C. Convergency in the population

D. None of the above

Answer:

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269. Which type of variation is inherited?

A. Somatic variation

B. Germinal variation

C. Both somatic and germinal variation

D. None

Answer:

Watch Video Solution

270. A trait in an off springs is influenced by

A. DNA of mother gamete

B. DNA of father gamete

C. Both DNAs of mother and father gamete

D. Neither of mother nor father gamete of DNA

Answer:

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271. A true breeding tall pea plant crossed with the true breeding drawf plant gave F_1 selfing resulted in 787 tall and 277 dwarf plants in F_2 generation. The F_1 plants are

A. 0.25

B. 0.4

C. 0.6

D. 0.75

Answer:

Watch Video Solution

272. complete the blanks. Homologous organs are examples for .....(1) type of evolution. Analogous organs are examples for .....(2) type of evolution.

A. Wing of whale and wing of bat

B. Wings of butterfly, bat and bird

C. Aves and reptiles

D. All the above

Answer:

Watch Video Solution

273. The diversity in the ty of veaks of finches adapted to differenn feeding habits on the Galapagos Islands, as observed by Darwin, provides evidence for

A. Elephants

B. Giraffes

C. Rats

D. Finch birds

Answer:

Watch Video Solution

274. The following body parts are examples for.....Forelimb of a whale Wing of a bat

A. Homologous organs

B. Analogous organs

C. Haemophilic organs

D. None of the above

Answer:

Watch Video Solution

275. The characters that are expressed in the first generation are called

A. F_1 generation

B. F_2 generation

C. F_3 generation

D. All the above

Answer:

Watch Video Solution

276. The vitamins present in pea plant are

A. A,D,E,K

B. A,C,E,K and B

C. B,C,D,K

D. A,C,D and K

Answer:

Watch Video Solution

277. Whar are the Vitamins & Minerals present in peas ?

A. Ca, Fe, Mg

B. Mn, P

C. S and Zn

D. All the above

Answer:

Watch Video Solution

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278. complete the blanks. In monohybrid cross, the genotypic ratio is .... (1)and the phenotypic ratio is .... (2).

A. 0.04306712962963

B. 0.16736111111111

C. 0.12569444444444

D. 0.043761574074074

Answer:

Watch Video Solution

279. A pair of contrasting characters in keys are called

A. Genotype

B. Phenotype

C. Homozygous

D. Heterozygous

Answer:

280. Charles Lyell wrote a book called

A. Origin of Species

B. Journal of Linnaean Society

C. Principles of Geology

D. None of the above

Answer:

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281. The scientific who studies fossil evidences is called

A. Geologist

B. Palaeontologist

C. Botanist

D. Chemist

Answer:

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282. How did Augustus Weisemann disprove the theory of Inheritance of acquired character proposed by Lamarck ?

A. Weismann

B. Lamarck

C. Mendel

D. Darwin

Answer:

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283. indentify the mismatched pair.

1. Zoogeography - Speciation

2 Genetics -Study of heardity

3. Embryology- Study of fossils

A. Fossils

B. Development from egg to adult

C. Classification

D. Evolution

Answer:

Watch Video Solution

284. What does the theory of natural selection state?

A. Lamarck

B. Weismann

C. Mendel

D. Darwin

Answer:

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285. Indentify the scientist. He wrote a letter to charles Darwin about the studies in the indonesian islands. The whole was about Natural selection.

A. Inheritance of Acquired characters

B. Principles of Population

C. Origin of spices

D. Palaeontology

Answer:

Watch Video Solution

286. What is genotype ratio ?

A. 0.04306712962963

B. 0.16736111111111

C. 0.12569444444444

D. 0.043761574074074

Answer:

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287. Who proved that bodily changes are not inherited?

A. Shape of nose

B. Colour of skin

C. Shape of ear lobes

D. Size of the body

Answer:

 Watch Video Solution

288. In a typical dihybrid cross the H_2 phenotypic ratio is

A. 9 : 3 : 3 : 1

B. 9 : 1 : 3 : 3

C. 3 : 3 : 1 : 9

D. 1:3:9:3

Answer:

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289. Acquiring change is called

A. Heredity

B. Inheritance

C. Evolution

D. Speciation

Answer:

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290. How many characters are responsible for producing a particular character or trait, according to Mendel?

A. TT or YY

B. Tt or Ty

C. tt or yy

D. Both A&B

Answer:

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291. Journal of Linnaean Society about natural selection was published by

A. Charles Darwin and Charles Lyell

B. Augustus Weismann and Charles Lyell

C. Charles Darwin and Alfred Russel

D. Hugo Devries and Augustus Weismann

Answer:

292. Find the correct one.

A. Genetic laws

B. Inheritance of acquired characters

C. Speciation

D. Germplasm theory

Answer:

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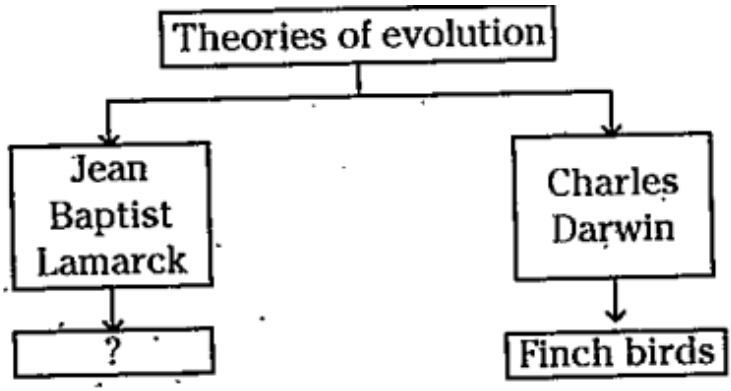
293. Complete the flow-chart.



A. Rats

B. Dog

C. Pea plants

D. Giraffee

Answer:

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294. Find the missed one.

Book	Scientist
The Origin of Species	Charles Darwin
An Essay on the Principles of Population	?

A. Wallace

B. Lamarck

C. Weismann

D. Malthus

Answer:

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295. HMS beagle : Charles Darwin, indonesian islands: .....

A. Lamarck

B. Malthus

C. Charles Lyell

D. AR Wallace

Answer:

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296. Kangaroo: Australia:: First Man: .....?.....

A. Asia

B. Europe

C. North America

D. Africa

Answer:

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297. indentify the mismatched pair .

1 Connecting link - Dinosaur

2. Homosapiens - Gorilla

3. Evolution - Process of attaining changes

A. 1,3

B. 2,3

C. 2 only

D. 1,2

Answer:

Watch Video Solution

298. Darwin: Fich birds :: Mendel: .....?.....

A. Giraffee

B. Pea plants

C. Rats

D. Cats

Answer:

Watch Video Solution

299. Variations in offspring are caused by .

A. Sexual reproduction

B. Asexual reproduction

C. Errors in DNA Mapping

D. Both A and C

Answer:

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300. What is your undertanding about survival of the fittest ? Give some situatios or examples that you observe in your surroundings.

A. Lamarck

B. August Weismann

C. Darwin

D. Mendel

Answer:

 Watch Video Solution

301. indentify the mismatched pair.

1. Zoogeography - Speciation

2 Genetics -Study of heardity

3. Embryology- Study of fossils

A. 1,2

B. 2 Only

C. 1 only

D. 3 only

Answer:

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302. indentify the mismatched pair.

1. Phenotypic ratio of F2 genration -1:2:1

2 Genotypic ratio of F2 generation -3:1

3. Phenotypic ratio of dihybrid cross-9:3:3:1

A. 1,3

B. 2,3

C. 2 only

D. 1,2

Answer:

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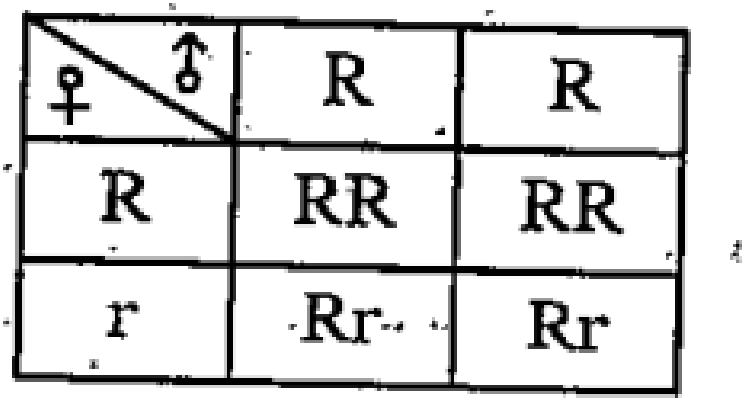
303. The genotypic ratio of the checker board is



A. 2:2

B. 2:0

C. 1:2:0

D. 1:1:0

Answer:

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304. Find the odd man out.

A. Appendix

B. Hair on skin

C. Pinna

D. Thumb

Answer:

Watch Video Solution

305. Palaeontology : fossils :: Anthropology:.....?.....

A. Speciation

B. Evolution

C. Genes

D. Study of human race

Answer:

Watch Video Solution

306. Weak deer cannot live long in a forest accroding to Darwin's principle. What concept it shows ?

A. Natural selection

B. Struggle for existence

C. Survival of the fittest

D. All of the above

Answer:

307. A goat which walks properly can't live for a long time. According to darwin, this represents .....

A. Natural selection

B. Survival of the fittest

C. Struggle for existence

D. All the above

Answer:

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308. A cross was made between tall and dwarf plant. In F_1 plants were selfed, thetall and

dwarf plants appeared in 3:1 ratio in F_2 generation. This phenomenon is known as

A. 0.4

B. 0.6

C. 0.75

D. 0.25

Answer:

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