

BIOLOGY

BOOKS - SANTRA BIOLOGY (BENGALI ENGLISH)

EVOLUTION AND ADAPTATION

Exercise Multiple Choice Questions

1. Which one is the vestigial organ of man?

| A. Stomach |
|--|
| B. Pancreas |
| C. Colon |
| D. Appendix |
| Answer: |
| Watch Video Solution |
| 2. Who proposed the theory of mutation ? |
| A. Mendel |

- B. Darwin
- C. Lamarck
- D. De-Vries



Watch Video Solution

3. Who proposed the theory of Natural Selection?

A. Lamarck

| C. mendel |
|--|
| D. Darwin |
| |
| Answer: |
| Watch Video Solution |
| |
| 4. Who proposed the idea of 'Inheritance of Acquired characters'? |
| A. De-Vries |

B. De-Vries

- B. Haldane
- C. drawin
- D. Lamarck



Watch Video Solution

5. Who first used the term "Struggle for existence"?

A. Weismann

- B. Mendel
- C. Lamarck
- D. Darwin



- 6. negatively geotropic roots are found in
 - A. Cactus
 - B. Sundari

C. lotus

D. Paddy

Answer:



Watch Video Solution

7. Number of air-sacs of plgeon are

A. 7

B. 7 pair

C. 9 pair



Watch Video Solution

8. Chemosynthetic theory was proposed by

- A. Miller & Urey
- B. Oparin & Haldane
- C. Darwin & Lamarck
- D. Weismann & De-Vries



Watch Video Solution

- 9. Which one is a halophytic plant?
 - A. Sundari
 - **B.** Cactus
 - C. Lotus
 - D. None of them

Answer:

10. In which animal pneumatic bone is found?

A. Rat

B. Pigeon

C. Man

D. Fish

Answer:



11. Original of life proposed by

- A. Darwin
- B. Lamarck
- C. Oparin & Haldane
- D. Mendel

Answer:



| 12. | Germp | lasm | theory | v was | pro | posed | b١ | / |
|-----|--------|--------|--------|-------|-----|-------|----|---|
| | GCITIP | 143111 | | yvvas | P | POSCA | ~ | , |

- A. Weismann
- B. Darwin
- C. Lamarck
- D. Mendel



13. How many eggs per day are libarated by round worm

- A. 7,00,000
- B. 2,00,000
- C. 75000
- D. 50000

Answer:



| 14. | Which | animal | exhibits | the | slowest |
|------|----------|--------|----------|-----|---------|
| repr | oductive | rate ? | | | |

- A. Tiger
- B. Lion
- C. Elephant
- D. Fox



15. The gas which was absent in the environment during the origin of life is

- A. Hydrogen
- B. Oxygen
- C. Methane
- D. Ammonia

Answer:



- 16. The feature of anaiogous organ is
 - A. Different in origin but functions are also different
 - B. Different in origin but functions are same
 - C. Indicates divergent evolution
 - D. Identical in origin and structure



Exercise Fill In The Blanks

1. Vermiform appendix is _____ organ in man.



Watch Video Solution

2. Microsphere is made from _____



| 3. In amphibia and reptiles, the heart is chambered. |
|--|
| Chambered. |
| Watch Video Solution |
| |
| 4. Number of air sacs of pigeons are |
| Watch Video Solution |
| |
| |
| 5. The earliest ancestor in the evolution of horse is |



Exercise Mention True Or False

1. Retia mirabilia is found in actus.



Watch Video Solution

2. Venus heart is present in fish.



3. Scientific study of animal behaviour is known as ethology.



Watch Video Solution

4. The write of 'Origin of Species' is Hugo de vries.



5. The fundamential tenet of the evolutionary theory of Drrwin is the process of natural selection



Watch Video Solution

Exercise Very Short Answer Vsa Type Questions

1. Who proposed 'Natural selection theory?



2. Give an example of homologous organ.



Watch Video Solution

3. Write an example of analogous organ.



Watch Video Solution

4. In which reptile 4-chambered heart is found

?



5. Name the ancestro of Equus.



Watch Video Solution

6. Give an example of vestigial organ of man.



Watch Video Solution

7. Name the fossil of the oldest fore father of Horse.



8. Who prosposed the theory of 'Inheritance of Acquired Characters"?



Watch Video Solution

9. In which plant breating root is found?



10. Which plant show left modified into spine?



11. Who proposed the 'Origin of life' concept?



12. Write the proposer of the 'Microsphere model"?



13. What is Drawinism?



Watch Video Solution

14. Mention one morplological adaptation of actus of prevent transpiration.



Watch Video Solution

Exercise Short Answer Sa Type Questions

1. What is adaptation?



Watch Video Solution

2. What is pneumatophore?



Watch Video Solution

3. What is the role of swim bladder in fish?



4. State any two adaptive features of Catus.



Watch Video Solution

5. Define homologous organ.



Watch Video Solution

6. What do you mean by anaiogous organ?



7. What is natural selection?



Watch Video Solution

8. What is vestigial organ?



Watch Video Solution

9. What to you mean by 'Survival of the fittest'

?



10. Define evolution.



Watch Video Solution

11. What is chemical evolution?



Watch Video Solution

12. What is protocell



13. Define Lamarkism.



Watch Video Solution

14. Write the name of reactants used and one organic compound formed in the experiment of Miller and Urey in connection with chemical origin of life.



15. Write four important features modified in the evolution of horse.



Watch Video Solution

Exercise Long Answer La Type Questions

1. Descibe the experiment performed by Miller and Urey along with proper diagem.



2. Describe the steps of formation of first cell.



3. What is Lamarckism. What ar ethe supportive points on Lamarckism? [2+3]



4. Define neo-Lamarckism. State about the criticism of Lamarckism. $\left[2+3\right]$

5. Describe about the Darwin's theory of Natural Selection.



6. Briefly state about the analysis on the reality of Darwin 's theory. What are the limitations of Darwinism? [3+2]



7. What is neo Darwinism ? What are the difference between Darwinism and neo-Darwinism? $\lceil 2+3 \rceil$



Watch Video Solution

8. State about the palaeontological evidence for the theory of evolution.



9. Describe the evolutionary stages of hors.



10. State about the evolution of heart of vertebrate. What is vestigial organ ? $\left[3+2\right]$



11. Describe the embryonic stages of fish to mammals.



12. Briefly describe the survival stategies of adaptiation.



Watch Video Solution

13. What is adptation ? Why adaptation is the key criteria in promotion of evolution ? [2+3]



14. State about the morphological adaptive features of cactus.



Watch Video Solution

15. Show the major evolutionary events with the help of a flow chart.

