EINSTEIN'S ACADMEY

10^{TH} SCIENCE

UNIT- 19

MARKS – 40

I Choose the correct answer

5x1=5

1. Biogenetic law states that_____

a. Ontogeny and phylogeny go together b. Ontogeny recapitulates phylogeny

c. Phylogeny recapitulates ontogeny d. There is no relationship between phylogeny and ontogeny

2. The best way of direct dating fossils of recent origin is by

a. Radio-carbon method b. Uranium lead method

c. Potassium-argon method d. Both (a) and (c)

3. The term Ethnobotany was coined by _____

a. Khorana b. J.W. Harsbberger

c. Ronald Ross d. Hugo de Vries

4. Biogenetic law states that _____

a) Ontogeny and phylogeny go together b) Ontogeny recapitulates phylogeny

c) Phylogeny recapitulates ontogeny d) There is no relationship between phylogeny and ontogeny

5. The 'use and disuse theory' was proposed by

a. Charles Darwin b. Ernst Haeckel

c. Jean Baptiste Lamarck d. Gregor Mendel

II Fill in the blanks

3x1=3

1. The degenerated and non-functional organs found in an organism are called_____

2. The forelimb of bat and human are examples of_____ organs.

3. The theory of natural selection for evolution was proposed by _____.

IV Match the following

(2)

1. Atavism - caudal vertebrae and vermiform appendix

2. Vestigial organs -- a forelimb of a cat and a bat's wing

3. Analogous organs - rudimentary tail and thick hair on the body

4. Homologous organs - Thiruvakkarai

5. Wood park - a wing of a bat and a wing of an insect

Ill State true or false. Correct the false statements

3 x 1=3

1. The use and disuse theory of organs' was postulated by Charles Darwin.

2. The homologous organs look similar and perform similar functions but they have different origin and developmental pattern.

3. Birds have evolved from reptiles.

IV. Short answers questions

7 x 2 =14

1. Imprints of fossils us about evolution.How?

2. The degenerated wing of a kiwi is an acquired character. Why is it an acquired character?

3. A human hand, a front leg of a cat, a front flipper of a whale and a bat's wing look dissimilar and adapted for different functions. What is the name given to these organs?

4. What is the study of fossils called?

5. Define Ethnobotany and write its importance.

6. How can you determine the age of the fossils?

7. Why is Archaeopteryx considered to be a connecting link?

V. Long answer questions

3 x 5=15

1. Natural selection is a driving force for evolution-How?

2. How do you differentiate homologous organs from analogous organs?

3. How does fossilization occur in plants?