



BIOLOGY

BOOKS - TRUEMAN BIOLOGY

EVOLUTION

Multiple Choice Questions

1. According to spontaneous generation (Abiogenesis) theory proposed

by Anaximander

A. organisms arose from water

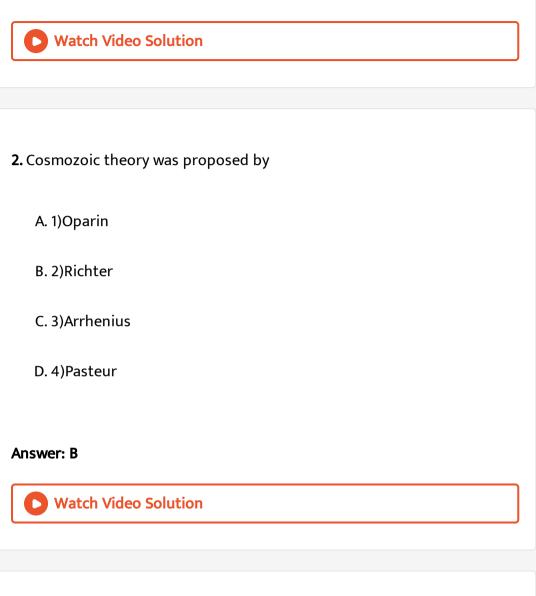
B. organism originated from decaying and rotting matter like straw,

mud etc.

C. organisms arose automatically from non-living matter

D. organisms arose only from air

Answer: C



3. Cosmic Panspermia theory was proposed by

A. 1)Plato

B. 2)Redi

C. 3)Arrhenius

D. 4)Thales

Answer: C

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4. Biogenesis was proposed by Francesco Redi and supported by

A. 1)Thales and Plato

B. 2)Spallanzani and Pasteur

C. 3)Thomson and Helmholtz

D. 4)Oparin and Haldane

Answer: B

5. Biogenesis states life originated from

A. 1)non-living things

B. 2) preexisting life

C. 3)both (1) & (2)

D. 4)none of these

Answer: B

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6. The book "The Origin of life" was written by a Russian scientist,

A. Darwin

B. Oparin

C. Hugo de Vries

D. Lamarck

Answer: B Watch Video Solution 7. Haldane born in England, migrated to....in July, 1957. A. Canada B. Russia C. India D. Nepal Answer: C Watch Video Solution

8. Modern theory of origin of life includes

A. chemical evolution

B. biological evolution

C. both chemical and biological evolution

D. none of the above

Answer: C

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9. Stanley Lloyd Miller a graduate student of Harold C. Urey, Conducted an experiment to demonstrate that simple organic molecules like amino acids could be produced if an electric discharge is passed through a mixture of such gases as might have been present in the atmosphere of the early earth. The gaseous mixture used in the experiment comprised

A. methane, ammonia, hydrogen, water vapour

B. methane, carbon dioxide, nitrogen, water vapour

C. ammonia, carbon dioxide, nitrogen water vapour

D. methane, ammonia, nitrogen, water vapour

| Answer: A |
|--|
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| |
| |
| 10. Who called water of primitive sea as prebiotic soup : |
| A. Haldane |
| B. Oparin |
| C. Fox |
| D. Huxley |
| Answer: A |
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| |
| |

11. Oparin's theory is based on

A. 1)artificial synthesis

B. 2)spontaneous generation

C. 3)God's will

D. 4)all

Answer: A

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12. Which type of respiration probably arose first?

A. aerobic as it releases more energy

B. anaerobic as it releases more energy

C. aerobic as it is more complex

D. anaerobic as early atmosphere contained little or no oxygen

Answer: D

13. Coacervates were large colloidal aggregates named by

1. Haldane

2. Oparin

3. Preyer

4. Bondi

A. Haldane

B. Oparin

C. Preyer

D. Bondi

Answer: B

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14. It is believed that the organisms first inhabited Earth's surface were :

A. saprotrophs

B. autotrophs

C. chemoheterotrophs

D. none of these

Answer: C

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15. On the basis of Miller's experiment one can say that

- 1. organic compounds have carbon, hydrogen and oxygen
- 2. organic compounds can be synthesized in the laboratory
- 3. life originated in the from of amino acids
- 4. complex organic molecules were first formed on primitive earth

A. organic compounds have carbon, hydorgen and oxygen

- B. organic compounds can be synthesized in the laboratory
- C. life originated in the from of amino acids
- D. complex organic molecules were first fromed on primitive earth

Answer: D



- 16. Which is not correct match
- 1. Alanine, Glycine, Aspartic acid-Miller
- 2. Coacervate-Oparin
- 3. Microsphere-Sydney Fox
- 4. Stromatolites-Aristotle
 - A. Alanine, Glycine, Aspartic acid-Miller
 - B. Coacervate-Oparin
 - C. Microsphere-sydney Fox
 - D. Stromatolites-Aristotle

Answer: D

17. Who proposed symbiotic origin of Eukaryotes

1. Graham Cairns-Smith

- 2. Margulis
- 3. Abbe Lemaire

4. Kant

A. Graham Cairns-Smith

B. Margulis

C. Abbe Lemaire

D. Kant

Answer: B

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18. Three Major Domains of life was proposed by carl Woese which includes

A. Eubacteria, Archaea and Eukarya

- B. Monera, Plantea and Animalia
- C. Bacteria, Plantea, Eukarya
- D. Cynobacteria, Plantea, Animalia

Answer: A

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19. Life originated on our planet

A. 2 billion years ago

B. 3.7 billion year ago

C. 5 billion years ago

D. 10 billion year ago

Answer: B

20. Life originated in the

A. precambrian era

B. palaeozoic era

C. mesozoic era

D. coenozoic era

Answer: A

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21. In the solar system of the milky way galaxy, earth was supposed to

have been formed about..... billion years back

A. 4

B. 5

C. 4.5

D. 3.5

Answer: C



22. Oparin's theory is based on

A. organic evolution

B. chemical evolution

C. cosmic evolution

D. artificial synthesis

Answer: B



23. Microspheres were named by

A. Oparin

B. Sydney Fox

C. Haldane

D. Bondi

Answer: B

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24. Who said that organisms develop from existing organisms

A. Aristotle

B. Louis Pasteur

C. Oparin

D. Morgan

Answer: B

25. First photosynthetic organisms to appear on earth were

A. bacteria

B. green algae

C. cyanobacteria

D. bryophytes

Answer: C

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26. A compound important in prebiotic evolution was

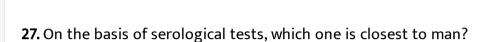
A. SO_2

 $\mathsf{B.}\,CH_4$

 $\mathsf{C}.SO_3$

D. NO

Answer: B



A. Baboon

B. Chimpanzee

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C. Gorilla

D. Monkey

Answer: B

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28. The greatest weakness of Darwin's theory was his failure to explain

A. survival of the fittest

B. overproduction

C. struggle for existence

D. variation

Answer: D

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29. Concept of genetic drift was introduced by

A. 1)Hardy and Weinberg

B. 2)Haeckel and Nageli

C. 3)Dobzhansky and Sewall

D. 4)Sewall and Wright

Answer: D

30. The strongest support to organic evolution comes from the study of

A. comparative anatomy

B. fossils

C. embryology

D. taxonomy

Answer: B

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31. Who is regarded as father of evolutionary concept

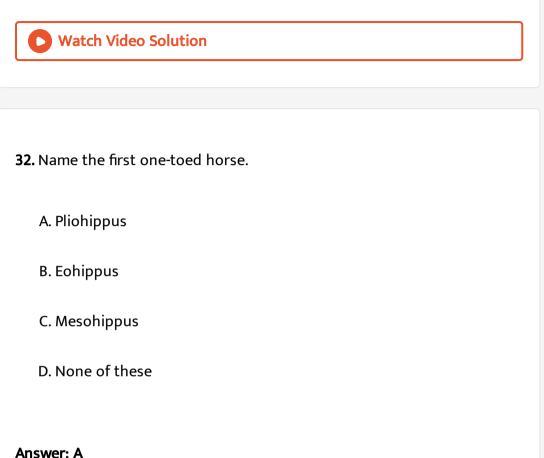
A. 1)Aristotle

B. 2)Empedocels

C. 3)Lamarck

D. 4)Darwin

Answer: B



D Watch Video Solution

33. Parallelism is

A. adaptive divergence in evolution

B. adaptive convergence of widely different species in evolution

C. adaptive convergence of closely related species in evolution

D. none of the above

Answer: C

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34. Which of the organs in man is not likely to become extinct soon?

A. wisdom tooth

B. blind spot

C. hair

D. ear muscles

Answer: B

35. Which of the following is a fossil?

A. Euglena

B. Balanoglossus

C. sycon

D. Limulus

Answer: D

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36. The beak in birds is toothed in

A. Ostrich

B. Kiwi

C. Pelican

D. Archaeopteryx

Answer: D



37. Geology and Zoology are intimately connected in :

A. 1)archaelogy

- B. 2)palaeontology
- C. 3)sociology
- D. 4)zoogeography

Answer: B

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38. Archaeopteryx became extinct in cretaceous and is connecting link

between

A. reptiles and mammals

B. reptiles and birds

C. amphibians and reptiles

D. birds and mammals

Answer: B

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39. Which animal has become extinct recently ?

A. Dinosaur

B. Pterodactyl

C. Mammoth

D. Dodo

Answer: D

40. Father of palaeontology is

A. Hugo de vries

B. Georges cuvier

C. Leonard da vinci

D. wallace

Answer: C

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41. Founder of modern palaeontology is

A. Georges Cuvier

B. Xenophanes

C. Osborn

D. Lamarck

Answer: A



42. Wooly mammoths were found buried in ice of

A. 1)Himalayas

B. 2)North pole

C. 3)Siberia

D. 4)Atlantica

Answer: C



- 43. Trilobates were dominant in
- 1. Precambrian
- 2. Cambrian
- 3. Ordovician
- 4. Silurian
 - A. Precambrian
 - B. Cambrian
 - C. Ordovician
 - D. Silurian

Answer: B



44. Fossil Parks of India are

- 1. Deccan country
- 2. Rajmahal Hills

- 3. Old coal forming forest
- 4. All the above
 - A. Deccan country
 - B. Rajmahal Hills
 - C. Old coal forming forest
 - D. All the above

Answer: D

- 45. Dinosaurs originated :
 - A. long before mammals
 - B. in the same period with mammals
 - C. before mammals and gave rise to them
 - D. sometime after mammals

Answer: B



46. In the geological history of earth, the beginning of birds and mammals occurred in

1. Carboniferous and Permian epochs

2. Jurassic

- 3. Silurian
- 4. Eocene and Oligocene

A. Carboniferous and Permian epochs

B. Jurassic

C. Silurian

D. Eocene and Oligocene

Answer: B



47. The age of fossils can be estimated now by

A. earth's crust

B. amount of calcium deposited

C. remaining quantity of radioactive carbon in relevant rocks

D. All of the above

Answer: C

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48. Man (Homo) originated in

A. Pliocene

B. Palaeocene

C. miocene

D. oligocene

| Answer: A |
|--|
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| 49. Whose palaeontological history is older then that of the other three? |
| A. 1)Dinosaurus |
| B. 2)Frog |
| C. 3)Man |
| D. 4)Horse |
| |
| Answer: B |
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| |
| 50. Hoofed animals like horse originated in : |

A. eocene

B. oligocene

C. miocene

D. pleistocene

Answer: A

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51. Which of the following were abundant in mesozoic era

Or

Birds are evolved from

A. Pisces

B. mammals

C. birds

D. reptiles

Answer: D



52. Which horse resembles pliohippus in general features?

A. Eohippus

B. Mesohippus

C. Equus

D. None of these

Answer: C

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53. Fossil of Archaeopteryx lithographica placed in London was found in

A. India

B. China

C. Germany

D. England

Answer: C



54. Most primitive fossil of horse is

A. equus

B. merychippus

C. mesohippus

D. eohippus

Answer: D



55. Age of invertebrates was

A. cambrian

B. silurian

C. ordovician

D. permian

Answer: C

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56. Age of fishes is

A. permian

B. devonian

C. triassic

D. miocene

Answer: B

57. age of amphibians is

A. 1)eocene

B. 2)jurassic

C. 3)carboniferous

D. 4)oligocene

Answer: C

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58. Ordovician is also called age of

A. annelids

B. arthroopods

C. giant mollusca

D. echinoderms

Answer: C



59. Analogous organs have a

A. common embryonic origin but perform different functions

B. different embryonic origin and perform different functions

C. common embryonic origin and perform similar functions

D. different embryonic origin but perform similar functions

Answer: D



60. Which one of the following sets includes all homologous organs

- 1. hind legs of dog, duck and kangaroo
- 2. wings of bats, butterflies and birds
- 3. sting of honeybee, scorpion and mosquito
- 4. tail of rat, peacock and earthworm

A. hindlegs of dog, duck and kangaroo

B. wings of bats, butterlies and birds

C. sting of honeybee, scorpion and mosquito

D. tail of rat, peacock and earthworm

Answer: A



61. Which of the following organ in man is not vestigial :

1. nictitating membrane

2. epiglottis or ileum and malleus

- 3. vermiform appendix
- 4. muscles of ear pinna

A. nictitating membrane

B. epiglottis or ileum and malleus

C. vermiform appendix

D. muscles of ear pinnea

Answer: D

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62. Vestigial organ of python is :

1. nose

- 2. scales
- 3. teeth

4. pelvic girdle

A. nose

B. soales

C. teeth

D. pelvic girdle

Answer: C

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63. Which statement is correct?

A. wings of bat and butterfly are homologous

B. wings of bird and hands of man are analogous

C. atlas is vestigial

D. coccyx of man is vestigial

Answer: C

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64. Which protozoan resembles the ancestral form from which the plants

and animals evolved ?

A. Amoeba

B. Paramoecium

C. Euglena

D. Plasmodium

Answer: D

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65. Connecting link between annelida and mollusca is

A. 1)Cuttle fish

B. 2)Octopus

C. 3)Neopilina

D. 4)Nautilus

Answer: C



66. Reappearance of certain ancestral characters is called

- 1. anabolism
- 2. catabolism
- 3. atavism
- 4. metabolism
 - A. anabolism
 - B. catabolism
 - C. atavism
 - D. metabolism

Answer: B

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67. Who has divided the whole world into six major biogeographical regions or realms for the distribution of animals and plants ?

A. A.R. Wallace

B. Charles Darwin

C. Dr. P.L. Sclater

D. Hugo de vries

Answer: C

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68. The Galapagos Islands were associated with :

A. 1)Lamarck

B. 2)Darwin

C. 3)Malthus

D. 4)Cuvier

Answer: C



69. Birds of Galapagos islands were named Darwin's finches by

- 1. Darwin
- 2. Wallace
- 3. Dr. David Lack
- 4. Hugo de Vries
 - A. Darwin
 - B. Wallace
 - C. Dr.David Lack
 - D. Hugo de vries

Answer: D

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70. Alligators are found in

A. India and Russia

B. Japan and Australia

C. United states and China

D. France and Germany

Answer: A

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71. Magnolias, Tulips and Sassafras Plants are found in

A. Nepal

B. Canada

C. Austria

D. USA and China

Answer: B Watch Video Solution 72. Basic principles of embryonic development were stated by A. 1)von Baer B. 2)Haeckel C. 3)Darwin D. 4)Weismann Answer: D Watch Video Solution

73. Biogenetic laws/recapitulation theory was proposed by

1. Weismann

2. Haeckel

- 3. Darwin
- 4. Malthus

A. Weismann

- B. von Baer and Haeckel
- C. Darwin
- D. Malthus

Answer: D

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- 74. According to Haeckel's biogenetic law :
- 1. development of individual metazoa shows embyonic characters of

ancestors

- 2. ontogeny repeats phylogeny
- 3. germplasm is immortal
- 4. every organism is produced by its parents

A. development of individual metazoa shows embyonic characters of

ancestors

B. ontogeny repeats phylogeny

C. germplasm is immortal

D. every organism is produced by its parents

Answer: C

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75. Appearance of teeth in the embryos of birds is an example of :

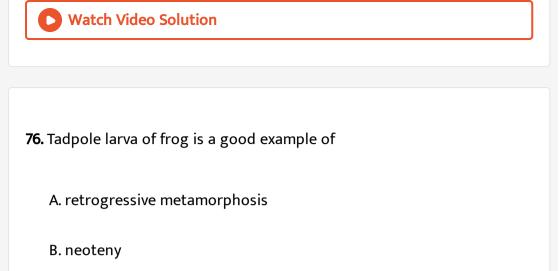
A. vestigeal organs

B. ontogeny repeats phylogeny

C. atavism

D. speciation

Answer: C



- C. parthenogenesis
- D. biogenetic law

Answer: C



77. Which is the correct sequence?

A. algae \rightarrow pteridophytes \rightarrow gymnosperms

B. bryophytes \rightarrow angiosperms

C. pteridophytes \rightarrow algae

D. algae \rightarrow bryophytes \rightarrow pteriodophytes \rightarrow gymnosperms

Answer: C



78. Blood proteins are similar in

A. fishes and reptiles

B. amphibians and birds

C. amphibians and birds

D. birds and mammals

Answer: B



79. 'Golden Age of Dinosaurs'/Age of reptiles was

A. Mesozoic

B. Coenozoic

C. Palaeozoic

D. Psychozoic

Answer: C

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80. Two zoogeographical regions separated by high mountain ranges are

A. Oriental and Australian

B. Palaearctic and Oriental

C. Nearctic and Palaearctic

D. Neotropical and Ethiopian

Answer: B



81. Existence of coal or petroleum can be known from the study of :

A. ecology

B. economic Botany

C. palaeobotany

D. bacteriology

Answer: C

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82. Famous palaeontologist/palaeobotanist of India was

A. P.Maheshwari

B. S.R.Kashyap

C. B.Sahni

D. B.P.Pal

Answer: C



83. Wings of pigeon, mosquito and bat show

A. divergent

B. convergent

C. atavism

D. parallel

Answer: B



84. Mammals occur on land, air and water. It is

A. adaptation

B. microevolution

C. Convergent evolution

D. adaptive radiation

Answer: D

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85. The book "Philosophie Zoologique" was written by :

A. 1)Darwin

B. 2)Lamarck

C. 3)Mendel

D. 4)Heackel

Answer: B

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86. The key point in Lamarck's view of organic evolution and basic principle is

A. origin of species

B. inheritance of acquired characters

C. over population

D. natural selection

Answer: B

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87. The term'Biology' was first used by

A. 1)Darwin

B. 2)Lamarck and Treviranus

C. 3)Hugo de vries

D. 4)Wallace

Answer: B



88. Weismann formulated his"theory of continuity of Germ plasm" in

A. 1892

B. 1859

C. 1863

D. 1959

Answer: A



89. Who experimentally proved that acquired characters are not inherited

and play no role in evolution?

A. Weismann

B. Darwin

C. Hugo de vries

D. Mendel

Answer: A

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90. Which of the following is a case of adaptive radiation?

A. Wings of birds and insects

B. Human vermiform appendix

C. Darwin's Galapagos finches

D. Cactus and euphorbia plants

Answer: C

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91. The idea of Natural Selection as the fundamental process of evolutionary change was reached

A. independently by Charles Darwin and Alfred Russel Wallace in 1900

B. by Charles Darwin in 1866

C. by Alfred Russel Wallace in 1901

D. independently by Charles Darwin and Alfred Russel Wallace in 1859

Answer: D



92. T.R. Malthus is famous for this book on

A. 1)genetics

B. 2)population

C. 3) mathematics

D. 4)geography

Answer: B

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93. Who published the book "Origin of species by Natural Selection" in

1859

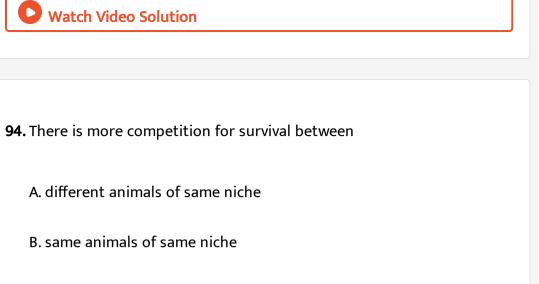
A. Lamarck

B. Darwin

C. Wallace

D. Oparin

Answer: B



- C. different animals of different niche
- D. same animals of different niche

Answer: B

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95. A scientist who gave a theory very similar to that given by Darwin was

Or

Co-worker of Darwin was

A. Wallace

B. Mendel

C. Bateson

D. Lamarck

Answer: A

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96. Given : 1 = Natural selection , 2 = Variations and their inheritance , 3 = Survival of the fittest , 4 = struggle for existence According the Darwinism, which of the following represents the correct squence of events in the origin of new species ?

A. 1,2,3,4

B. 2,3,1,4

C. 3,4,1,2,

D. 4,2,3,1

Answer: D



97. Who gave principle that man tends to multiply by geometrical progression then food supply?

A. Malthus

B. Darwin

C. Haldon

D. Gandhi

Answer: A

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98. For evolution, the most important requirement is :

A. adaptation of acquired characters

B. Variation

C. natural selection

D. development anomaly

Answer: B

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99. The book "Descent of Man and selection in relation to sex" was written

by

A. Robert Broom

B. Lamarck and Darwin

C. Charles Darwin

D. lamarck

Answer: D



100. Replica plating experiment was conducted by

A. Joshua Lederberg

B. R.A.Fisher

C. Esther Lederberg

D. (1) and (3)

Answer: D

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101. Which of these was most influential in formulation of Natural selection Theory by Darwin?

A. Malthus essay on population

B. Inheritance of acquired characters

C. Mendelian laws of inheritance

D. Struggle for existence

Answer: A

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102. The most accepted and recent theory of organic evolution is :

A. Lamarck's theory of inheritance of acquired characters

B. Darwin Wallace theory of natural selection

C. Hugo de Vries mutation theory

D. Synthetic theory (Neo-Darwinism)

Answer: D

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103. According to the Neo-Darwinian theory, which of the following is responsible for the origin of new species

A. Mutations

B. Useful Variations

C. Mutations together with natural selection

D. Hybridization

Answer: C

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104. Industrial melanism in moths was originally studied by

A. Kettlewell

B. Fisher and Ford

C. Darwin

D. Lamarck

Answer: C Watch Video Solution 105. Darwin explained artifical selection by taking example of A. Dogs **B.** Pigeons C. Cats D. Giraffe Answer: B Watch Video Solution

106. Initiating force of evolution is :

A. natural selection

B. mutation

C. adaptation

D. none of these

Answer: B

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107. Which is a correct match?

A. 1)Darlington-DNA replication

B. 2)Mendel-mutation

C. 3)Morgan-father of genetics

D. 4)Hugo de vries-Oenothera lamarckiana

Answer: D

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108. A child has a single kidney since birth. This variation is

A. positive meristic

B. negative meristic

C. substantive

D. blastogenic

Answer: B

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109. Which law of evolution states that "Warmblooded" mammals of hot

and humid areas have abundant melanin pigment

A. 1)Dollo's Law

B. 2)Gloger's Law

C. 3)Cope's Law

D. 4)Gause's Law

Answer: B



110. Genetic drift is the elimination of

A. individuals

B. chromosomes

C. species

D. genes of some original characteristics of a species due to epidemics

Answer: D

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111. Reproductive isolation results in

A. differentiation of species

- B. evolutionary divergence
- C. maintenance of a species
- D. extermination of a species

Answer: B

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112. Instant speciation can occur by

A. intraspecific hybridization

B. interspecific hybridization

C. polyploidy

D. both (2) and (3)

Answer: C

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113. Appearance of DDT-resistant mosquitoes is an instance of

A. parallel evolution

B. convergent evolution

C. current evolution

D. divergent evolution

Answer: C

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114. A new factor in the modern synthetic theory of organic evolution is

A. sexual reproduction

B. mutation

C. isolation

D. natural selection

Answer: C

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115. Some organisms resemble other organisms and thus escape from enemies. This phenomenon is known as :

A. 1)homology

B. 2)variation

C. 3)analogy

D. 4) mimicry

Answer: D

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116. The greatest evolutionary change enabling the land vertebrates to be

completely free from water , was the development of

A. four legs

B. lungs

C. shelled eggs and internal fretilization

D. four chambered heart

Answer: C

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117. Mule is a hybrid, which of the following statements is correct?

- A. 1)Mule is not a species
- B. 2)Mule is a new species
- C. 3)Horse and ass are two populations
- D. 4)Mule represents a common ancestor of horse and ass

Answer: C

118. A species is a collection of demes. The deme is a group of

A. genes

B. individuals

C. chromosomes

D. population with a common gene pool

Answer: D

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119. In sympatric speciation

A. Part of the population becomes geographically isolates from main

population

B. small segment of the original population becomes isolated

reproductively

C. migration of members of a species from one to other population

takes place

D. hybridization occurs

Answer: B

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120. Allopatric speciation is due to

A. mutations

B. geographical separation of populations

C. migration of members of a species from one to other population

D. hybridization between closely related species

Answer: A



121. Survival of Fittest' was coined by

A. Charles Darwin

B. Herbert Spencer

C. Jean Baptiste Lamarck

D. Hugo de Vries

Answer: C

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122. Light coloured Peppered Moth/Biston betularia gets changed to its

darker carbonaria variety due to

A. translocation of block of genes in response of heavy carbons

B. deletion of gene segment due to industrial pollution

C. mutation of single mendelian gene for survival in smoke laden

industrial environment

D. industrial carbon deposited on wings

Answer: B

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123. Closely related, morphologically similar reproductively isolated sympatric populations are designated as

A. Clones

B. Clines

C. Demes

D. Sibling species

Answer: A

124. The presence of vestigial organs in man supports :

A. natural selection

B. Germplasm theory

C. Evolution but not Lamarck's theory

D. Synthetic theory

Answer: D

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125. Animals living in colder region have shorter tail and ears as compared to the animals living in warmer regions. This phenomenon is called

A. Allen's law

B. Cope's law

C. Bergmann's law

D. Dollo's law

Answer: A

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126. Which one of the following scientists is not related with organic

evolution ?

A. T.R.Malthus

B. Erasmus Darwin

C. Darlington

D. Charles Darwin

Answer: B

127. Who gave the 'Theory of pangenesis'

Or

Who is related with 'Galapagos Island'

A. 1)Correns

B. 2)Mendel

C. 3)Hugo de Vries

D. 4)Darwin

Answer: B

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128. Who wrote the book 'Genetics and Origin of Species' ?

A. 1)Devis

B. 2)Dobzhansky

C. 3)Julian Huxley

D. 4)Fisher

Answer: C



129. The theory which explains the origin of life and is based upon experiments

A. chemical theory

B. catastrophism

C. abiogenesis

D. biogenesis

Answer: B

130. Darwin's finches show one of the following aspects of evolution.

- 1. Biogeographic evidence
- 2. Industrial melanism
- 3. Biochemical evidence
- 4. Embryological evidence
 - A. Biogeographic evidence
 - B. Industrial melanism
 - C. Biochemical evidence
 - D. Embryological evidence

Answer: A



131. The age of evolution of man is measured by

A. observing by electron microscope

B. chemical reaction

C. C-14 radiocarbon dating

D. ultraviolet radiations

Answer: C

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132. Wallace's line passes between

A. Sumatra and Java

B. Borneo and Celebes

C. Timor and New Guinea

D. Bali and Lombok

Answer: B

133. The origin of angiosperm took place during

A. mesozoic era

B. coenozoic era

C. archeozoic era

D. proterozoic era

Answer: A

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134. Mutation cannot explain

A. mimicry

B. industrial melanism

C. connecting link

D. living fossils

Answer: D



135. Tasmanian wolf is a marsupial while wolf is a placental mammal. This

shows :

A. convergent evolution

B. divergent evolution

C. parallelism

D. inheritance of acquired characters

Answer: A



136. In which condition the gene ratio remains constant for any species ?

A. sexual selection

B. random mating

C. mutation

D. gene flow

Answer: B

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137. Two different species cannot live for long duration in the same niche

or habitat. This law is

A. Allen's law

B. Gause's law

C. Competitive exclusion principle

D. Weiseman's theory

Answer: B

138. Cause of mimicry is

A. attack (Offence)

B. Protection (Defence)

C. both (1) and (2)

D. isolation

Answer: C

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139. Animals of cold countries have shorter ears. This is

A. Allen's law

B. Jordan's law

C. Dollo's law

D. Gloger's law

Answer: B



140. The formula of genetic drift that occurs in small isolated population is

A.
$$GD \propto \frac{\sqrt{pn}}{q}$$

B. $GD \propto \frac{\sqrt{pq}}{n}$
C. $GD \propto \frac{\sqrt{n}}{pq}$
D. $GD \propto \frac{\sqrt{pn}}{p}$

Answer: B

141. The evolution resulting in the formation of new species is known as

A. microevolution

B. macroevolution

C. megaevolution

D. (1) and (2)

Answer: B

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142. All the finches on the Galapagos islands are

A. completely unrelated

B. descended from a common ancestor

C. in competition with one another due to feeding seeds

D. both (2) and (3)

Answer: B Watch Video Solution 143. Which one of the following considered to be ancestor of all other? A. Cabbage B. Cauliflower C. Kohlrabi D. Colewort Answer: D Watch Video Solution

144. Reason of fast speciation in present day crop plant is :

A. mutation

B. isolation

C. polyploidy

D. sexual reproduction

Answer: C

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145. Parasites show

A. progressive evolution

B. speciation

C. retrogressive evolution

D. coevolution

Answer: C

146. When a primitive bacterium is exposed to oxygen

A. it dies

B. it develops chlorophyll

C. it produces methane ozone

D. it works faster

Answer: A

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147. Which of the following evolved first?

A. Coacervates

B. Viroids

C. Cyanobacteria

D. Mycoplasma

Answer: A

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148. Which of the following is formed from proteinoids exposed to water,

has properties similar to tooday's cells?

A. Liposome

B. Coacervate

C. Microsphere

D. All of these

Answer: C

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149. First cell produced on Earth is :

A. metazoa

B. protozoa

C. protobiont

D. none of these

Answer: C

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150. Nucleoprotein most probably gave the first sign of :

A. life

B. proteins

C. mimicry

D. evolution

Answer: D

151. The correct sequence of the of the substances appeared during the course of origin of life on earth was:

A. glucose, amino acids, nucleic acids, proteins

B. ammonia, amino acids, proteins, nucleic acids

C. nucleotides, amino acids, nucleic acids, enzymes

D. amino acids, ammonia, phosphates, nucleic acids

Answer: A

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152. Organisms which obtain energy by the oxidation of reduced inorganic compounds are called

A. saprozoic

B. chemoautotrophs

C. photoautotrophs

D. coproheterotrophs

Answer: C

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153. Fossils contents of the alimentary canal are known as :

A. casts

B. trails

C. coprolites

D. impressions

Answer: D

154. Trilobites evolved in

A. 1)silurian

B. 2)cambrian

C. 3)ordovician

D. 4) precambrian

Answer: B

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155. The term 'homologous ' was introduced by :

- 1. Richard Owen
- 2. Andreas Wagner
- 3. Leonardo da Vinci
- 4. Alfred Russel Wallace

A. Richard Owen

B. Andreas Wagner

C. Leonardo da vinci

D. Alfred Russel Wallace

Answer: B

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156. A flying reptile was :

- 1. Pterosaur
- 2. Plesiosaur
- 3. Brontosaurus
- 4. Ichthyosaur
 - A. Pterosaur
 - B. Plesiosaur
 - C. Brontosaurus
 - D. Ichthyosaur

Answer: B



157. The scientist, who described the birds as glorifies reptiles was :

A. 1)Romer

B. 2)Huxley

C. 3)Mendel

D. 4)Robert Hooke

Answer: D

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158. The first mammal appeared in :

A. jurassic period

B. triassic period

C. permian period

D. cretaceous period

Answer: B

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159. Birth palce of horse was :

A. Africa

B. Australia

C. New Zealand

D. North America

Answer: C

160. Mammoths were the extinct :

A. camels

B. horses

C. dinosaurs

D. elephants

Answer: B

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161. Hoofed animals like horse originated in :

A. Eocene epoch

B. Oligocene epoch

C. Miocene epoch

D. Pleistocene epoch

Answer: A

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|---|
| |
| 162. Hyracotherium refers to the ancestral : |
| A. ape |
| |
| B. man |
| C. horse |
| D. elephant |
| |
| Answer: B |
| Watch Video Solution |
| |

163. Neo-Darwinism is

A. population theory

- B. natural selection theory
- C. modern mutation theory
- D. modern synthetic theory

Answer: B

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164. Discovery of which of the following in 1980 predicted the existence of

RNA world during early stage in evolution ?

A. RNA is not found in all cells

B. RNA has enzymatic properties

C. In some viruses RNA is genetic material

D. m-RNA, t-RNA and r-RNA synthesize proteins

Answer: D

165. Total collection of genes at any time in a unit of evolution is

Or

The sum of genes ina populaltiona is called

A. genome

B. gene pool

C. germplasm

D. gene bank

Answer: D

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166. Genetic drift operates in :

A. large isolated population

B. small isolated population

- C. fast reproductive population
- D. slow reproductive population

Answer: D

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167. "Differential reproduction" is just another way of saying :

- 1. variation
- 2. mutation
- 3. genetic drift
- 4. natural selection
 - A. variation
 - B. mutation
 - C. genetic drift
 - D. natural selection

Answer: C

168. The concept of "Biological species " was proposed by :

1. Darwin

2. Mayr

3. von Bear

4. Linnaeus

A. Darwin

B. Mayr

C. von Bear

D. Linnaeus

Answer: C

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169. Huge clusters of galaxies comprise the

A. solar system

B. universe

C. sun

D. asteriods

Answer: A

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170. Big Bang theory explains the origin of

A. 1)universe

B. 2)solar system

C. 3)earth

D. 4)stars

Answer: A

171. Which of the following formed sometime later

- 1. oxygen and hydrogen
- 2. hydrogen and helium
- 3. carbon dioxide and oxygen
- 4. methane and hydrogen

A. oxygen and hydrogen

B. hydrogen and helium

C. carbon dioxide and oxygen

D. methane and hydrogen

Answer: C



172. Oxygen combined with ammonia and methane to form

A. water and carbon dioxide

B. water carbon dioxide and other

C. carbon dioxide and carbon nonoxide

D. water, hydrogen and cyanide

Answer: D

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173. In 1953, S.L. miller, an American scientist, created electric discharge in closed flask containing gases at $800^{\circ}C$. He obtained.

A. Fatty acids

B. Proteins

C. Carbohydrates

D. Amino acids

Answer: D

174. In simimlar experiments like Miller's experiment, which products were

obtained?

A. Sugars

B. Nitrogen bases

C. Pigments and fats

D. All the above

Answer: A

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175. The first non-ceelular form of life could have originated ____ bilion

years back

B. B)5

C. C)6

D. D)3

Answer: D

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176. Which one of the following amino-acids was not found to be synthesized in Miller's experiment

A. 1)Glycine

B. 2)Aspartic acid

C. 3)Glutamic acid

D. 4)Alanine

Answer: B

177. Which cannot be explained by Lamarckism ?

A. Elongated of neck of giraffe.

B. Loss of tail in human being.

C. Weak progeny of nobel laureate.

D. None of these

Answer: D

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178. Major radiation of mammals, birds and pollinating insects took place

in which epoch?

A. Eocene

B. Pliocene

C. Miocene

D. Palaeocene

Answer: C



179. Jurassic period of the Mesozoic era is characterised by

A. gymnosperms are dominant plants and first birds appear

B. radiation of reptiles and origin of mammal like reptiles

C. dinosaurs become extinct and angiosperms appear

D. flowering plants and first dinosaurs appear

Answer: A



180. Hardy-Weinberg principle explains :

A. genetic equilibrium

B. non-random mating

C. evolution force

D. all of these

Answer: A

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181. Resemblance between widely different groups due to a common adaptation is

A. parallel evolution

B. divergent evolution

C. convergent evolution

D. retrogressive evolution

Answer: C

182. Which one of the following is not a living fossil

Or

Missing link in evolution is

A. 1)Limulus

B. 2)Peripatus

C. 3)Sphenodon

D. 4)Archaeopteryx

Answer: D

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183. Darwin finches are related to which of the following evidences ?

A. Fossils

B. Anatomy

C. Embryology

D. Geographical distribution

Answer: D

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184. Arrange the periods of palaeozoic era in ascending order in a geological time scale :

A. 1)Cambrian \rightarrow Ordovician \rightarrow Silurian \rightarrow Devonian \rightarrow

Carboniferous \rightarrow Permian

B. 2)Cambrian ightarrow Devonian ightarrow Ordovician ightarrow Silurian ightarrow

Carbovician \rightarrow Permian

C. 3)Cambrian ightarrow Ordovician ightarrow Devonian ightarrow Silurian ightarrow

Carboniferous \rightarrow Permian

| D. 4)Silurian - | \rightarrow | Devonian | \rightarrow | Cambrian | \rightarrow | Ordovician | \rightarrow |
|-----------------|---------------|----------|---------------|----------|---------------|------------|---------------|
|-----------------|---------------|----------|---------------|----------|---------------|------------|---------------|

Permian \rightarrow Carboniferous

Answer: A

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185. Industrial melanism as observed in peppered moth proves that

A. the melanic form of the moth has no selective advantage over

lighter form in industrial area.

B. the lighter form moth has no selective advantage either in polluted

industrial area or non-polluted area.

- C. melanism is a pollution-generated feature.
- D. the true black melanic form arise by recurring random random mutation.

Answer: D



186. Plants and animals of Galapagos islands resemble most closely to

plants and animals of

A. 1)North America

B. 2)South America

C. 3)North Australia

D. 4)South Africa

Answer: B

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187. Change of frequency of alleles in a population results in evolution is

proposed in :

A. de vries theory

B. Darwin's theory

C. Lamarck's theory

D. Hardy-Weinberg principle

Answer: D

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188. Which of the following defines Hardy-Weinberg's law?

A. 1)
$$p^2 + 2pq + q^2 = 0$$

B. 2) $q^2 + p^2 + 2pq = 0$

C. 3)
$$p^2+2pq+q^2=1$$

D. 4)
$$p^2+3pq+q^2=1$$

Answer: C

189. Hardy-Weinberg equilibrium is known to be affected by gene flow, genetic drift, mutation, genetic recombination and

A. saltation

B. evolution

C. limiting factors

D. over production

Answer: D

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190. An evolutionary process giving rise to new species adapted to new

habitats and ways of life is called

A. adaptation

B. microevolution

C. adaptive radiation

D. convergent evolution

Answer: C



191. Higher frequency of melanie British moths and DDT resistance in mosquitoes are cited as examples for :

A. Genetic drift

B. Point mutation

C. natural selection

D. Arrival of the first

Answer: C

192. Transfer of genes from one gene pool to another is called :

A. 1)gene flow

B. 2) mutation

C. 3) speciation

D. 4)genetic drift

Answer: A

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193. Whose bicentenary is the year 2009

A. 1)Darwin

B. 2)Edward Jenner

C. 3)Stanley Miller

D. 4)T.H. Morgan

Answer: A

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194. Darwinism explains all the following except

A. offspring with bette traits that overcome competition are best

suited for the environment

B. variations are inherited from parents to offspring through genes

C. within each species, there are variations

D. organisms tend to produce more number of offspring than can

survive

Answer: B

195. Which one of the following was not given by Darwin's theory of evolution

A. Struggle for existence

B. Over production

C. natural selection

D. Genetic drift

Answer: D

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196. mayr's biological concept of species is mainly based on

A. morphological feature

B. morphology and method reproduction

C. method of reproduction only

D. reproductive isolation

Answer: D



197. Darwin could not properly explain the theory of evolution due to lack

of

A. 1) evidences

B. 2)variations

C. 3) speciation

D. 4)genetics

Answer: D



198. In the case of peppered moth (Biston betularia) the black-coloured

from became dominant over the light-coloured form in England during

industrial revolution. This is an example of

A. Protective mimicry

B. Inheritance of darker colour charater acquired due to the darker

environment

C. Natural selection whereby the darker forms were selected

D. Appearance of the darker coloured individuals due to very poor

sunlight

Answer: C

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199. Same species found in different geographical areas are called :

A. Sibling

B. Sympatric

C. Allopatric

D. Taxonomic

Answer: B



200. Phylogeny refers to

- A. 1)A group of phyla
- B. 2)Life history of plants
- C. 3)Genetics of animals
- D. 4)Evolutionary history of species from its ancestors

Answer: D



201. A marine dinosaur is

A. 1)Pelycosaur

B. 2)Tyrannosaurus

C. 3)Ichthyosaur

D. 4)Pterosaur

Answer: C

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202. The major cause of evolution of genes and protein is

A. Point mutation

B. chromosomal aberration

C. sexual reproduction

D. gene duplication and divergence

Answer: A

203. In the early earth, water and CO_2 were produced by the combination

of O_2 with

A. 1)ammonia and methane

B. 2)hydrogen

C. 3)organic matter

D. 4)sulphates and nitrates

Answer: A



204. Given below are four statements (A-D) each with one or two blanks.Select the option which correctly fills up the blanks in two statements.(A) Wings of butterfly and birds look alike and are the results of i evolution.

(B) Miller showed that CH_4, H_2, NH_3 and i when exposed to electric

discharge in a flask resulted in formation of ii

- (C) Vermiform appendix is a i organ and an ii evidence of evolution.
- (D) According to Darwin, evolution took place due to i and ii of the fittest.
 - A. (D)-(i) Small variation, (ii) Survival,
 - (A)- (i) Convergent
 - B. (A)-(i) Convergent,
 - (B)-(i) Oxygen, (ii) Nucleosides
 - C. (B) (i) Water vapour, (ii) Amino acids
 - (C) (i) Rudimentary, (ii) Anatomical
 - D. (C) (i) Vestigial, (ii) Anatomical
 - (D) (i) Mutation, (ii) Multiplication

Answer: A

205. The most apparent change during the evolutionary history of Homo-

sapiens is traced in

A. 1)Loss of body hair

B. 2)Walking upright

C. 3)Shortening of the jaws

D. 4)Remarkable increase in the brain size

Answer: D

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206. Darwin's finches were a good example of

A. convergent evolution

B. industrial melanism

C. connecting link

D. adaptive radiation

Answer: D



207. Cro-Magnon people were

A. 1)Herbivorous

B. 2)Frugivorous

C. 3)Sangivorous

D. 4)Carnivorous

Answer: A



208. In evolution of horse, two most important anatomical and morphological changes brought about are

A. Limbs and tail

B. Limbs and height

C. Limbs and teeth

D. Teeth and tail

Answer: C

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209. The primitive atmosphere of earth contained water vapours, hydrogen, ammonia and

A. 1) CO_2

B. 2)Oxygen

C. 3)Nitrogen

D. 4)Methane

Answer: D



210. Homologous structures are a result of

A. convergent evolution

B. divergent evolution

C. genetic drift

D. artificial selection

Answer: B

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211. Which was the biggest land dinosaur?

A. 1)Protoceratops

B. 2)Camptosaurus

C. 3)Tyrannosaurus rex

D. 4)Ichthyosaur

Answer: C



212. The brain capacity of Homo erectus was about

A. 650-800 c.c.

B. 900 c.c.

C. 1400 c.c.

D. none of the above

Answer: B



213. which of the following is not considered as a mutagen ?

A. UV radiation

B. nuclear reaction

C. 2-aminopurine

D. lower temperature

Answer: D

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214. Polyploid derived from two different species is called :

A. 1)autopolyploid

B. 2)triploid

C. 3)allopolyploid

D. 4)monoploid

Answer: C

215. The important gas which was absent during the origin of life on Earth:

A. 1)oxygen gas

B. 2)hydrogen gas

C. 3)nitrogen gas

D. 4)carbon dioxide gas

Answer: A

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216. Maximum survival and reproductive capacity shown by a population under optimal environmental conditions is called:

A. carrying capacity

B. natality

C. biotic potential

D. vitality

Answer: C

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217. Mutations can be induced with

A. 1)infra red radiations

B. 2)IAA

C. 3)ethylene

D. 4)gamma radiations

Answer: D

218. "Good ozone" is found in:

A. mesosphere

B. troposphere

C. stratosphere

D. ionosphere

Answer: C

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219. Which one among the following is an example for homology?

- A. Eye of octopus and mammals
- B. Tuber of sweet potato and potato
- C. Wings of butterfly and dolphins
- D. Thorn and tendrils of Bougainvillea and Cucurbita

Answer: D

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220. Who proposed that the first form of life could have come from pre-

existing non-living organic molecules ?

A. S.L. Miller

B. Oparin & Haldane

C. Charles Darwin

D. Alfred Wallace

Answer: B

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221. Single step large mutation leading to speciation is also called

A. Founder's effect

B. Saltation

C. branching descent

D. natural selection

Answer: B

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222. Which one is considered the first biological catalyst when life originated on earth ?

A. 1)RNA

B. 2)DNA

C. 3)Protein

D. 4)Lipid

Answer: A



223. The period of fishes is

A. Jurassic

B. Devonian

C. Cretaceous

D. Silurian

Answer: B

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224. Analogous structures are a result of

- 1. Divergent evolution
- 2. Convergent evolution
- 3. Artificial selection
- 4. Genetic drift

A. Divergent evolution

- B. Convergent evolution
- C. Artificial selection
- D. Genetic drift

Answer: B



225. Which one of the following options gives one correct example each of convergent evolution and divergent evolution ? Convergent evolution - Divergent evolution (a) Eyes of Octopus and mammals - Bones of forelimbs of vertebrates (b) Thorns of Bougainvillea and tendrils of Cucurbita - Wings of butterflies and birds (c) Bones of forelimbs of vertebrates -Wings of butterfly and birds (d) Thorns of Bougainvillea and tendrils and tendrils of Cucurbita - Eyes of Octopus and mammals

226. In an area where DDT had been used extensively, the population of birds declined significantly because:

A. 1) birds stopped laying eggs

B. 2) earthworms in the area got eradicated

C. 3) cobras were feeding exclusively on birds

D. 4)many of the birds eggs laid, did not hatch

Answer: D

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227. Which one of the following is a wrong statement?

- 1. Most of the forests have been lost in tropical areas
- 2. Ozone in upper part of atmosphere is harmful to animals
- 3. Greenhouse effect is a natural phenomenon
- 4. Eutrophication is a natural phenomenon in freshwater bodies

A. Most of the forests have been lost in tropical areas

B. Ozone in upper part of atmosphere is harmful to animals

C. Greenhouse effect is a natural phenomenon

D. Eutrophication is a natural phenomenon in freshwater bodies

Answer: B

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228. Evolution of different species in a given area starting from a point

and spreadig to other geographical areas is known as

A. adaptive radiation

B. natural selection

C. migration

D. divergent evolution

Answer: A



229. What was the most significant trend in the evolution of modern man

(Homo sapiens) from his ancestors?

A. Binocular vision

- B. Increasing cranial capacity
- C. Upright posture
- D. Shortening of jaws

Answer: B

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230. The idea of mutations was brought forth by

A. 1)Hardy Weinberg, who worked on allele frequencies in a population

B. 2)Charles Darwin, who observed a wide variety of organisms during

sea voyaga

C. 3)Hugo de Vries, who worked on evening primrose

D. 4)Gregor Mendel, who worked on pisum sativum

Answer: C

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231. Read the following statements and choose the correct option

A. Increase in melanized moths after industrialization in Great Britain is a

proof for natrual selection

B. When more individuals of a population acquire a mean character value,

it is called disruption

C. Changes in allelic frequency in a population will lead to Hardly Weinberg equilibrium

D. Genetic drift changes the existing gene ot allelic frequency in future generations

A. B alone is correct

B. D alone if correct

C. A and D alone are coorect

D. A and C alone are correct

Answer: D



232. Match column I with column II and select the correct option from the

given codes. Column I Column II Saltation (i)Darwin Formation of life was perceded by chemical evolution (ii)Louis pasteur Reproductive fitness (iii)de Vries Life comes from pre-existing life (iv)Oparin and Hal-

A. A-(iii),B-(iv),C-(i),D-(ii)

B. i-D, ii-C, iii-B, iv-A

C. i-D, ii-B, iii-C, iv-A

D. i-B, ii-C, iii-A, iv-D

Answer: A



- 233. Which one of these was a flying dinosaur
- 1. Triceratops
- 2. Tyrannosaurus
- 3. Stegosaurus
- 4. Pteranodon
 - A. Triceratops
 - B. Tyrannosaurus
 - C. Stegosaurus
 - D. Pteranodon

Answer: D

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234. Sickle-cell anemia is caused due to the substitution of :

1. Valine by glutamic acid at sixth position of alpha chain of heamoglobin

- 2. Valine by glutamic acid at sixth position of beta chain of haemoglobin
- 3. glutamic acid by valine at sixth position of alpha chain of haemoglobin
- 4. glutamic acid by valine at sixth position of beta chain of haemoglobin
 - A. Valine by glutamic acid at sixth position of alpha chain of heamoglobin
 - B. Valine by glutamic acid at sicth position of beta chain of haemoglobin
 - C. glutamic acid by valine at sixth position of alpha chain of haemoglobin
 - D. glutamic acid by valine at sixth position of deta chain of haemoglobin

Answer: D

235. Which of the following corresponds to mutagens

1. Chemicals and radiations which cause changes in the genetic material

of a cell

- 2. Various archaebacteria that produce methane
- 3. Chemicals which react with ozone molecules and destroy them
- 4. RNA molecules that infect plant and cause diseases

A. Chemicals and radiations which cause changes in the genetic

material of a cell

- B. Various archaebacteria that produce methane
- C. Chemicals which react with ozone molecules and destroy them
- D. RNA molecules that infect plant and cause diseases

Answer: A

236. The idea of mutations was brought forth by

A. Hugo de vries, who worked on evening primrose

B. Gregor Mendel, who worked on pisum sativum

C. Hardy Weinberg, who worked on allele frequencies in a population

D. Charles Darwin, who observed a wide variety of organisms during

sea voyage

Answer: A

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237. Which of the following is a vestigial structure in man?

A. Caecum

B. Pinna of ear

C. Wisdom tooth

D. Muscles of glottis

Answer: C



238. Which of the following statements is incorrect?

A. Wings of insects and bats are homologous

B. Wings of insects and bats are analogous

C. Wings of bats and birds are homologous

D. Wings of insects and birds are analogous

Answer: A



239. According of Darwin, the organic evolution is due to

- A. Competition within closely ralated species
- B. Reduced feeding efficiency in one species due to the presence of

interfering species.

- C. Intraspecific competition
- D. Interspecific competition

Answer: A

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240. The tendency of population to remain in genetic equilibrium may be

disturbed by

A. lack of mutation

B. lack of random mating

C. random mating

D. lack of migration

Answer: B



241. Variation in gene frequencies within populations can occur by chance

rather than by natural selection. This is referred to as

- 1. Random mating
- 2. Genetic load
- 3. Genetic flow
- 4. Genetic drift
 - A. Random mating
 - B. Genetic load
 - C. Genetic flow
 - D. Genetic drift

Answer: D



242. The process by which organisms with different evolutionary history evolve similar phenotypic adaptations in response to a common environmental challenge is called :

A. Non-random evolution

B. Adaptive radiation

C. Natural selection

D. convergent evolution

Answer: D

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243. The eye of octopus and eye of cat show different patterns of structure, yet they perform similar function. This is an example of

A. Analogous organs that have evolved due to convergent evolution.

B. Analogous organs that have evolved due to divergent evolution.

C. Homologous organs that have evolved due to convergent evolution.

D. Homologous organs that have evolved due to divergent evolution.

Answer: A

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244. Which one of the following are analogous structures

A. Flippers of Dolphin and Legs of Horse

B. Wings of Bat and wings of Pigeon

C. Gills of Prawn and Lungs of Man

D. Thorns of Bougainvillea and Tendrils of Cucurbita

Answer: B::C

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245. Forelmbs of cat, lizard used in walking, forelimbs of whale used in swimming and forelimbs of bats used in flying are an example of

A. convergent evolution

B. Analogous organs

C. adaptive radiation

D. Homologous organs

Answer: D

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246. Which is the most common mechanism of genetic variation in the

population of a sexually-reproducing organism

- 1. Chromosomal aberrations
- 2. Genetic drift
- 3. Recombination
- 4. Transduction

- A. Chromosomal aberrations
- B. Genetic drift
- C. Recombination
- D. Transduction

Answer: C



247. A population will not exist in Hardly-Weinberg equilbrium if

- A. 1) there are no mutation
- B. 2) there is no migration
- C. 3) the population is large
- D. 4) individuals mate selectively

Answer: D



248. The wings of a bird and the wings of an insect are

A. homologous structures and represent divergent evolution

B. analogous structures and represent convergent evolution

C. phylogenetic structures and represent divergent evolution

D. homologous structures and represent convergent evolution

Answer: B

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249. Industrial melanism is an example of

A. Neo Darwinism

B. Natural selection

C. Mutation

D. Neo Lamarckism

Answer: B



250. Which of the following structures is homologous to the wing of a

bird?

- 1. Wing of a Moth
- 2. Hind limb of Rabbit
- 3. Flipper of Whale
- 4. Dorsal fin of a Shark
 - A. Wing of a Moth
 - B. Hind limb of Rabbit
 - C. Flipper of Whale
 - D. Dorsal fin of a Shark

Answer: C

251. Following are the two statements regarding the origin of life :

i. The earliest organisms that appeared on the earth were nongreen and presumably anaerobes.

ii. The first autotrophic organisms were the chemoautotrophs that never relesed oxygen.

Of the above statements which one of the following options is correct ?

a. (ii) is correct but (i) is false

b. Both (i) and (ii) are correct

c. Both (i) and (ii) are false

d. (i) is correct but (ii) is false

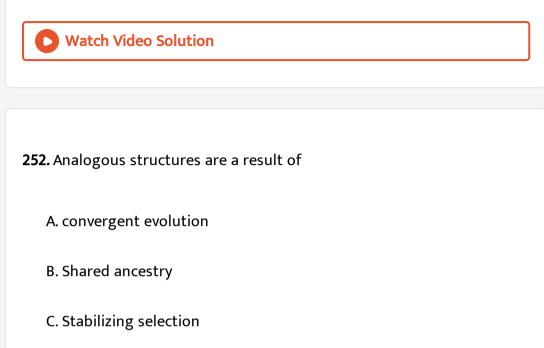
A. (ii) is correct but (i) is false

B. Both (i) and (ii) are correct

C. Both (i) and (ii) are false

D. (i) is correct but (ii) is false

Answer: B



D. divergent evolution

Answer: A



253. In 1863 T.A Huxley mentioned in his book "Man's Place in Nature" that

our closest relatives are

A. old world Monkeys

B. apes

C. new World Monkeys

D. prosimians

Answer: B

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254. In 1871, Charles Darwin described in his book "The Descent of Man" that

A. monkeys and apes had a common ancestor

B. apes and man had a common ancestor

C. prosimians and simians had common ancestor

D. monkey, apes and men had common ancestor

Answer: D

255. Carolus Linnaeus, the Father of Taxonomy placed man among the

A. monkeys

B. apes

C. monkeys and Apes

D. prosimians

Answer: C

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256. The earliest site where human civilization and crop cultivation started was presumably:

A. around capspian and mediterranean seas

B. around river Nile

C. chinese river valley

D. All of the above

Answer: A

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257. Proconsul (Dryopithecus africanus) was discovered East Africa by

- 1. Mayer
- 2. Raymond Dart
- 3. Leakey

4. Lewis

A. Mayer

- B. Raymond Dart
- C. Leakey
- D. Lewis

Answer: C

258. Sivapithecus is another fossil ape from Sivalik hills of India. It was like

that of

- 1. Ramapithecus
- 2. Dryopithecus
- 3. Australopithecus
- 4. Homo habilis
 - A. Ramapithecus
 - B. Dryopithecus
 - C. Australopithecus
 - D. Homo habilis

Answer: B

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259. Dryopithecus existed in miocene and gave rise to

A. 1)Australopithecus

B. 2)Ramapithecus

C. 3)Homo erectus

D. 4)Homo sapiens neanderthalensis

Answer: B

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260. Name given to fossil homind of shivalik hills in India is

A. 1)Ramapithecus

B. 2)Australopithecus

C. 3)Pithecanthropus

D. 4)Sinanthropus

Answer: A

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261. The earliest or first fossil man know present is

A. Homo habilis

B. Homo erectus

C. Australopithecus

D. Ramapithecus

Answer: D

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262. Fossils of Ramapithecus were first discovered by

A. Dubois

B. Ramond Dart

C. Edward Lewis

D. J.K. Fuhlort

Answer: C

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263. Fossils of Kenyapithecus were discovered by

A. Robert Broom

B. Prof. Raymond Dart

C. L.S.B. Leakey

D. Mary Leakey

Answer: C

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264. Fossils of kenyapithecus was found in kenya and Africa, which was

similar to

A. Sivapithecus

B. Ramapithecus

C. Sinanthropus

D. Homo sapiens

Answer: B

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265. Which one of the following ancestors of man first time showed bipedal movement?

A. Cro-Magnon

B. Australopithecus

C. Java ape man

D. Peking man

Answer: B



266. The first fossil of Australopithecus was discovered by

A. Arthur Keith

B. E. Dubois

C. Leakey

D. Raymond Dart

Answer: D



267. Nutritionally Australopithecus was

A. carnivorous

B. omnivorous

C. herbivorous

D. none of these

Answer: C

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268. Australopithecus africanus, the africa apeman, gave rise to

A. 1)Homo habilis

B. 2)Homo erectus

C. 3)Homo sapiens

D. 4)Homo sapiens sapiens

Answer: A

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269. The cranial capacity of Australopithecus was about 500 cc. Australopithecus existed in

A. 1)miocene

B. 2)Pliocene

C. 3)pleistocene

D. 4)both pliocene and pleistocene

Answer: D

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270. Brain capacity of Homo habilis was :

A. 1)500 to 600 CC

B. 2)680 to 720 CC

C. 3)1200 to 1400 CC

D. 4)1500 to 1600

Answer: B

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271. The cranial capacity of Homo habilis was about 700 cc. Who discovered its fossils and called Homo habilis as "handy amn"?

A. Robert Brown

B. Mary and Louis Leakey

C. Dubois

D. Mayer

Answer: B

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272. Homo habilis originated in

A. 1)miocene

B. 2)oligocene

C. 3)pleistocene

D. 4)holocene

Answer: C

Watch Video Solution

273. Homo habilis gave rise to

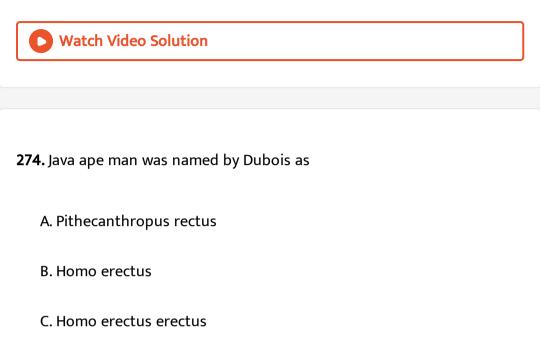
A. 1)Neanderthal man

B. 2)Homo erectus

C. 3)Homo sapiens fossilis

D. 4)Homo sapiens

Answer: B



D. none of the above

Answer: A



275. Java man and Peking man were

A. carnivorous

B. herbivorous

C. cannibal

D. omnivorous and cannibal

Answer: D

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276. Homo erectus is the zoological name of

A. Java & Peking men

B. African man

C. Peking man

D. Java man

Answer: A

Watch Video Solution

277. In which of the following, the cranial cavity was smallest ?

A. Cro-Magnon

B. Neanderthal

C. Peking man

D. Java ape-man

Answer: D

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278. Homo erectus differed from Cro-Magnon Man in

A. having protruded jaws

B. having receding jaws

C. being able to draw pictures of animals

D. being able to make well- fromed tools and weapons

Answer: A

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279. Fire was first used for protection and cooking by

A. 1)Java ape man

B. 2)Neanderthal man

C. 3)Cro-Magnon man

D. 4)Peking Man

Answer: A

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280. The noticeable difference of Peking man from Java man was its

A. 1)large cranial cavity

B. 2)small cranial cavity

C. 3)longer arms

D. 4)longer legs

Answer: A

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281. The cranial capacity of Java ape man was about

A. 1450 cc

B. 900 cc

С. 1660 сс

D. 1075 cc.

Answer: B

282. Java ape man is considered to have existed in

A. Java only

B. China only

C. Africa only

D. Java, China and Africa

Answer: D

Watch Video Solution

283. Fossils of Peking man were found from caves near peking in china by

Davidson Black. He named them

A. Homo erectus pekinensis

B. Sinathropus pekinensis

C. Homo erectus

D. Homo erectus erectus

Answer: B Watch Video Solution 284. Fossils of Peking man were renamed Homo erectus pekinensis by A. Dubois B. Mayr C. Louis Leakey D. Fuhlrott Answer: B Watch Video Solution

285. Peking man was slightly shorter, little lighter and weaker than

A. Sivapithecus

B. Ramapithecus

C. Kenyapithecus

D. Java man

Answer: D

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286. Among the human ancestors the brain size was more than 1000 cc

in:

A. Homo erectus

B. Ramapithecus

C. Homo habilis

D. Homo neandrthalensis

Answer: D

287. Cranial capacity of peking man was

A. 1)700 cc

В. 2)14 сс

C. 3)1075 cc

D. 4)1660cc

Answer: C

Watch Video Solution

288. Ancestor of man who first stood erect was :

A. Java man

B. Australopithecus

C. Peking man

D. Cro-Magnon man

Answer: A

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289. C. Fuhlrott (1856) made an important discovery in evolution and he

discovered the first human fossil of

A. 1)Neanderthal man

B. 2)Cro-Magnon man

C. 3)Classification of man

D. 4)Characters of modern apes

Answer: A



290. Neanderthal man:

A. resembled modern man

B. often had a somewhat larger brain than modern man

C. was culturally more advanced than modern man

D. had a much smaller brain than that of modern man

Answer: B

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291. Which of these ancestors of modern man presumably lived upon Earth during late Pleistocene?

A. Australopithecus

B. Zinjanthropus

C. Neanderthal man

D. Atlantic man

Answer: C

292. Fossils of Neanderthal were first obtained from Neander Valley by C.

Fuhlrott (1856) This valley is in

A. France

B. Australia

C. Germany

D. India

Answer: C

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293. Which of the following had the feeling of worship and used to bury

clothes with dead bodies?

A. Neanderthal man

B. Peking man

C. Java man

D. African ape man

Answer: A

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294. The cranial capacity of Neanderthal man was between

A. 1)1100-1500 cc

B. 2)1200-1400 cc

C. 3)1300-1600 cc

D. 4)1000-1300 cc

Answer: A

295. Among the following, the cranial capacity was highest in

A. Java-ape man

B. Neanderthal man

C. Cro-Magnon man

D. Peking man

Answer: C

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296. Neanderthal man differs from modern man in

A. Semierect posture

B. Protruding jaws

C. No chin

D. All of these

Answer: D

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297. Fossils of Cro-Magnon man were first discovered in 1868 from Magnon rocks by Mac Gregor. These rocks are in

A. 1)Canada

B. 2)Japan

C. 3)France

D. 4)Austria

Answer: C

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298. Which of the following fossil men was expert in making tools,

weapons and paintings ?

A. Java ape man

B. Peking man

C. Neanderthal man

D. Cro-Magnon man

Answer: D

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299. Cranial capacity of Cro-magnon man was :

A. 1)900 cc

B. 2)1075 cc

C. 3)1450 cc

D. 4)1600 cc

Answer: D

300. The continent where maximum fossils of prehistoric man have been

found is

A. 1)Asia

B. 2)Africa

C. 3)Australia

D. 4)America

Answer: B

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301. Which ape is found in India?

A. Pan

B. Pongo

C. Gorilla

D. Hylobates

Answer: D



302. Which of the following is true for 'Homo sapiens'

A. protruded mouth

B. cranial capacity of 1250 c.c.

C. omnivorous

D. developed chin

Answer: D



303. Character of man which is most significant from evolution point of

view

A. foramen magnum shifted forward

- B. larger cranial capacity
- C. face orthognathous

D. all of them

Answer: D

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304. The modern man evolved

A. 10,000 years ago

B. 25,000 years ago

C. 50,000 years ago

D. 2,50,000 years ago

Answer: B

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305. Besides fossils, the common ancestry of great apes and man is shown by nearly similar

A. chromosome number

B. DNA content

C. banding pattern of chromosomes

D. all the above

Answer: D

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306. Study of origin and development of humans is called

A. Eugenics

B. Euthenics

C. Ethnology

D. Anthropology

Answer: D

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307. Which is correct about man?

A. 1)Man is a social and cultured animal

B. 2)He has opposable thumbs

C. 3)He has foramen magnum below the brain box.

D. 4)All of the above

Answer: D

308. Which one is irrelevant to evolution of man?

A. 1)Perfection of hand for tool making

B. 2)Change of diet from hard nuts/roots to soft food

C. 3)Increased ability to communicate or develop community

behaviour

D. 4)Loss of tail

Answer: D

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309. Correct sequence of stages in evolution of modern Man/Homo sapiens sapiens is

A. 1)Australopithecus, Neanderthal Man, Cro-Magnon Man, Homo

erectus, Modern Man

B. 2) Australopithecus, Homo Erectus, Neanderthal Man, Cro-Magnon

Man, Modern Man

C. 3)Neanderthal Man, Australopithecus, Cro-Magnon Man, Homo

erectus, Modern Man.

D. 4)Homo erectus, Australopithecus, Neanderthal Man, Cro-Magnon

Man, Modern Man.

Answer: B

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310. Which is the most recent in human evolution?

A. Mesolithic

B. Upper palaeolithic

C. Neolithic

D. Middle Palaeolithin

Answer: C



311. Common origin of man and chimpanzee is best shown by

A. Cranial capacity

B. Binocular vision

C. Chromosomes

D. Dental formula

Answer: C

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312. In Homo habilis, 'habilis' refers to

A. Wandering species

B. Ancient man

C. Modern man

D. Tool-maker

Answer: D

Watch Video Solution

313. Cranial capacity is minimum in

A. Chimpanzee

B. Gorilla

C. Rhesus monkey

D. Orangutan

Answer: C

314. Which are not found in India?

A. New world monkeys

B. Old world monkeys

C. Apes

D. Both (2) and (3)

Answer: A

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315. The modern man differs from the apes in:

A. protruding eyes

B. spare body hair

C. wearing of clothes

D. arms shorter than legs

Answer: D



316. Common link between apes and man was

A. Dryopithecus

B. Homo erectus

C. Australopithecus

D. Homo neanderthalensis

Answer: A



317. The hominid fossil 'Lucy' belongs to

A. Australopithecus boisei

- B. Australopithecus robustus
- C. Australopithecus afarensis
- D. Australopithecus africanus

Answer: C

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318. 'Taung baby' was discovered by

A. C. Fuhlrott

B. Mac Gregor

C. Raymond Dart

D. Donald Johanson

Answer: C

319. The tailless primate is:

A. Loris

B. Lemur

C. African baboon

D. Spider monkey

Answer: A

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320. Which is direct ancestor of Homo sapiens ?

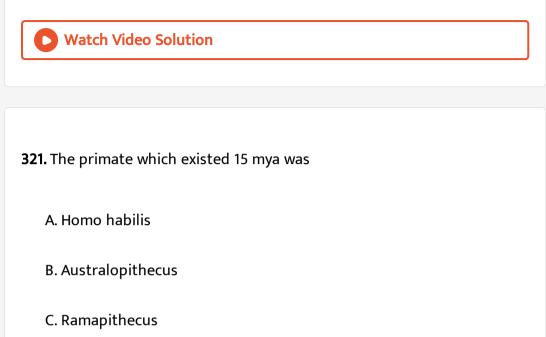
A. Cro-Magnon

B. Pre-Neanderthal

C. Neanderthal

D. None of these

Answer: A



D. Homo erectus

Answer: C

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322. Which one of the following is the most primitive ancestor of man?

A. Homo habilis

B. Australopithecus

- C. Ramapithecus punjabicus
- D. Homo neanderthalensis

Answer: C

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323. What was the most significant trend in the evolution of modern man

(Homo sapiens) from his ancestors?

A. Shortening of jaws

B. Binocular vision

C. Increasing brain capacity

D. Upright posture

Answer: C

324. The extinct human who lived 100000 to 40000 years ago, in Europe, Aisa and parts of Africa, with short stature, heavy eye brows, retreating fore heads, large jaws with heavy teeth, stocky bodies, a lumbering gait and stooped posture was

A. Homo habilis

B. Neanderthal human

C. Cro-magnan human

D. Ramapithecus

Answer: B

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325. Homo erectus evolved during

A. oligocene

B. pliocene

C. pleistocene

D. miocene

Answer: C

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326. Genetic drift operates in

A. small isolated population

B. large isolated population

C. non-reproductive population

D. slow reproductive population

Answer: A

327. The chronological order of human evolution from early to the recent

A. Australopithecus \rightarrow Ramapithecus \rightarrow Homo habilis \rightarrow Homo

is:

erectus
B. Ramapithecus → Australopithecus → Homo habilis → Homo erectus
C. Ramapithecus → Homo habilis → Australopithecus → Homo erectus
D. Australopithecus → Homo habilis → Ramapithecus → Homo erectus

Answer: B

328. Which of the following is the correct sequence of events in the origin

of life

- I. Formation of protobionts
- II. Synthesis of organic monomers
- III. Synthesis of organic polymers
- IV. Formation of DNA-based genetic systems

A. I,II,III,IV

B. I,III,II,IV

C. II,III,I,IV

D. II,III,IV,I

Answer: C



329. Artificial selection to obtain cows yielding higher milk output

represents

- A. Stabilizing selection as it stabilizes a character in the population.
- B. Directional as it pushes the mean of a character in one direction
- C. Disruptive as it splits the population into the one yielding higher

output and the other lower output

D. Stabilizing followed by disruptive as stabilizes the population to

produce high yielding cows.

Answer: B

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330. The term for similarity in organ structure seen in great diversity is

Or

The similarity of bone structure in the forelimbs of many vertebrates is an

example on

A. Adaptive radiation

B. Convergent evolution

C. Analogy

D. Homology

Answer: D