SECTION A: TOPICWISE QUESTIONS

TOPIC 1 : Origin of Life

Evolution of Life Forms—A Theory

1. Stellar distances are measure in

(A)Kilometers

(B)Meters

(C)Nanometers (D)Light years

- 2. Read the following statements and find out the incorrect statement.
 - (a)The universe is almost 20 million years old.
 - (b)Huge clusters of galaxies comprise the universe.
 - (c)Galaxies contain stars and clouds of gas and dust.
 - (d)Considering the size of earth, universe is indeed a speck.
 - (e)Big bang theory attempts to explain the origin of universe.
 - (A)a, b and c

(B)b and c

(C)<mark>a and d</mark>

(D)only a

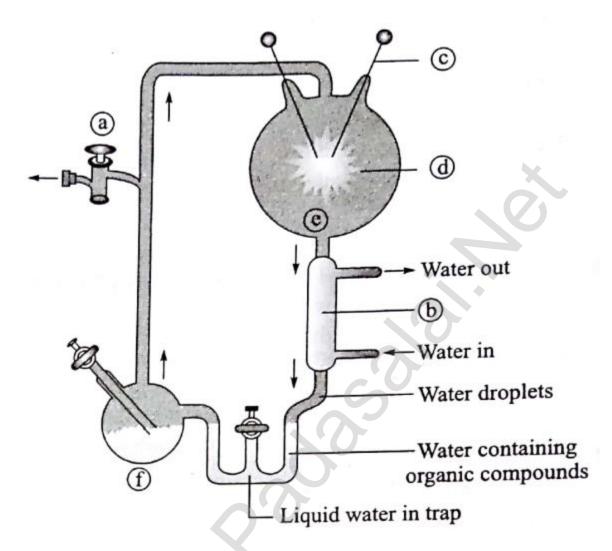
3. Recognise the figure and find out the correct matching.

(A)a—condenser, b—to vaccum pump, c—electrode, d—spark discharge, e—boiling water, f—gases

(B)b—condenser, a—to vaccum pump, d—electrode, c—spark discharge, f—boiling water, e—gases

(C)b—condenser, a—to vaccum pump, c—electrode, d—discharge, e—boiling water, f—gases

(D)b—condenser, a—to vaccum pump, c—electrode, d—spark discharge, f—boiling water, e gases



4. Chemical theory for origin of life was given by

(A)Stanley Miller	(B) <mark>Oparin and Haldane</mark>
(C)Spallanzani	(D)Louis Pasteur

- 5. The first life on earth originated from nonliving materials has been explained by
 - (A)Theory of biogenesis
 - (B)Theory of abiogenesis
 - (C)Theory of special creation
 - (D)Theory of extra-terrestiral origin

- 6. "Every cell of the body contributes gemmules to the germ cells and so shares in the transmission of inherited characters" This theory is known as
 - (A)Theory of inheritance of acquired characteristic
 - (B)Theory of germplasm
 - (C)Theory of pangenesis
 - (D)Theory of mutations
- 7. Organic compounds evolved on earth and required for origin of life were
 - (A)Proteins and nucleic acids
 - (B)Urea and amino acids
 - (C)Proteins and amino acids
 - (D)Urea and nucleic acids
- 8. Scientists believes that life on earth originated by
 - (A)Spontaneous generation
 - (B)Chemical evolution/Abiogenesis
 - (C)Special creation
 - (D)Extraterrestrial transfer
- 9. Match the columns I and II, and choose the correct combination from the options given.

Column I		Column II
(a)Origin of earth	1.	4500 mya
(b)Origin of life	2.	4000mya
(c)Origin of first cellular form of life	3.	3000 mya
(d)Origin of first non cellular form of	life 4.	2000mya
(A)a—1, b—2, c—3, d—4		
(B)a—2, b—1, c—4, d—3		

- (C)<mark>a—1, b—2, c—4, d—3</mark>
- (D)a-2, b-1, c-3, d-4
- 10. In early earth, water and carbon dioxide was produced by the combination of O₂ with
 - (A)Ammonia and methane
 - (B)Organic matter
 - (C)Hydrogen sulphide
 - (D)Sulphates and nitrates
- 11. Which of the following amino acids was not found to be synthesised in Miller's experiment?
 - (A)Alanine
 - (C)Aspartic acid

(D)Glutamic acid

(B)Glycine

- 12. Extra-terrestrial origin of life was proposed by theory of
 - (A)Catastrophism
 - (B)Spontaneous generation
 - (C)Special creation
 - (D)Panspermia
- 13. Experiment to prove that synthesis of organic compounds formed the basis of origin of life was performed by
 - (A)Oparin (B)Haldane (C)Miller (D)Fox
- 14. Theory of abiogenesis or spontaneous generation was finally disapproved by
 - (A)Louis Pasteur (B)A.I.Oparin
 - (C)A.B.Wallace (D)Sidney Fox
- 15. Atmosphere of earth just before the origin of life consisted of

(A)Water vapours, CH₄, NH₃ and Oxygen

	(B)CO ₂ , NH ₃ and CH ₄	
	(C)CH ₄ , NH ₃ , H ₂ and water vapours	
	(D)CH ₄ , O_3 , O_2 and water vapours	
1	16. Miller's experiment provided evidence is the	ory of
	(A)Special creation	(B)Biogenesis
	(C)Abiogenesis	(D)Organic evolution
1	17. Experimental proof that organic compounds	formed the basis of evolution was given by
	(A)Oparin	(B)Pasteur
	(C) <mark>Miller and Urey</mark>	(D)Spallanzani
1	18. Swan-necked flask experiment was performe	d by
	(A)<mark>Louis Pasteur</mark>	(B)Robert Koch
	(C)Francisco Redi	(D)Aristole
1	19. Spark discharge apparatis for testing chemica	I origin of life was designed by
	(A)Urey and Miller	(B)Jacob and Monod
	(C)Oparin and Haldane	(D)Dixon and Joly
2	20. Gaseous mixture used by Miller for synthesis included	of amino acids through heat and electric discharge
	(A) <mark>Methan, ammonia, hydrogen and water va</mark>	apours
	(B)Methane, ammonia, nitrogen and water v	apours
	(C)Nitrogen, methane, oxygen and water	
	(D)Ammonia, carbon dioxide, nitrogen and w	rater vapours
2	21. Approximate age of earth (in million years) is	
	(A)3600	(B) <mark>4500</mark>
	(C)7200	(D)6000

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22.	Most advanced theory of origin of life is that of	
	(A)Catastrophic	(B)Haldane and Oparin
	(C)Cosmozoic	(D)Spontaneous
23.	Which is the most important for origin of life?	
	(A)Oxygen	(B) <mark>Water</mark>
	(C)Nitrogen	(D)Carbon
24.	Theory of spontaneous creation was supported	by
	(A) <mark>Van Halmont</mark>	(B)Redi
	(C)Spallanzani	(D)Pasteur
25.	One of the greatest advocates of the theory of s	pecial creation was
	(A)C. Darwin	(B)Aristotle
	(C) <mark>Father Saurez</mark>	(D)Huxley
26.	Which was absent in the atmosphere at the time	e of origin of life?
	(A)NH ₃	(B)H ₂
	(C) <mark>O</mark> 2	(D)CH ₄
27.	Theory of pangenesis was given by	
	(A) <mark>Darwin</mark>	(B)Lamarck
	(C)Hugo ds Vries	(D)Oparin
28.	Life cannot originate from inorganic materials no	ow because of
	(A)Low atmospheric temperature	
	(B)High degree of pollution	
	(C)High atmospheric oxygen	
	(D)Absence of raw materials	

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29. Presence of NaCl in body fluid indicates that life originated in

(A) <mark>Primitive ocean</mark>	(B)Rain water lakes

- (C)Salt solution (D)All the above
- 30. First photosynthetic organisms to appear on earth were
 - (A)Bacteria (B)Green algae (C)Cyanobacteria (D)Bryophytes
- 31. Choose the correct sequence during formation of chemicals on early earth
 - (A)Ammonia, Water, Nucleic acid, Protein
 - (B)Ammonia, Proteins, Carbohydrates, Nucleic acid
 - (C)Ammonia, Nucleic acid, Proteins, Carbohydrates
 - (D)Proteins, Carbohydrate, Water, Nucleic acid
- 32. Russian scientist who porposed the theory of origin of life was

(A)<mark>Oparin</mark>

(B)Haldane

(C)Miller

(D)Fox

- 33. Oparin's theory is based on
 - (A)Artificial synthesis
 - (B)Spontaneous generation
 - (C)God's Creation
 - (D)Panspermia
- 34. Which one is considered the first biological catalyst when life originated on earth?

(A)RNA (B)DNA

(C)Protein

(D)Lipid.



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TOPIC 2: Evidences for Evolution

35. Choose the wrong statement.

(A)Louis Pasteur demonstrated that life comes only form pre-existing life.

(B)S.L. Miller observed that electric discharge in a flask containing CH_4 , H_2 . NH_3 and water vapours at 800 °C formed amino acids.

(C)Flippers of penguins and dolphins are examples of homology.

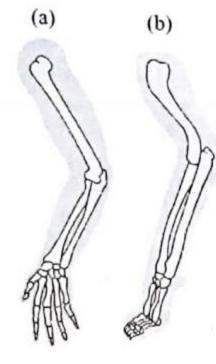
(D)Analogous structures are the result of convergent evolution.

36. Biogenetic law/recapitulation theory was proposed by

	(A)Wallance	(B)Lamarck
	(C) <mark>Haeckel</mark>	(D)Mendel
37.	"Continuity of germplasm" theory was given	
	(A)De Vries	(B) <mark>Weismann</mark>
	(C)Darwin	(D)Lamarck
38.	Birbal Sahni Institute of Palaeobotany is located	in
	(A)Lucknow	(B)Delhi
	(C)Kolkata	(D)Kanpur
39.	Presence of gill slits in the embryos of all verteb	rates supports the theory of
	(A)Organic evolution	(B)Biogenesis
	(C)Metamorphosis	(D)Recapitulation
40.	Similarities between organisms of different geno	otypes is due to
	(A)Convergent evolution	
	(B)Divergent evolution	
	(C)Microevolution	

(D)Macroevolution

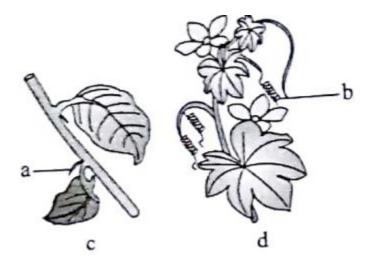
41. Recognise the figure and find out the correct matching.





- (A)a-man, b-whale, c-cheetah, d-bat
- (B)<mark>a—man, c—whale, b—cheetah, d—bat</mark>
- (C)a-man, d-whale, c-cheetah, b-bat
- (D)a-man, c-whale, a-cheetah, d-bat
- 42. Analogous organs are
 - (A)Different origin but similar functions
 - (B)Common origin and common functions
 - (C)Different origin and different functions
 - (D)Common origin but different functions
- 43. Homologous organs are
 - (A)Wings of Pigeon and Butterfly
 - (B)Wings of Pigeon and Houselfy

- (C)Wings of Pigeon and arms of Humans
- (D)Wings of Bat, Housefly and Butterfly
- 44. Resemblance between widely different groups due to a common adaptation is
 - (A)Parallel evolution
 - (B)Divergent evolution
 - (C)Convergent evolution
 - (D)Retrogressive evolution
- 45. Homologous organs are
 - (A)Wings of insects and Bat
 - (B)Gills of Fish and lungs of Rabbit
 - (C)Pectoral fins of Fish and fore limbs of Horse
 - (D)Wings of Grasshopper and Crow
- 46. Which one correctly describes homologous structures?
 - (A)Organs with anatomical similarities but performing different functions
 - (B)Organs with anatomical dissimilarities but performing same function
 - (C)Organs that have no function now but had an important function in ancestors
 - (D)Organs appearing only in embryonic stage and disappearing later in the adult
- 47. Convergent evolution is illustrated by
 - (A)Rat and Dog
 - (B)Bacterium and Protozoan
 - (C)Starfish and Cuttle fish
 - (D)Dogfish and Whale
- 48. Recognise the figure and find out the correct matching.



(A)a-tendril, b-thorn, c-Cucurbia, d-Bougainvillea

(B)b-tendril, a-thorn, d-Cucurbia, c-Bougainvillea

- (C)a-tendril, b-thorn, d-Cucurbia, c-Bougainvillea
- (D)b-tendril, a-thorn, c-Cucurbia, d-Bougainvillea
- 49. Which of the following pairs of structures is homologous?

(A)Wings of Grasshopper and forelimbs of Flying Squirrel

(B)Tentacles of Hydra and arms of Starfish

(C)Forelimbs of a Bat and forelegs of a Horse

(D)Wings of a birds and wings of a Moth

- 50. Which is relatively most accurate method of dating of fossils?
 - (A)Radiocarbon method

(B)Potassium-Argon method

(C)Electron spin-resonance method

(D)Uranium-lead method

51. Closely related species with different traits exhibit

(A)Convergent evolution

(B)Divergent evolution

(C)Parallel evolution

(D)None of the above

52. Potato and Sweet potato have edible parts which are

(A)Homologous

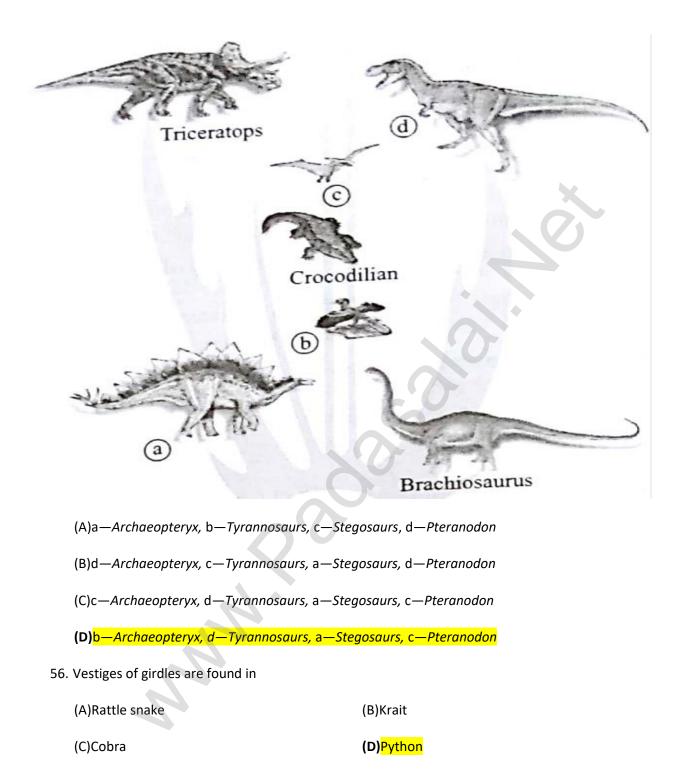
(B)Analogous

- (C)Recent introductions
- (D)Two species of the same genus
- 53. Which one provides direct and solid evidence in favour of organic evolution through ages?
 - (A)Atavism
 - (B)Paleontology/fossils
 - (C)Vestigial organs
 - (D)Galapagos island fauna
- 54. Tachyglossus is connecting link between
 - (A)Reptiles and mammals
 - (C)Amphibians and reptiles

(B)Reptiles and birds

(D)Birds and mammals

55. Recognise the figure and find out the correct matching.



57. Evidence for evolution from fossils belong to the

(A)Biogeography (B)Embryology

(C)Paleontology (D)Anatomy

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58. Example of homologous structures is/are

(A)Optic lobes of brain

(C)Cerebrum of brain

59. Which is incorrect?

(A)Wings of insects and bat 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

60. Forelimbs of humans and wings of birds are

(A)Analogous organs

(B)Homologous organs
(D)Vestigial organs

(B)Heart of vertebrates

(D)All of the above

(C)Parallel organs

TOPIC 3 : Adaptive Radiation

Biological Evolution and Mechanism of Evolution

61. The process of evolution of different species in a given geographical area starting from a point and literally radiating to other areas of geography (habitats) is called

(A)Adaptive convergence

(B)Adaptive radiation

(C)Natural selection

(D)Convergent evolution

62. Hugo de Vries works on the mutation in

(A)First decade of nineteenth century

(B)First decade of twentieth century

(C)First decade of eighteenth century

(D)Last decade of nineteenth century

63. Original features of Darwin's finches in Galapagos islands were adapted for

(A)Flesh eating	(B)Insect eating
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(C)Fish eating

64. Which of the following pair is incorrectly matched with respect to convergent evolution?

(D)Seed eating

- (A)Lempur—Spotted cuscus
- (B)Flying squirrel—Flying phalanger
- (C)Anteater—Numbat
- (D)Bobcat—Tasmanian lion cat

65. Match the columns I and II, and choose the correct combination from the options given.

Column I	Colum	n ll
a.Oparin	1.	America
b.Haldane	2.	France
c.Miller	3.	Russia
d.Lamarck	4.	England
(A)a—1, b—2, c—3, d—4	^	

- (B)a-2, b-3, c-4, d-1
- (C)a-4, b-3, c-1, d-2
- (D)<mark>a-3, b-4, c-1, d-2</mark>
- 66. Theory of inheritance of acquired characters was given by

(A)Wallace	(B) <mark>Lamarck</mark>
(C)Darwin	(D)De Vries

- 67. According to Darwin, diversity as found in Australian marsupials is due to
 - (A)Convergent evolution
 - (B)Adaptive radiation

- (C)Parallel radiation
- (D)Parallel evolution
- 68. Darwin judged the fitness of individual through
 - (A)Ability to defend
 - (B)Strategy for obtaining food
 - (C)Number of offspring
 - (D)Dominance over others
- 69. A theory explaining the mechanism of evolution based on change of gene structure was forward by

(A) <mark>De Vries</mark>	(B)Darwin
(C)Lamarck	(D)Wallace
70. Fill in the blanks according to the	e convergent evolution.

Placental mammals	Australian mammals
	XU
Anteater	a

Spotted cuscus

Flying squirrel

.....b......

.....C.....

......d........ Tasmanian tiger cat

(A)c—flying phalanger, b—lemur, d—bobcat, a—Numbat

- (B)b—flying phalanger, a—lemur, c—bobcat, d—Numbat
- (C)c—flying phalanger, a—lemur, d—bobcat, b—Numbat
- (D)d—flying phalanger, b—lemur, c—bobcat, c—Numbat
- 71. According to Darwin, evolution is
 - (A)Sudden but discontinuous process
 - (B)Slow, gradual, continuous process

- (C)Slow, sudden and discontinuous process
- (D)Slow and discontinuous process
- 72. An evolutionary pattern characterized by a rapid increase in number of kinds of closely related species is called
 - (A)Divergent evolution
 - (B)Convergent evolution
 - (C)Adaptive radiation
 - (D)Parallel evolution
- 73. Naturalist who sailed round the world in ship Beagle was
 - (A)Charles Lyell
 - (C)Alfred Wallace
- 74. Darwin's finches occur in
 - (A)Australia
 - (C)Siberia

(B)<mark>Charles Darwin</mark>

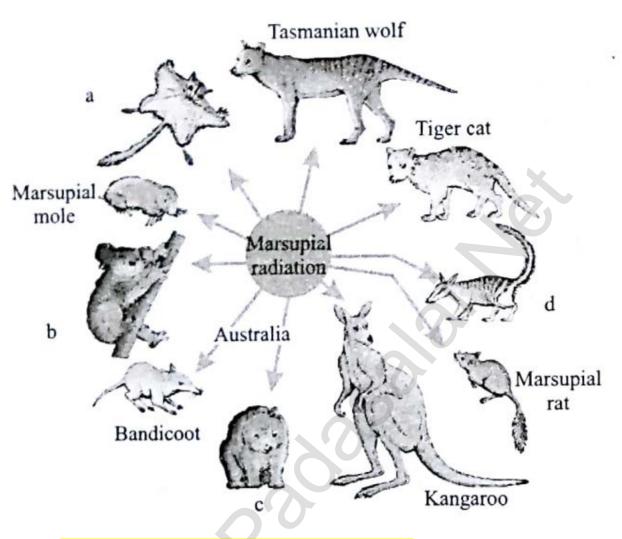
(D)Lamarck

(B)Galapagos islands

(D)India

- 75. The idea of natural selection as fundamental process of evolutionary changes was reached
 - (A)By Charles Darwin in 1866
 - (B)Alfred Russel Wallace in 1901
 - (C)Independently by Darwin and Russel in 1859
 - (D)Independently by Darwin and Russel in 1900.
- 76. Which cannot be explained by Lamarckism?
 - (A)Loss of tail by humans
 - (B)Elongation of neck in Giraffe
 - (C)Weak progeny of a Nobel laureate
 - (D)None of the above

- 77. Darwin in his "Natural Selection Theory" did not believe in any role of which one of the following?
 - (A)Parasites and predators as natural enemies
 - (B)Survival of the fittest
 - (C)Struggle for existence
 - (D)Discontinuous variations
- 78. Which one of the following sequences was proposed by Darwin and Wallace of organic evolution?
 - (A)Overproduction, variations, constancy of population size, natural selection
 - (B)Variations, constancy of population size, overproduction, natural selection
 - (C)Overproduction, constancy of population size, variations, natural selection
 - (D)Variations, natural selection, overproduction, constancy of population size
- 79. Darwin's theory state that
 - (A)Characters are acquired through inheritance
 - (B)Species change morphologically with time
 - (C)Nature selects organisms which can adapts
 - (D)Evolution is due to effect of environment
- 80. Recognise the figure and find out the correct matching.



- (A)c-wombat, b-koala, a-sugar glider, d-banded anteater
- (B)a-wombat, c-koala, d-sugar glider, b-banded anteater
- (C)b-wombat, d-koala, c-sugar glider, a-banded anteater
- (D)d-wombat, a-koala, b-sugar glider, c-banded anteater
- 81. What is true for Lamarck?
 - (A)American botanist who later became zoologist
 - (B)English naturalist who propounded theory of evolution
 - (C)British scientist who gave law of genetic
 - (D) French scientist who gave "Inheritances of Acquired Characters."

- 82. 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
- 83. Dark coloured Peppered Moth is able to survive in industrial areas as compared to light coloured from because of
 - (A)High fecundity
 - (B)Mimicry
 - (C)Natural selection in smoky environment
 - (D)Lethal mutation
- 84. Presence of different types of beaks in finches of Galapagos Islands adapted to different feeding habit provides evidence for
 - (A)Intraspecific variations
 - (B)Natural selection
 - (C)Intraspecific competition
 - (D)Interaspecific competition
- 85. Which one provides correct sequence of events in origin of new species according to Darwinism?
 - 1.Natural selection
 - 2. Variations and their inheritance
 - 3.Survival of the fittest
 - 4.Struggle for existence
 - (A)1. 2. 3, 4 (B)2, 3. 1, 4
 - (C)3, 4, 1, 2 (D)4, 2, 3, 1

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86. The ship in which Darwin travelled was

(A)Baeg;e

(C)Beagel

(B)<mark>Beagle</mark>

(D)Baegel

- 87. Darwin was most influenced by
 - (A)Lamarck's theory of acquired characters
 - (B)Weismann's theory of germplasm
 - (C)Wallace's theory of origin of species
 - (D)Essay on Population by Malthus
- 88. T.R. Malthus is famous for his book on

(A)Population

(B)Mathematics

(D)Genetics

- (C)Geography
- 89. Weismann cut of tail of mice generation after generation but tail neither disappeared nor shortened showing that
 - (A)Darwin was correct
 - (B)Tail is an essential organ
 - (C)Mutation theory is wrong
 - (D)Lamarckism was wrong in inheritance of acquired characters
- 90. 'Origin of Species' was written by

(A)Oparin	(B)Weismann
(C)Lamark	(D) <mark>Darwin</mark>
91. 'Philosophic Zoologique' was writtenby	
(A)De Vries	(B) <mark>Lamarck</mark>
(C)Mendel	(D)Spencer

- 92. Hugo de Vries worked on the plant
 - (A)Gardem Pea/Pisum sativum
 - (B)Sweat Pea/Lathyrus odoratus
 - (C)Primula sinensis
 - (D) Evening Primrose/Oenothera lamarckiana

TOPIC 4 : Hardy—Weinberg Principle

93. Choose the wrong statement regarding Hardy—Weinberg principle.

(A)Sum total of all the allelic frequencies in a population is 1.

(B)Variation due to genetic drift results in changed frequency of genes and alleles in future generations.

(C)Natural selection can lead to stabilization, directional change or disruption.

(D)Genetic recombination helps in maintaining Hardy—Weinberg equilibrium

94. During the growth of any population more individuals acquires peripheral character value at both ends of the distribution curve which lead to the

(A)Stabilisation

(B)Directional change

(C)Disruption

(D)Either B or C

95. In a population of 1000 individuals, 360 belong to genotype aa, 480 to Aa and remaining 160 to aa. Based on this data, the frequency of allele A in the population is

(A)0.5

(B)<mark>0.6</mark>

(C)0.7

(D)0.4

96. Gene pool of a population tends to remain stable if the population is large, without large scale mutations, without migration and with

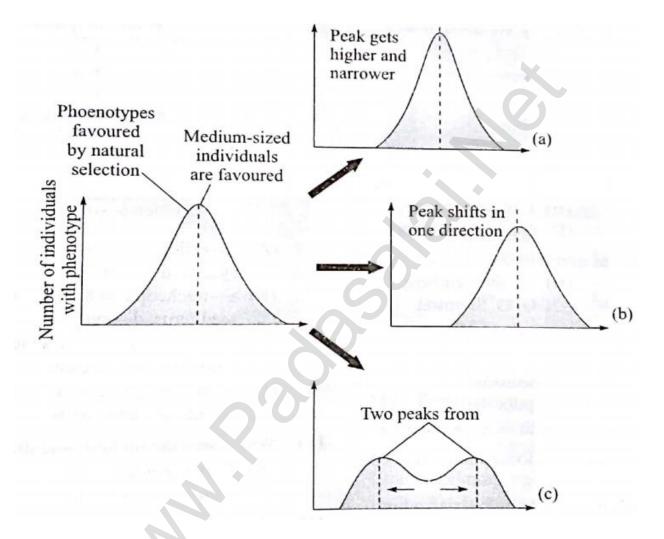
(A)Random mating

(B)Moderate environmental changes

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- (C)Natural selection
- (D)Reduction in predators
- 97. Recognise the figure and find out the correct matching.



(A)b—directional, a—disrupting, c—stabilizing

- (B)b—directional, c—disrupting, a—stabilizing
- (C)c-directional, b-disrupting, a-stabilizing
- (D)a-directional, c-disrupting, b-stabilizing
- 98. New species develop due to

(A) Isolation and mutation

- (B)Competition and mutation
- (C)Isolation and competition
- (D)Isolation and variation
- 99. Which is most important for speciatin?
 - (A)Seasonal isolation
 - (B)Reproductive isolation
 - (C)Temporal isolation
 - (D)Behavioral isolation
- 100. Some bacteria can grow in streptomycin containing medium due to

	(A)Induced mutation	(B)Natural selection
	(C)Reproductive isolation	(D)Mimicry
101. Formation of new species from pre-existing ones is		
	(A)Mutation	(B) <mark>Speciation</mark>
	(C)Isolation	(D)Polyploidy
102. Speciation in geographically separated region is		
	(A)Sibling	(B)Geopatric
	(C)Sympatric	(D) <mark>Allopatric</mark>
103. In which condition gene ratio remains constant in a species?		
	(A)Gene flow	(B)Mutation
	(C) <mark>Random mating</mark>	(D)Sexual selection
104. In random mating population in equilibrium, which of the following brings about a change in gene frequency in a non-directional manner		

(A)Mutatins	(B) <mark>Random drift</mark>
(C)Selection	(D)Migration

105. Change in frequency of alleles in population results in evolution as proposed by

(A)De Vries theory

- (B)Hardy—Weinberg principle
- (C)Darwin's theory
- (D)Lamarck's theory
- 106. What is correct formulation of Hardy Weinberg law?
 - $(A)P^2 + 2pq + q^2 = 1$
 - $(B)P^{2} + pq + q^{2} = 1$
 - $(C)P^2 + 2pq + q^2 = 0$
 - $(D)P^{2} + pq + q^{2} = 0$
- 107. Hardy Weinberg equilibrium is influenced by gene flow, genetic drift, mutation, genetic recombination and

(A)Evolution

(B)Limiting factor

(C)Over-production

(D)Natural selection

- 108. Concept of genetic drift was introduced by
 - (A)Sewall Wright
 - (C)Julian Huxley

(B)Hardy Weinberg (D)G. G. Simpson

- 109. Hardy—Weiberg principle cannot operate if
 - (A)Population is large
 - (B)Free interbreeding among all members
 - (C)Frequent mutations occur in population
 - (D)Population does not interact with other population
- 110. Read the statements (i iv) and choose the correct operation.
 - i. Increase in melanised moths after industrialization in Great Britain is a proof of Natural Selection

- ii. More individuals acquiring mean character value cause disruption
- iii. Change in allelic frequency leads to Hardy-Weinberg equilibrium
- iv. Genetic drift changes allelic frequency in future generations
- (A)ii is correct (B)i is correct
- (C) i and iv are correct (D) i and iii are correct

TOPIC 5: Evolution of Organisms

111. Fish with stout and strong fins could move on land and go back to water. This was about

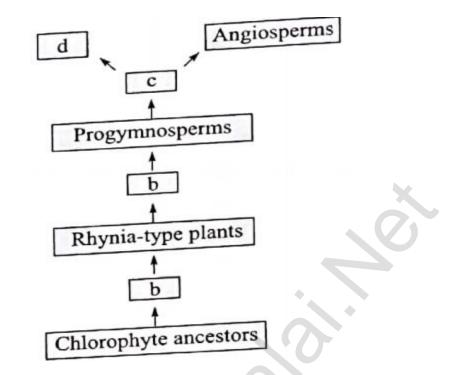
(A)<mark>350 mya</mark>	(B)320 mya
(C)500 mya	(D)200 mya

- 112. Ina...., a fish caught inb...., happened to be ac...., which was thought to be extinct. These animals are calledd... evolved into the firste.....
 - (A)a-1891, b-South America, c-Ichthyosaurs, d-lobefins, e-amphibians
 - (B)a—1938, b—South America, c—*Icthyophis*, d—coelacanth, e—reptiles
 - (C)a-1891, b-North America, c-coelacanth, d-lobefins, e-amphibians

(D)a—1938, b—South Africa, c—coelacanth, d—lobefins, e—amphibians

113. Recognise the figure and find out the correct matching.

Jan Star



(A)a—psilophyton,b—tracheophyte ancestors, c—cycads, d—conifers

(B)a—tracheophyte ancestors, b—psilophytons, c—seed ferns, d—cycads

(C)a-psilophyton, b-traceophyte ancestors, c-seed ferns, d-cycads

(D)a-tracheophyte ancestors, b-psilophyton, c-cycads, d-seed ferns

- 114. Which was the biggest land dinosaur?
 - (A)Protoceratops

(B)Apatosaurus

(C)Tyrannosaurus rex

(D)Inchtyosaurus

115. Match the columns I and II, and choose the correct combination from the options given.

Column I		Column II
a.Invertebrates evolved	1.	65 mya
b.Sea weeds and few plants evolved	2.	200mya
c.Jaw fishes evolved	3.	320mya
d.Fish like reptiles evolved	4.	350mya
e.Dinosaurs disappeared	5.	500mya

- (A)a-3, b-5, c-4, d-1, e-2
- (B)a-4, b-3, c-5, d-2, e-1
- (C)a-5, b-4, c-3, d-1, e-2
- (D)a-5, b-3, c-4, d-2, e-1
- 116. In human being vestigial organs are
 - (A)Wisdom tooth, coccyx, nail, eyelid and vermiform
 - (B)Wisdom tooth, coccyx, vermiform appendix, pancreas and elbow joint
 - (C)Wisdom tooth, coccyx, vermiform appendix, nictitating membrane and auricular muscles
 - (D)Coccyx, wisdom tooth, nail, auricular muscles
- 117. Dinosaurs disappeared during

(A)Jurassic (B)Triassic (D)Permian (C)Cretaceous 118. A bird with teeth is (B)Ostrich/King vulture (A)Kiwi (D)Archaeopteryx (C)Dodo 119. Correct order is (A)PalaeozoicArchaeozoic Coenozoic (B)Archaeozoic.....Palaeozoic Proterozoic (C)PalaeozoicMesozoicCoenozoic (D)MesozoicProterozoicProterozoic 120. Age of mammals and birds is (B)<mark>Coenozoic</mark> (A)Mesozoic (C)Archaeozoic (D)Palaeozoic

TOPIC 6: Origin and Evolution of Man

121. Homo sapiens a rise in

(A)<mark>Africa</mark>

- (B)Ethiopia and Tanzania
- (C)South American grasslands
- (D)Central and East Asia
- 122. Extinct human ancestor who ate only fruits and hunted with stone weapons was

(A) <mark>Australopithecus</mark>	(B)Dryopithecus
(C)Ramapithecus	(D)Homo erectus

123. The hominid fossils discovered in Java in 1891 revealed a stage in human evolution which was called

(A) <mark>Homo erectus</mark>	(B)Dryopithecus	
(C)Australopithecus	(D)Homo habilis	
124. Fossil man having cranial capacity similar to that of modern man was		
(A)Australopithecus	(B)Java Ape Man	
(C) <mark>Neanderthal Man</mark>	(D)Peking Man	
125 Which one of the following was the	first to stand erect/show hinedal r	

125. Which one of the following was the first to stand erect/show bipedal movement?

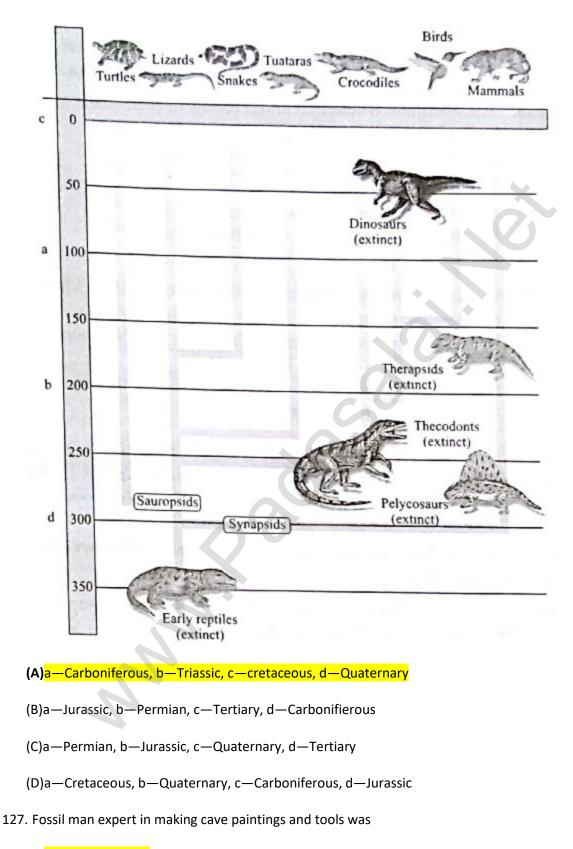
(A)Peking Man

(B)<mark>Australopithecus</mark>

(C)Java Man

(D)Cro-Magnon Man

126. Here is given the diagrammatic representation of evolutionary history of vertebrates through geological periods. Identify the geological periods (a, b, c and d) and select the correct option.



(A)Cro-Magnon Man

(B)Peking Man

	(C)Java Man	(D)Neanderthal Man	
128. Maximum resemblance of today's man is with			
	(A)Australopithecus	(B)Cro-Magnon Man	
	(C)Java Man	(D) <mark>Neanderthal Man</mark>	
129	9. Cranial capacity of Neanderthal Man was		
	(A) <mark>1400 cc</mark>	(B)1300 cc	
	(C)1200 cc	(D)1100 cc	
130. Which is the most primitive ancestor of man?			
	(A) <mark>Ramapithecus</mark>		
	(B)Australopithecus	20	
	(C)Homo habilis	0	
	(D)Homo neanderthalensis	S	
131	L. Cranial capacity of humans is	0	
	(A)915 cc	(B) <mark>1450 cc</mark>	
	(C)1600 cc	(D)1700 cc	
132. Primitive Man who built up dwelling huts and buried its dead was			
	(A)Java Ape Man	(B)Cro-Magnon Man	
	(C)Peking Man	(D) <mark>Neanderthal Man</mark>	
133. The continent where maximum fossils of prehistoric man have been found is			
	(A)Asia	(B) <mark>Africa</mark>	
	(C)Europe	(D)America	
134. Which one is connected with human evolution?			
	(A)Binocular vision	(B)Africa	
	(C)Loss of tail	(D) <mark>Shortening of jaws</mark>	

135. Correct sequence of stages in evolution of Modern Man/Homo sapiens sapiens is

(A) Australopithecus, Neanderthal Man, Cro-Magnon Man, Homo erectus, Modern Man

(B)Australopithecus, Homo erectus, Neanderthal Man, Cro-Magnon Man, Modern Man

(C)Neanderthal Man, Australopithecus, Cro-Magnon Man, Hoco erectus, Modern Man

- (D) Homo erectus, Australopithecus, Neanderthal Man, Cro-Magnon Man, Modern Man
- 136. Which is correct order of increasing geological time scale for a hypothetical vertebrate evolution?
 - (A)Cenozoic, Mesozoic, palaeozoic, Precambrian
 - (B)Cenozoic, palaeozoic, Mesozoic, Precambrian
 - (C)Precambrian, Cenozoic, palaeozoic, Mesozoic
 - (D)Precambrian, palaeozoic, Mesozoic, Cenozoic.
- 137. Crinial capacity of Homo erectus was

(A)1650 cc

(B)1400 cc

(C)<mark>900</mark>

(D)650 cc

- 138. Scientific name of Java man is
 - (A)Homo habilis
 - (B)Homo sapiens neanderthalensis
 - (C)<mark>Homo erectus erectus</mark>
 - (D)Australopithecus boisei