



10TH SSC MCQ - CH 1 - Heredity and Evolution

DATE:

TIME: 30 Min

MARKS: 30

SEAT NO:

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Note:-

1. All Questions are compulsory.
2. Numbers on the right indicate full marks.

- Q.1 Which condition can be explained by Lamarckism? (1)
- A) How giraffes got their long neck B) How humans lost their tail
C) How humans became bipedal D) All of the above

Ans : D

- Q.2 In terms of DNA and RNA structure, what is a nucleotide? (1)
- A) A nucleotide is a heterocyclic base
B) A nucleotide is a sugar molecule covalently bonded to a heterocyclic base
C) A nucleotide is a sugar molecule bonded to phosphate group and a heterocyclic base
D) A nucleotide is a heterocyclic base bonded to phosphate group

Ans : D

- Q.3 Which law of Mendel is also known as Law of purity of gametes? (1)
- A) Law of dominance B) Law of independent assortment
C) Law of segregation D) Law of gravitation

Ans : C

- Q.4 Who among the following first coined the term "Genetics"? (1)
- A) Wilhelm Johannsen B) Gregor Mendel
C) William Bateson D) Carl Linnaeus

Ans : C

- Q.5 Which of the following is the vestigial organ in man? (1)
- A) Vermiform appendix B) Cervical vertebra
C) Atlas D) Soft palate

Ans : A

- Q.6 Who wrote the famous book the 'Origin of Species'? (1)
- A) Linnaeus B) Lamarck
C) Wallace D) Darwin

Ans : D

- Q.7 Mutations are generally (1)
- A) continuous variations B) discontinuous
C) not variations D) all of the above

Ans : B

- Q.8 A sudden irreversible change that takes (1)
A) Evolution B) Mutation
C) Melanism D) Natural selection
Ans : B
- Q.9 Which of the following are examples of homologous origin? (1)
A) Wings of pigeon and mosquito B) Wings of pigeon and housefly
C) Wings of pigeon and arms of man D) Wings of bat, housefly and butterfly
Ans : C
- Q.10 Genetics is the study of (1)
A) inheritance B) evolution
C) history D) cell structure
Ans : A
- Q.11 Which of the following is the phenotype ratio of the F₂ generation in dihybrid crosses? (1)
A) 1 : 3 : 1 B) 1 : 2 : 1
C) 9 : 3 : 3 : 1 D) 1 : 3 : 3 : 1
Ans : C
- Q.12 Which of these are identified to be the earliest of the life forms? (1)
A) Fungi B) Cyanobacteria
C) Protozoa D) Plants
Ans : B
- Q.13 Which of the following is the connecting link between the birds and reptiles? (1)
A) Dinosaurs B) Mammoths
C) Archaeopteryx D) Pliohippus
Ans : C
- Q.14 Which of the following statements is true of palaeontology? (1)
A) It provides indirect evidence in favour of organic evolution B) It does not help us to compare the 'past' with the 'present'
C) It helps us to know the exact period of the formation of a species D) All of the above
Ans : C
- Q.15 Which of the following statements is true of Natural selection? (1)
A) Organisms with favourable characters are selected by nature B) Organisms with unfavourable characters are selected by nature
C) Organisms with favourable characters are selected by man D) Organisms with favourable and unfavourable characters are selected by man
Ans : A
- Q.16 Who suggested the theory that organs which are not used may eventually lose their function and may even disappear? (1)
A) Mendel B) Darwin
C) Devries D) Lamarck
Ans : D

- Q.17 In which book did Lamark publish his theory of organic evolution? (1)
A) Origin of life B) Philosophic Zoologique
C) Survival of the fittest D) Struggle for existence
Ans : B
- Q.18 Who among the following did not propose the theory of evolution? (1)
A) Jean Baptiste Lamark B) Hugo Devries
C) Gregor Mendel D) Charles Darwin
Ans : C
- Q.19 The fossil trilobite was originally (1)
A) a vertebrate B) an invertebrate
C) a reptile D) a bird
Ans : B
- Q.20 What is organic evolution? (1)
A) Formation of more and more complex organisms from simpler ones through gradual changes B) The act of special creation that brought all the organisms into this world
C) Life started from non-living matter in one day D) Developed from organisms which arose from chemical reactions in the ocean
Ans : A
- Q.21 Art of writing was invented around _____ years ago. (1)
A) 5000 B) 500
C) 50 D) 5
Ans : A
- Q.22 Which of the following indicates that man and chimpanzee are connected? (1)
A) Appendix B) Cranial capacity
C) Thumb D) Legs
Ans : B
- Q.23 Transcription uses _____ as template strand. (1)
A) Antisense DNA strand
B) RNA strand
Ans : A
- Q.24 Which of the following were closer to Cro-Magnon man? (1)
A) Neanderthals B) Ramapithecus
C) Dryopithecus D) Australopithecus
Ans : A
- Q.25 Codon for amino acid consists of three nucleotides, known as _____ (1)
A) Triplet codon
B) Genes
Ans : A

- Q.26 Dinosaurs got extinct due to _____ (1)
A) Pollution B) meteorite crashing
C) over population
Ans : B
- Q.27 Fossils of reptiles are seen in _____ era. (1)
A) Cenozoic B) Mesozoic
C) Paleozoic
Ans : A
- Q.28 Which of the following evidence of evolution is associated with fossils? (1)
A) Embryological B) Paleontological
C) Anatomical D) Morphological
Ans : B
- Q.29 Which of the following scientist proposed theory of "Inheritance of acquired characters"? (1)
A) Darwin B) Lamarck
C) Willard D) Donald
Ans : B
- Q.30 Which enzyme is used in the process of transcription? (1)
A) DNA polymerase B) RNA polymerase
C) Both (a) and (b) D) None of these
Ans : B