

ORIGIN/EVOLUTION STATE PMT EXAMS EXERCISE

1. Swan neck flask experiment proved :
[UTTARANCHAL PMT-2004]
(1) biogenesis (2) abiogenesis
(3) gene therapy (4) both (a) and (2)
2. Cosmozoic theory was proposed by :
[UTTARANCHAL PMT-2004]
(1) Helmholtz (2) Richter
(3) Pasteur (4) Arrhenium
3. The idea not related to the Darwinian evolutionary theory is :
[UTTARANCHAL PMT-2004]
(1) survival of the best
(2) struggle for existence
(3) inheritance of acquired characters
(4) origin of species by natural selection
4. Name given to fossil hominid of Shivalik hills in India is :
[UTTARANCHAL PMT-2004]
(1) Ramapithecus
(2) Australopithecus
(3) Pithecanthropus
(4) Neanderthalensis
5. Gene mutation is : [UP-CPMT-2006]
(1) mutation in the genes of DNA
(2) mutation in the phosphodiester linkage
(3) mutation in the chromosomes
(4) change in the sequence of nitrogenous bases
6. Inheritance of acquired characters comes :
[UTTARANCHAL PMT-2004, JHARKHAND-04]
(1) Lamarckism (2) Darwinism
(3) Neo-Lamarckism (4) Neo-Darwinism
7. The Mesozoic era is also called as :
[UP CPMT 2003, UTTARANCHAL PMT-04, MP PMT 07]
(1) the golden age of the amphibian
(2) the golden age of the reptiles
(3) the golden age of the mammals
(4) the golden age of the birds
8. Big bang theory was proposed by :
[UTTARANCHAL PMT-2005]
(1) Kant (2) Miller
(3) Lemaitre (4) Darwin
9. The phenomenon 'ontogeny repeats phylogeny' is explained by :
[UP CPMT 2003, MP PMT 04, JHARKHAND-05]
(1) natural selection
(2) inheritance theory
(3) mutation theory
(4) recapitulation theory
10. Neo-Darwinism believes that new species develop through : [JHARKHAND-2004]
(1) mutations
(2) hybridization
(3) mutations with natural selection
(4) none of the above
11. Phrase "Survival of the Fittest" was given by : [JHARKHAND-2004]
(1) Hugo de Vries
(2) Charles Darwin
(3) Herbert Spencer
(4) Jean Baptiste Lamarck
12. The study of fossils is called :
[JHARKHAND-2003]
(1) Palynology (2) Palaeontology
(3) Fossil systematic (4) Pharmacognosy
13. The beginning of plant cultivation is considered to be taken place in :
[JHARKHAND-2002]
(1) Neolithic age (2) Paleolithic age
(3) Mesolithic age (4) None of these
14. Which one is absent in free state during origin of life?
[MP PMT 2004, BIHAR-05, UP CPMT 06]
(1) O₂ (2) H₂

(3) N_2 (4) NH_3

15. Theory of natural selection is given by :
[BIHAR-2005, MP PMT 06, UP CPMT 06]

- (1) Darwin (2) Lamarck
(3) Mendel (4) Hugo de Vries

16. The banding pattern of chromosomes of 3 and 6 of human beings and chimpanzee shows that they had : [BIHAR-2003]

- (1) common origin
(2) different origin
(3) same number of chromosomes
(4) similar blood groups

17. Closed ancestor to modern man was :
[BIHAR-2002]

- (1) Neanderthal man
(2) Homo habilis
(3) Cro-magnon man
(4) Australopithecus

18. Fossils are : [BIHAR-2002]

- (1) animals living in burrows
(2) remnants of extinct animals and plants
(3) floating organisms
(4) fast runners

19. First organisms to evolve on the earth were : [UP-CPMT-2001]

- (1) saprotrophs (2) autotrophs
(3) heterotroph (4) none

20. Miller and Urey performed an experiment to prove the origin of life. They took gases NH_3 and H_2 along with :

[UP-CPMT-2001]

- (1) N_2 and H_2O (2) H_2O and CH_4
(3) CH_4 and N_2 (4) CO_2 and NH_3

21. The age of fossils is determined by :
[UP-CPMT-2001]

- (1) analysis of bones
(2) radioactive C^{14} dating
(3) electron microscopy
(4) weighing the fossils

22. Which of the following statements is correct : [UP-CPMT-2001]

- (1) Homo erectus is the ancestor of man
(2) Cro-magnon man's fossil has been found in Ethiopia
(3) Australopithecus is the real ancestor of modern man
(4) Cro-magnon man is the most recent ancestor of Homo sapiens

23. In which era life was absent :
[UP-CPMT-2002]

- (1) Archaeozoic (2) Palaeozoic
(3) Proterozoic (4) Azoic

24. Recapitulation theory was proposed by :
[UP-CPMT-2002,03]

- (1) E. Haeckel (2) Mendel
(3) Hugo de Vries (4) Von Baer

25. First evidence of ceremonial burial of dead body and belief in religion have been found with fossil of :
[UP-CPMT-2002]

- (1) Neanderthal man
(2) Cro-magnon man
(3) Homo erectus
(4) Homo habilis

26. Abiogenesis is the [UP-CPMT-2002]

- (1) origin of life from non-living material
(2) origin of life from living organism
(3) origin of viruses and microbes
(4) none

27. Coverstone of theory of Darwin was
[UP-CPMT-2003]

- (1) natural selection
(2) inheritance of acquired characters
(3) omnis cellulae e cellulae
(4) higher productivity

28. Primitive man was originated during
[UP-CPMT-2003]

- (1) Miocene (2) Holocene
(3) Pleistocene (4) Pliocene

- 29.** Who first conducted experiments on evolution to prove biochemical origin of life ? **[UP-CPMT-2003]**
 (1) Miller and Urey (2) Darwin
 (3) Lamarck (4) Weismann
- 30.** The chance of elimination of genes from a small population is an example of : **[UP-CPMT-2004]**
 (1) selection pressure (2) speciation
 (3) adaptation (4) genetic drift
- 31.** The classical example of adaptive radiation is : **[UP-CPMT-2004]**
 (1) Darwin finches
 (2) marsupials of Australia
 (3) giant turtle
 (4) all of these
- 32.** Missing link in evolution is : **[UP-CPMT-2005]**
 (1) Peripatus (2) Limulus
 (3) Pheretima (4) Archaeopteryx
- 33.** Convergent evolution of two species is associated with: **[UP-CPMT-2005]**
 (1) analogous organs
 (2) recent common ancestor
 (3) homologous organs
 (4) different habitat
- 34.** Organs which have the same fundamental structure but are different in function are called **[UP-CPMT-2005]**
 (1) vestigial organs
 (2) homologous organs
 (3) analogous organs
 (4) homoplastic organs
- 35.** Which of the following are not analogous organs : **[UP-CPMT-2005]**
 (1) fins of fishes and flippers of whales
 (2) stings of honey bee and scorpion
 (3) thorn of bougainvillea and tendril of Cucurbita
 (4) wings of insect and wings of bird
- 36.** Maximum cranial capacity was in : **[UP-CPMT-2006]**
 (1) cro-magnon man (2) peking man
 (3) Neanderthal man (4) java ape man
- 37.** Adaptation is a type of : **[UP-CPMT-2006]**
 (1) convergent evolution
 (2) divergent evolution
 (3) adaptive radiation
 (4) speciation
- 38.** Organism living in cold areas have shorter extremities than the organisms of warm area . It states : **[UP-CPMT-2006]**
 (1) Graubber's law
 (2) Dollo's law
 (3) Allen's law
 (4) none
- 39.** Struggle for existence and survival of the fittest theories were given by : **[UP-CPMT-2007]**
 (1) Wallace (2) Darwin
 (3) Lamarck (4) none of these
- 40.** Which one is linked to evolution ? **[UP-CPMT-2007]**
 (1) extinction (2) competition
 (3) variation (4) reproduction
- 41.** Archaeopteryx is a connecting link between : **[UP-CPMT-2007]**
 (1) reptiles and birds
 (2) birds and mammals
 (3) amphibians and reptiles
 (4) none of these
- 42.** Which of the following is not a concept of Lamarck ? **[UP-CPMT-2007]**
 (1) environmental pressure causes variation
 (2) rate & survival of organism is different due to variation

(3) inheritance of acquired character

(4) if an organ is used constantly it will continuously

43. Being all mammals, whales, dolphins, bat, monkey and horse have some common characters but they also show conspicuous differences . This is due to phenomenon of : **[MP-PMT-2004]**

- (1) Normalisation (2) Genetic drift
(3) Divergence (4) Convergence

44. Initiating force of evolution is :

[MP-PMT-2004]

- (1) Variation
(2) Natural selection
(3) Adaptation
(4) Competition

45. Most modern hypothesis regarding origin of life was given by : **[MP-PMT-2005]**

- (1) Wallace (2) Hugo de Vries
(3) Oparin (4) Charles Darwin

46. Which of the following ancestor of man was found of painting and weapons making : **[MP-PMT-2005]**

- (1) Neanderthal man
(2) Cromagnon man
(3) Java man
(4) Peking man

47. The scientific name of Homo erectus-erectus has been given to :

[MP-PMT-2005]

- (1) Cromagnon man
(2) Neanderthal man
(3) Java ape man
(4) Peking man

48. On which continent maximum fossils of prehistoric man have been recovered :

[MP-PMT-2006]

- (1) Europe (2) Asia
(3) America (4) Africa

49. Which of the following is commonly called “age of mammals”?

[MP-PMT-2006]

- (1) Mesozoic (2) Coenozoic
(3) Palaeozoic (4) Azoic

50. The frequency of mutant gene in a population is expected to increase if that gene is **[MP-PMT-2001]**

- (1) dominant
(2) recessive
(3) sex linked
(4) favourable selected

51. Wings of insects and wings of birds are the examples of : **[MP-PMT-2002]**

- (1) Analogy (2) Homology
(3) Serology (4) Mimicry

52. Archeopteryx, a transitional fossil between birds and reptiles was discovered from the rocks of following period :

[MP-PMT-2002]

- (1) Jurassic (2) Archeozoic era
(3) Cretaceous (4) Triassic

53. Use and disuse theory was proposed by **[MP-PMT-2003]**

- (1) Mendel (2) Darwin
(3) Vries (4) Lamarck

54. Gases found in primitive atmospheres are **[MP-PMT-2007]**

- (1) CH₄, NH₃, H₂, H₂O (vapour form)
(2) CH₄, NH₃, CO₂, H₂O
(3) CH₄, H₂O, CO₂
(4) CH₄, O₂, CO₂

55. Chromosome number 2n-1 is an example of **[UTTARANCHAL PMT-2004]**

- (1) trisomy (2) euploidy
(3) polyploid (4) monosomy

56. A change in the chromosome number is called ? **[CG-PMT-2004]**

- (1) Chromosomal mutation
(2) Gene mutation

- (3) Somatic mutation
(4) Polyploidy

57. Triticum aestivum is : [CG-PMT-2004]
(1) Haploid (2) Diploid
(3) Tetraploid (4) Hexaploid
58. A mutant micro – organism unable to synthesize a compound required for its growth but able to grow if the compound is provided, is known as [CG-PMT-2006]
(1) Auxotroph (2) Prototroph
(3) Autotroph (4) None of these
59. Mutations are generally induced by means of [JHARKHAND-2004]
(1) α -rays (2) β -rays

- (3) γ -rays (4) UV radiations

60. Rate of mutation is affected by : [JHARKHAND-2002]
(1) temperature
(2) X-rays
(3) gamma and beta radiations
(4) all of these
61. Mutations which alter nucleotide sequence within a gene are : [UP-CPMT-2004]
(1) frame shift mutations
(2) base pair substitutions
(3) both 'a' and 'b'
(4) none of these

STATE PMT EXAMS EXERCISE

ANSWER KEY

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	1	2	3	1	4	1	2	3	4	3	3	2	1	1	1
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	1	3	2	3	2	2	1	4	1	1	1	1	3	1	4
Q.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
A.	4	4	1	2	3	1	1	3	2	3	1	2	3	1	3
Q.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A.	2	3	4	2	2	1	1	4	1	4	1	4	1	4	4
Q.	61														
A.	3														