# UNIT-IV : Animal diversity-II 


#### Abstract

AIIMS 1. Assertion(A): Bats and whales are classified as mammals

\section*{Reason(R):Bats and whales have four-chambered heart} a)If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion,then mark(a) b)If both Assertion and Reason are true and the Reason is not the correct explanation of the

Assertion,then mark(b) c)If Assertion is true statement but Reason is false, then mark(c) d)If both Assertion and Reason are false statements, then mark (d) 2. Echidna and Ornithorhynchus are the connecting links between a)amphibians and aves b)mammals and amphibians c)reptiles and mammals d)reptiles and amphibians 3. Assertion(A): Holoblastic cleavage with almost equal-sized blastomeres is a characteristic of placental animals.

Reason(R):Eggs of most mammals, including humans are of centrolecithal type a)Both Assertion and Reason are true and the Reason is the correct explanation of the Assertion b)Both Assertion and Reason are true and the Reason is not the correct explanation of the

Assertion c)Assertion is true but Reason is false d)Both Assertion and Reason are false


4. The chordate features shared by the non-chordates are
a)bilateral symmetry
b)triploblastic condition and bilateral symmetry
c) metamerism
d)All of the above
5. Bone marrow is absent in
a)reptilia
b) amphibia
c)fishes
d) birds
6. 5th cranial nerve of frog is called
a)vagus
b)trigeminal
c) optic
d)ophthalmic
7. Which of the following is made up of a single bone in mammal?
a)Lowerjaw
b)Hyoid
c)Upper jaw
d)All of these
8. If frog's brain is crushed, even then its leg moves on pinpointing. It is called
a)simple reflex
b)conditional reflex
c) neurotransmitter function
d)autonomic nerve conditions
9. Which of the following are uricotelic animals?
a)Rohu, frog
b)Camel,frog
c)Lizard, crow
d)Eagle,earthworm
10. Assertion(A):Lateral line system is found in fishes and aquatic amphibians Reason(R):Lateral line system has rheoreceptor sensory cells derived from ectoderm
a)A
b)B
c) C
d)D e)E
11. Assertion(A): The duck-billed platypus and the spiny ant-eater, both are egg-laying animals yet they are grouped under mammals

Reason(R): Both of them have seven cervical vertebrae and 12 pairs of cranial nerves
12. All mammals without any exception are characterised by
a)viviparity and biconcave red blood cells
b)extra-abdominal testes and a four chambered heart
c)heterodont teeth and 12 pairs of cranial nerves
d)a muscular diaphragm and milk producing glands
13. A lizard-like member of reptilia is sitting on a tree with its tail coiled around a twig. This animal could be
a)Hemidactylus showing sexual dimorphism
b)Varanus showing mimicry
c) Garden lizard (Calotes) showing camouflage
d)Chamaeleon showing protective colouration

## AFMC

## 14. Venom of cobra attacks

a)digestive system
b)respiratory system
c)nervous system
d)circulatory system
15. Jacobson's organ is related with
a)touch
b) smell
c)heat
d) brain
16. The fangs of Python which pulled out can
a)not come again b)come again with half the length
c)come again with same length
d)come again with double length
17. Heart lacks sinus venosus in
a)fishes
b)mammals
c)amphibians
d)echinoderms
18. In frog the vertebra, with an anterior convex surface, is
a)atlas
b) urostyle
c) 8 th vertebra
d) 9 th vertebra
19. The type of vertebrae in the sub order Ophidia is
a)acoelous
b)procoelous
c)heterocoelous
d)amphicoelous
20. Which of the following structures is related with vision in Rabbits?
a)Hippocampus
b)Corpus albicans
c)Corpus callosum
d)Corpora quadrigemina
21. Tadpole's tail is a/an
a) excretory organ
b)attachment organ
c) respiratory organ
d)locomotory organ
22. Correct order of ear ossicles in rabbit is
a)incus, stapes, malleus
b)malleus, incus, stapes
c)malleus,stapes,incus
d)incus,malleus,stapes
23. Nucleus pulposes is found in
a)brain
b)nucleus
c) intervertebral disc
d)liver
24. In frogs oviduct is formed by
a)Wolffian duct
b)Metanephric duct
c)Mullerian duct
d)Bidder's canal
25. Maximum life span of dog in years is
a) 5
b) 10
c) 15
d) 20
26. Flippers of seal are modified
a)fins
b)hind limbs
c)forelimbs
d) gills
27. In which of the following organisms, testes descend into scrotum in breeding season but in non-breeding season goes up?
a)Frog
b)Kangaroo
c)Shrew
d) Bat
28. Excretory waste of birds and reptiles are
a)urea
b)urea and uric acid
c) uric acid
d)ammonia and uric acid
29. Viper venom affects
a)circulatory system
b)nervous system
c)respiratory system
d)none of these
30. Which of the following group of animals maintains high and constant body temperature such as mammals?
a)Reptiles
b)Amphibians
c)Birds
d)Fishes
31. Some vertebrae in birds fuse to form
a)sacrum
b) synsacrum
c) $\operatorname{coccy} x$
d)none of these
32. 9th pair of cranial nerve in frog is
a)hypoglossal
b)glossopharyngeal
c) vagus
d)trigeminal
33. At retrogressive metamorphosis the urochordate larva exhibits
a)loss of notochord
b)loss of tail
c)reduction of nervous system to a visceral genglion
d)all of the above
34. In fishes the lateral line receptors are neuromast organs. These are
a)olfactoreceptors
b)gustatoreceptors
c)rheoreceptors
d)chemoreceptors
35. Axolotl larva of Ambystoma normally fails to metamorphose due to
a)lack of Ca and Mg ions in water
b)absence of phosphorus in water
c)lack of iodine in water or diet
d)high concentration of iodine in body
36. Which of the following is not a characteristic feature of all the chordates?
a)Presence of coelom
b)Pharyngeal gill clefts in the early embryonic stages
c)A diaphragm that separates thorax from abdomen
d)Dorsal neve cord
37. A common scent producing gland among mammals is
a)anal gland
b)prostate gland
c)adrenal gland
d)Bartholin's gland
38. Fifth cranial nerve of frog is
a)facial
b)olfactory
c)trigeminal
d) vagus
39. Cloacal aperture of frog is used to pass out
a)sperms
b)faeces
c) urine
d)All of these

## CBSE-PMT

40. Indicate the correct statement
a)Camel has biconcave red blood cells
b)Bat bears feathers
c)Rat bears cloaca
d)Platypus lays eggs
41. In which of the following animal post analtail is found?
a)Earthworm
b)Lower invertebrate
c)Scorpion
d)Cobra
42. In which of the following notochord is present in embryonic stage?
a)All chordates
b)Some chordates
c)Vertebrates
d)Non chordates
43. One of the following is a very unique feature of the mammalian body
a)Homeothermy
b)Presence of diaphragm
c)Four chambered heart
d)Rib cage
44. Which one of the following characters is not typical of the class Mammalia?
a)Thecodont dentition
b)Alveolar lungs
c)Ten pairs of cranial nerves
d)Seven cervical vertebrae
45. In which one of the following sets of animals do all the four give birth to young ones?
a)Platypus,Penguin,Bat,Hippopotamus
b)Shrew,Bat,Cat,Kiwi
c)Kangaroo,Hedgehog,Dolphin,Loris
d)Lion,Bat,Whale,Ostrich
46. Annual migration does not occur in the case of
a)Siberian crane
b)Salamander
c) Arctic tern
d)Salmon
47. Which of the following pairs are correctly matched?

Animals
i)Crocodile
ii)Sea urchin
iii)Obelia
iv)Lemur
a)ii,iii and iv
b)only i and iv
c) only i and ii
d)i,iii and iv
48. Which one of the following pairs of animals comprises 'jawless fishes'?
a)Mackerals and Rohu
b)Lampreys and hag fishes
c)Guppies and hag fishes
d)Lampreys and eels
49. What will you look for to identify the sex of the following?
a)Female Ascaris-Sharply curved posterior end
b)Male frog - A copulatory pad on the first digit of the hind limb
c) Female cockroach-Anal cerci
d)Male shark-Claspers borne on pelvic fins
50. Which one of the following groups of animals is correctly matched with its one characteristic feature without even a single exception?
a)Reptilia:possess3-chambered heart with one incompletely divided ventricle
b)Chordata:possess a mouth provided with an upper and lower jaw
c)Chondrichthyes: possess cartilaginous endoskeleton
d)Mammalia:give birth to young ones
51. Which one of the following statements is totally wrong about the occurrence of notochord, while the other three are correct?
a)It is present only in larval tail in Ascidians
b)It is replaced by a vertebral column in adult frog
c)It is absent throughout life in humans from the very beginning
d)It is present throughout life in Amphioxus
52. Frogs differ from humans in possessing
a)paired cerebral hemispheres
b)hepatic portal system
c)nucleated red blood cells
d)thyroid as well as parathyroid

## JIPMER

53. The distinguishing feature of all chordates is
a) a water vascular system
b) an elastic rod (notochord)
c) a chitinous exoskeleton
d) a ventrally placed nerve cord
54. Which of the following sets of derivatives of integumentary structures characterized birds as glorified reptiles?
a)Syrinx and uropygial glands
b)Claws and uropygial glands
c)Scales and claws
d)Syrinx and scales
55. Third cleavage of frog's development is
a)equatorial
b)vertical
c)latitudinal
d)none of these
56. Dinosaurs become extinct in
a)Permian age
b)Triassic period
c) Jurassic period
d)Cretaceous period
57. The scientist, who described the birds as glorified reptiles, was
a)Romer
b)Huxley
c)Mendel
d)Robert Hook
58. In frog, the vertebra with an anterior convex surface(i.e.,double convexties) is
a)atlas
b) urostyle
c) 8 th vertebra
d) 9 th vertebra
59. Number of cranial nerves in frog
a) 10 pairs
b) 9 pairs
c) 12 pairs
d)none of these
60. Mesozoic era is Golden period of
a)reptiles
b)Mollusca
c)fishes
d)amphibians
61. In frog's heart, there are cardiac muscles which consists of fibres called
a)Purkinje fibres
b)myonemes
c)telodendria
d)columnae carnae
62. The group of Anamniota includes
a)reptiles and birds b)birds and mammals
c)fishes and amphibians d)reptiles and mammals
63. The excretory material of bony fish is
a)urea
b)protein
c)ammonia
d)amino acid
64. Synsacrum of fowl consists of about
a) 29 vertebrae
b) 3 vertebrae
c) 16 vertebrae
d) single vertebra
65. Human ear ossicles are
a)incus and stapes
b) stapes
c)incus, malleus and stapes
d)incus and malleus
66. Pneumatic bones are expected to be found in
a)house lizard
b)flying fish
c) pigeon
d)tadpole of frog
67. Ruminants belong to the order
a)Proboscidea
b) Artiodactyla
c)Marsupials
d)Edentata
68. Sciatic vein of frog opens in
a)heart
b)kidney
c) pelvic region
d)liver
69. Which of the following have notochord throughout life?
a)Birds
b)Fish
c) Snake
d)Amphioxus
70. Chondrichthyes is characterised by
a)placoid scales
b)ventral mouth
c)ctenoid scales and ventral mouth
d)placoid scales and ventral mouth
71. Vetebrate brain differentiates from
a)endoderm
b)mesoderm
c)ectoderm
d)blastoderm
72. Animals of class-Mammalia have
a)seven cervical vertebrae
b)seven cranial nerves
c) single ventricular chamber
d)fourteen cervical vertebrae
73. Age of fishes is
a)Permian
b)Silurian
c)Devonian
d)Ordovician

KEY

|  |  | 2) | c |  |  |  | d |  | d |  | b | 7) |  |  | a |  | c | 10) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | d | 13) | d | 14) | C | 15) | b | 16) | c | 17) | b | 18) | d | 19) | b | 20) | d |
| 21) |  | 22) | b | 23) | c | 24) | C | 25) | d | 26) | c | 27) | d | 28) | C | 29) | a | 30) | C |
| 31) |  | 32) | b | 33) | d | 34) | C | 35) | c | 36) | c | 37) | a | 38) | C | 39) | d | 40) |  |
| 41) |  | 42) | a | 43) | b | 44) | c | 45) | C | 46) | b | 47) | b | 48) | b | 49) | d | 50) | c |
| 51) |  | 52) | c | 53) | b | 54) | C | 55) | c | 56) | d | 57) | b | 58) | d | 59) | a | 60) | a |
| 61) |  | 62) | C | 63) | C | 64) | c | 65) | C | 66) | C | 67) | b | 68) | b | 69) | d | 70) | d |
| 71) |  | 72) | a | 73) | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

