



Sample Paper- 04

Class 11th NEET (2024)

ZOOLOGY

ANSWER KEY

1. (3)
2. (2)
3. (4)
4. (1)
5. (2)
6. (3)
7. (4)
8. (2)
9. (1)
10. (2)
11. (2)
12. (3)
13. (1)
14. (1)
15. (1)
16. (3)
17. (4)
18. (1)
19. (2)
20. (2)
21. (1)
22. (3)
23. (4)
24. (2)
25. (4)

26. (4)
27. (4)
28. (1)
29. (1)
30. (1)
31. (2)
32. (1)
33. (2)
34. (2)
35. (3)
36. (4)
37. (2)
38. (4)
39. (3)
40. (4)
41. (4)
42. (3)
43. (1)
44. (2)
45. (4)
46. (1)
47. (1)
48. (2)
49. (3)
50. (2)



Hint & Solution

- | | |
|---|---|
| <p>1. (3)
In human being, cerebrum is most developed part of brain. Cerebrum is having large surface area and analysing centre for maintaining body activity.</p> <p>2. (2)
In the presence of enzyme activation energy decreases.</p> <p>3. (4)
Coelom is a cavity between alimentary canal and body wall enclosed by mesoderm on both sides.</p> <p>4. (1)
Ostia → Spongocoel → Osculum → Exterior</p> <p>5. (2)
(A) – (V); (B) – (IV); (C) – (III); (D) – (II); (E) – (I); (F) – (VI)</p> <p>6. (3)
(A) – (II); (B) – (I); (C) – (III); (D) – (IV)</p> <p>7. (4)
Exoskeleton consists of feathers, scales, beak and claws.</p> <p>8. (2)
Columnar epithelium have basal nuclei.</p> <p>9. (1)
Epiphysis and diaphysis of bone are end and shaft of a long bone, respectively.</p> <p>10. (2)
Ovary has functional connection with kidney. oviduct arises from ovary and opens into cloaca.</p> <p>11. (2)
The correct order of chemical composition of living tissues/cells in term of percent of the total cellular mass is $H_2O > \text{Proteins} > \text{Nucleic acid} > \text{Carbohydrate} > \text{Lipid} > \text{Ions}$</p> <p>12. (3)
Cysteine amino acid can stabilise protein structure by forming disulphide bonds.</p> <p>13. (1)
Reducing sugars have free aldehyde.</p> <p>14. (1)
Glycosidic bond of nucleoside form between 1st carbon of ribose sugar and 9th member of purine.</p> | <p>15. (1)
Resting membrane potential is -70mv and Na^+ and K^+ helps in maintaining the membrane potential.</p> <p>16. (3)
Conceptual</p> <p>17. (4)
Human kidney can produce urine nearly four times concentrated than the initial filtrate and counter current mechanism help to maintain the concentration.</p> <p>18. (1)
Androgen plays role in both spermatogenesis and male sexual behaviour libido.</p> <p>19. (2)
The blood leaving the lungs has all its haemoglobin Oxygenated and gives up oxygen to the tissues because O_2 concentration in tissues is lower and CO_2 concentration is higher as compared to lungs.</p> <p>20. (2)
A cardiac cycle involves auricular systole – ventricular systole – joint diastole.</p> <p>21. (1)
End of systole.</p> <p>22. (3)
High blood pressure can potentially harm the vital organs like heart, brain and kidneys.</p> <p>23. (4)
Ammonia is excreted by diffusion across body surface or through gill surface as ammonium ions. Ureotelic animals excrete urea. Ammonia and urea are the waste products derived from the metabolic breakdown of proteins.</p> <p>24. (2)
The descending limb is impermeable to sodium ions while ascending limb is permeable to sodium ions.</p> <p>25. (4)
Counter current operates between the two limbs of Henle's loop and those of vasa recta.</p> <p>26. (4)
Chemical ions responsible for muscles contraction are Ca^{2+} and Mg^{2+}.</p> |
|---|---|



27. (4)
Axial skeleton comprises 80 bones and skull has 22 bones.
28. (1)
(A) – (III); (B) – (I); (C) – (IV); (D) – (II)
29. (1)
(A) – (I); (B) – (III); (C) – (II)
30. (1)
Presence of thrombin converts the inactive fibrinogen into fibrin. Plasma without clotting factor is called as serum.
31. (2)
Statement I is correct but Statement II is incorrect.
32. (1)
MSH is secreted in man by anterior pituitary.
33. (2)
PTH stimulates osteoclastic action.
34. (2)
Both Statement I and Statement II are correct.
35. (3)
Hormone receptor present on the cell membrane of the target cell are called membrane bound receptor and the receptor present in the target cell called as intracellular receptor mostly regulated the gene expression
36. (4)
A chemo-sensitive area is situated adjacent to the rhythm centre which is highly sensitive to CO_2 and hydrogen ions. The role of oxygen in the regulation of respiratory rhythm is quite insignificant.
37. (2)
Amphibians share with reptiles all of the following characters except external fertilisation and indirect development.
38. (4)
All the given statements are correct.
39. (3)
Myelin sheath is discontinuous at node of Ranvier.
40. (4)
Prosthetic group is a part of holoenzyme. It is accessory non-protein substance attached firmly.
41. (4)
Thyroid regulates the basal metabolic rate of body.
42. (3)
Partial pressures (in mm Hg) of O_2 in atmospheric air, alveoli deoxygenated blood, oxygenated blood and tissues are 159, 104, 40, 95 and 40 respectively.
43. (1)
Exchange of bicarbonates and chloride ions between RBC and plasma is called Chloride shift.
44. (2)
Different groups of animals have evolved the different method for transport.
45. (4)
Osmoreceptors in the body are activated by changes in blood volume, body fluid volume and ionic concentration.
46. (1)
(A) – (I); (B) – (II); (C) – (III)
47. (1)
The protein which maintains the muscular storage of oxygen is myoglobin.
48. (2)
Mollusca – *Loligo*, *Sepia*, *Octopus*
49. (3)
Asthma – Epinephrine
50. (2)
Grave's disease is caused by malfunctioning of thyroid gland. ADH stimulates reabsorption of water and decrease the urine production.

