

Odisha Joint entrance Examination, -2014
[(Engg /Architecture /Pharmacy) (+2Sc. Level)]

1. In mitochondria, cristae acts as sites of :
 - a) Breakdown of macromolecules
 - b) Phosphorylation of flavoproteins
 - c) Protein synthesis
 - d) Oxidation –reduction reactions.

2. In meiosis, crossing over occurs in
 - a) Zygotene
 - b) Pachytene
 - c) Diplotene
 - d) Diakinesis

3. The spicules of *Sycon* are made up of :
 - a) Silica
 - b) Sponging fibres
 - c) A combination of sponging fibres and silica
 - d) Calcium carbonate

4. In hydra, nematocysts are abundant in:
 - a) Hypostome
 - b) Tentacles
 - c) Pedal disc
 - d) Middle part of the body

5. The body of the Platyhelminthes is :
 - a) Pseudocoelomate
 - b) Coelomate
 - c) Haemocoelomate
 - d) Acoelomate

6. Male *Ascaris* can be distinguished from female by the presence of:
 - a) Oral suckers

- b) Blunt posterior end
 - c) Curved posterior end with a pair of pineal setae
 - d) Lack segmented cuticle
7. In earthworms, the female genital pore is located in :
- a) 13th segment
 - b) 14th segment
 - c) 15th segment
 - d) 16th segment
8. The blood of Molluscs is:
- a) Red
 - b) Green
 - c) Blue
 - d) Yellow
9. Respiration both by lungs and gills takes place in :
- a) Pila
 - b) Sepia
 - c) Unio
 - d) Neopilina
10. Echinoderms lack:
- a) Tube feet
 - b) Pedicellariae
 - c) Choanocytes
 - d) Radial symmetry
11. Retrogressive metamorphosis is shown by:
- a) Vertebrates
 - b) Cephalochordates
 - c) Urochordates
 - d) Hemichordates
12. Cold-blooded groups of vertebrates are :
- a) Pisces and amphibian
 - b) Pisces, amphibians and reptiles
 - c) Reptiles, birds and mammals
 - d) Reptiles and birds

13. Open blood vascular system is found in :
- a) Cockroach
 - b) Earthworms
 - c) Frogs
 - d) Fishes
14. In molluscs, the general body cavity is :
- a) Blastocoel
 - b) Hydrocoel
 - c) Haemocoel
 - d) Pseudocoel
15. Which one of the following is not applicable to Echinoderms?
- a) Triploblastic
 - b) Oral and aboral surfaces
 - c) Cephalisation
 - d) Deuterostomes
16. Excretory organ in Annelids is
- a) Nephridia
 - b) Malpighian tubules
 - c) Flame cells
 - d) Green gland
17. Foramen of Panizza is found in the heart of :
- a) Snake
 - b) Sphenodon
 - c) Draco
 - d) Crocodile
18. What is incorrect about the circulatory system of aves?
- a) Heart is four chambered
 - b) Well-developed renal portal system
 - c) Sinus venosus and transarteriosus are lacking
 - d) RBC are nucleated

19. The main characters that differentiate mammals from other vertebrates are :

- a) Pinnae, hairy skin and oviparity
- b) Nails, mammary glands, and oviparity
- c) Pinnae cleidoic egg and hairy skin
- d) Hairy skin, mammary glands and placenta

20. In humans, how many pairs cranial nerves are present?

- a) 8 pairs
- b) 10 pairs
- c) 12 pairs
- d) 14 pairs

21. Flame cells are found in

- a) Planaria
- b) Tadpole larva
- c) Blanoglossus
- d) Turtles

22. Trancusarteriosus is present in

- a) Lizard
- b) Pegion
- c) Frog
- d) Rabbit

23. Vocal cords are found in

- a) Pharynx
- b) Larynx
- c) Branchial tube
- d) Glottids

24. What is the end product of glycolysis?

- a) Pyruvic acid
- b) Acetyl Co-A
- c) Lactic acid
- d) Citric acid

25. Mammalian embryo is directly surrounded by

- a) Allantoic cavity
- b) Amniotic cavity
- c) Yolk sac cavity
- d) Primary digestive cavity

26. Na^+ and K^+ metabolism is controlled by

- a) Cortisol
- b) ADH
- c) Aldosterone
- d) Thyroxine

27. Sponges are

- a) Herbivorous
- b) Carnivorous
- c) Sanguivorous
- d) Omnivorous

28. The egg of human is

- a) Telolecithal
- b) Alecithal
- c) Microlecithal
- d) Macrolecithal

28. Most terrestrial arthropods have Malpighian tubules which drain wastes from the

- a). Coelom
- b). Blood vessels
- c). Hemocoel
- d). Intestine

30. The blood from a person with an AB blood type

- a) Would agglutinate with anti-A antibody only
- b) Would agglutinate with anti-B antibody only
- c) Would agglutinate with both anti-A and anti-B antibodies
- d) Would not agglutinate with either anti-A or anti-B antibodies.