

**College:** S. S. College, Jehanabad

**Department:** Zoology

**Class:** M.Sc. Semester I

**Subject:** Zoology / Assignment

**Topic:** Animal Physiology, Reproductive Biology &  
Biochemistry (Paper – 2)

**Teacher:** Praveen Deepak

**Last date of assignment submission:** 16.05.2020

**Mode of submission:** E-mail or WhatsApp or Google Classroom

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*Note: Students must submit their detail viz. Name, Class, and College Roll Number during the course of assignment submission. Students can access by going to link <https://classroom.google.com/c/MTAyNzU2MzI1OTg4/p/MTAzMDE5MzY2OTky/details> or joining Google Classroom with code rasmv3a.*

*To join Department's group, students can use following link  
<https://chat.whatsapp.com/EHuHNfQzoAzJBMFNjvsjQx>  
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**S.S. COLLEGE, JEHANABAD**  
(NAAC Accredited- Grade 'B')

Department's Internal Assessment

Name: \_\_\_\_\_ Class: \_\_\_\_\_  
Class Roll No.: \_\_\_\_\_ Total Marks: 40  
Assignment: May 14, 2020 Submission: May 16, 2020

## M.Sc. Zoology Paper - 2 Assignment

*This assignment is for evaluation of students with respect to online classes and e-contents. It has a total of 40 questions and a total of 40 marks. Each question carries 1 mark. There is no minus marking.*

- Which of the following is the best description of homeostasis?
  - maintenance of body function
  - maintenance of body function at the optimum level at all times
  - Cranemultiple systems working cooperatively to maintain body function at an optimum level
  - multiple systems working cooperatively to maintain body function within normal limits
- What is stress?
  - Non-specific response of the body of organism to any demand for change.
  - Specific response of the body of organism to any demand for change.
  - A reaction of body that leads to decrease in appetite.
  - All of the above
- Strain in general is the change produced in response to the \_\_\_\_\_.
  - environmental factor
  - population
  - stress
  - gravitational force
- Environmental stressors includes \_\_\_\_\_.
  - temperature
  - oxygen availability
  - ionic and osmotic balance
  - All of the above
- A compensatory changes that occur in animals and maintained under controlled conditions of the environmental factors are known as \_\_\_\_\_.
  - tolerance
  - resistance
  - acclimation
  - None of the above
- Acclimatization is a compensatory changes occurring under \_\_\_\_\_.
  - normal conditions.
  - controlled conditions.
  - stressful condition.
  - Both (a) & (c)

7. Migration of a bird up a mountain under low oxygen and low pressure is called as \_\_\_\_\_
- (A) acclimation (B) acclimatization  
(C) tolerance (D) resistance
8. There is a thick layer of insulating fat in whales and seals which protects them from colder water, this layer is known as \_\_\_\_\_
- (A) brown fat (B) cuticle  
(C) blubber (D) integument
9. The regional temperature differences within an animal are obtained by \_\_\_\_\_
- (A) vasodilation only (B) vasoconstriction only  
(C) vasocirculation (D) vasodilation and vasoconstriction
10. The homeostatic thermostat which facilitates the process of thermoregulation in man is present in \_\_\_\_\_
- (A) cerebrum (B) thalamus  
(C) hypothalamus (D) medulla
11. The increased muscle contraction along with the increasing rate of heat production is called \_\_\_\_\_
- (A) shivering thermogenesis (B) non-shivering thermogenesis  
(C) overlapping hypogenesis (D) underweighted osmogenesis
12. The animal which uses saliva and urine for cooling is \_\_\_\_\_
- (A) lizard (B) cats  
(C) bears (D) bats
13. Which statement best defines thermoregulation?
- (A) Maintenance of body temperature (B) Regulation of fluids  
(C) Balancing blood sugar (D) Controlling oxygen and carbon dioxide levels
14. Receptors inside the thermoregulatory centre detect blood \_\_\_\_\_
- (A) pH (B) oxygen  
(C) temperature (D) pressure

15. Temperature receptors are found in the brain and also in the \_\_\_\_\_
- (A) liver (B) heart  
(C) skin (D) mouth
16. Which process cools the skin during sweating?
- (A) Transpiration (B) Respiration  
(C) Condensation (D) Evaporation
17. What is the normal core body temperature for humans?
- (A) 36° C (B) 37° C  
(C) 38° C (D) 39° C
18. Which of the following nephridia are not found in earthworm?
- (A) Septal nephridia (B) Macronephric nephridia  
(C) Pharyngeal nephridia (D) Integumentary nephridia
19. Sea gulls excrete salts from \_\_\_\_\_
- (A) nasal chamber (B) liver  
(C) lungs (D) kidneys
20. Which of the following hormones is involved in regulating the water-salt balance of the blood?
- (A) Cortisone (B) Aldosterone  
(C) ADH (D) ANH
21. Which of the following leads to the secretion of aldosterone from the adrenal cortex?
- (A) Chymotrypsin (B) Trypsin  
(C) Renin (D) None of these
22. Which of the two waste products are removed from the blood in liver by Ornithine cycle?
- (A) Urea and CO<sub>2</sub> (B) Uric acid and ammonia  
(C) Ammonia and CO<sub>2</sub> (D) Urea and ammonia

23. Which one of following correctly explains the function of a specific part of a human nephron?
- (A) Afferent arteriole : Carries the blood away from the glomerulus towards renal vein
- (B) Podocytes : Create minute spaces (slit pores) for the filtration of blood into the Bowman's capsule
- (C) Henle's loop : Most reabsorption of the major substances from the glomerular filtrate
- (D) Distal convoluted tubule: Reabsorption of K<sup>+</sup> ions into the surrounding blood capillaries
24. Which one of the following is not a part of a renal pyramid?
- (A) Loops of Henle
- (B) Peritubular capillaries
- (C) Convoluted tubules
- (D) Collecting ducts
25. Volume of urine is regulated by \_\_\_\_\_
- (A) Aldosterone
- (B) Aldosterone and testosterone
- (C) ADH
- (D) Aldosterone and ADH
26. What is the function of respiratory pigments?
- (A) Help in assimilation
- (B) Transport of oxygen
- (C) Transport of nutrients
- (D) None of these
27. What is formerly hemoglobin of invertebrates which is functionally similar yet structurally distinct pigments of vertebrate bloods?
- (A) Hemocyanin
- (B) Erythrocrionin
- (C) Chlorocruonins
- (D) Hemoglobins
28. Which of the following is true for aerobic respiration in humans?
- (A) Glucose + water = carbon dioxide + water
- (B) Glucose + oxygen = Carbon dioxide + water
- (C) luose = Carbon dioxide + water
- (D) None of these
29. Which one is respiratory pigment?
- (A) Chlorocruonin
- (B) Bilirubin
- (C) Chlorophyll
- (D) Carotene

30. Pinnaglobin is a brown coloured blood pigment present in the plasma of the mollusk Pinna. It contains \_\_\_\_\_
- (A) Iron (B) Copper  
(C) Manganese (D) Vanadium
31. The Haldane Effect describes the \_\_\_\_\_
- (A) effect of oxygen on CO<sub>2</sub> transport. (B) effect of air effect of environmental pressure on O<sub>2</sub> transport.  
(C) effect of blood osmolarity on O<sub>2</sub> transport. (D) None of these
32. Chloride shift is essential for \_\_\_\_\_
- (A) CO<sub>2</sub> transport (B) O<sub>2</sub> transport  
(C) N<sub>2</sub> transport (D) All of these
33. The cause of sickle cell anemia in human is \_\_\_\_\_
- (A) presence of mutation in hemoglobin. (B) aberrated erythropoiesis  
(C) Both of these (D) None of these
34. What type of thalassemia disease is Cooley anaemia?
- (A) Alloimmunization (B) Beta-thalassemia  
(C) Alpha-thalassemia (D) None of these
35. Which of the following statement is correct about Thalassemia disease?
- (A) Thalassemia is caused by mutations in the DNA of cells that make haemoglobin. (B) The type of thalassemia depends upon the number of mutations in genes.  
(C) In mild thalassemia you may not need treatment. (D) All the above
36. Which of the following is not the symptom of Thalassemia disease?
- (A) Slow growth and Weakness (B) Abdominal cramps  
(C) Dark Urine (D) Facial bone deformities

37. The primary sex organ is known as \_\_\_\_\_
- (A) Regulate blood volume and composition      (B) Synthesize glucose  
(C) Regulate blood pressure      (D) Gonads
38. The incomplete descent of the testes into the scrotum is called as \_\_\_\_\_
- (A) cryptorchidism      (B) hirsutism  
(C) hernia      (D) None of these
39. Which of the following produces the male sex hormone?
- (A) Rete testis      (B) Seminiferous tubule  
(C) Leydig cell      (D) Scrotum
40. Out of the following, which hormone does not secret from corpus luteum?
- (A) Estrogen      (B) Progesterone  
(C) Relaxin      (D) Testosterone

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Saturday, May 16, 2020

Total Marks: 40

**M.Sc. Zoology Paper - 2 Assignment Answer Sheet**

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Department's Internal Assessment

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