

SSR DEGREE AND PG COLLEGE(Autonomous)
Department of Zoology
B.Sc II YEAR – Animal physiology and Animal Behaviour IAT-I
SEM-III (INTERNAL-I) QB

1. Multiple choice questions

1. Which nutrient is the primary source of energy for the body?

- A. Proteins
- B. *Carbohydrates*
- C. Vitamins
- D. Minerals

Ans: B. Carbohydrates

2. Proteins are mainly responsible for:

- A. Energy production
- B. *Growth and repair of tissues*
- C. Fat storage
- D. Water balance

Ans: B. Growth and repair of tissues

3. The deficiency of Vitamin C causes:

- A. Rickets
- B. Beriberi
- C. *Scurvy*
- D. Night blindness

Ans: C. Scurvy

4. Which mineral is essential for the formation of hemoglobin?

A. Calcium

B. *Iron*

C. Iodine

D. Sodium

Ans: B. Iron

5. Fats are biologically significant because they:

A. Are structural components of cell membranes

B. Provide energy and insulation

C. Act as carriers for fat-soluble vitamins

D. *All of the above*

Ans: D. All of the above

6. Iodine deficiency leads to:

A. Anemia

B. *Goiter*

C. Osteoporosis

D. Kwashiorkor

Ans: B. Goiter

7. Vitamin D is important for:

A. Blood clotting

B. *Calcium and phosphorus absorption*

C. Vision

D. Energy metabolism

Ans: B. Calcium and phosphorus absorption

8. Which of the following is NOT a macronutrient?

A. Carbohydrates

B. Proteins

C. Fats

D. *Vitamins*

Ans: D. Vitamins

9. The biological role of water includes:

A. Transport of nutrients and waste

B. Regulation of body temperature

C. Medium for biochemical reactions

D. *All of the above*

Ans: D. All of the above

10. Kwashiorkor is caused due to deficiency of:

A. Carbohydrates

B. *Proteins*

C. Fats

D. Vitamin A

*Ans: B. Proteins

11. The term "Homeostasis" means:

A. Cell division

B. *Maintenance of constant internal environment*

C. Growth of organism

D. Response to stimuli

Ans: B

12. Which organ is the main center for thermoregulation in humans?

A. Liver

B. Kidney

C. *Hypothalamus*

D. Skin

Ans: C

13. Maintenance of blood glucose level is an example of:

A. Negative feedback

B. *Homeostasis*

C. Positive feedback

D. Metabolism

Ans: B

14. The hormone that lowers blood glucose level is:

A. Glucagon

B. *Insulin*

C. Adrenaline

D. Cortisol

Ans: B

15. Kidneys help in homeostasis by regulating:

- A. *Water and electrolyte balance*
- B. Body temperature
- C. Blood pressure only
- D. Oxygen level

Ans: A

16. Sweating during hot weather is an example of:

- A. Positive feedback
- B. *Negative feedback mechanism*
- C. Hormonal control
- D. Neural control

Ans: B

17. Shivering in cold is controlled by:

- A. Medulla
- B. *Hypothalamus*
- C. Pituitary
- D. Cerebellum

Ans: B

18. Which of the following is NOT an example of homeostasis?

- A. Regulation of blood pH
- B. Regulation of body temperature
- C. *Increase in heart rate during exercise*
- D. Maintenance of blood glucose

Ans: C

Note: Increase in heart rate during exercise is a temporary change, not maintaining constant internal state

19. ADH hormone is responsible for:

- A. Increasing glucose reabsorption
- B. *Water reabsorption in kidneys*
- C. Sodium excretion
- D. Glycogen breakdown

Ans: B

20. The process by which body maintains stable internal conditions despite external changes is called:

- A. Metabolism
- B. Adaptation
- C. *Homeostasis*
- D. Excretion

Ans: C

2.Fill in the blanks

1. The functional unit of lungs is _____.

*Ans: *Alveoli*

2. The respiratory pigment present in RBCs is *____*.

*Ans: *Haemoglobin*

3. Exchange of gases in lungs takes place in *____*.

*Ans: *Alveoli*

4. The normal breathing rate in humans is * _____ * breaths per minute.

Ans: *12-16*

5. * _____ * is the largest respiratory organ.

Ans: *Lungs*

6. The voice box is also called * _____ *.

Ans: *Larynx*

7. During inhalation, the diaphragm becomes * _____ *.

Ans: *Flat / Contracts*

8. The process of breakdown of glucose to release energy is called * _____ *.

Ans: *Cellular Respiration*

9. In anaerobic respiration, glucose is converted into * _____ * in yeast.

Ans: *Ethanol + CO₂*

10. The respiratory center is located in * _____ * of the brain.

Ans: *Medulla Oblongata*

11. The circulatory system was discovered by * _____ *.

Ans: *William Harvey*

12. The largest artery in the body is * _____ *.

Ans: *Aorta*

13. The normal blood pressure of a healthy person is * _____ * mm Hg.

Ans: *120/80*

14. * _____ * are responsible for blood clotting.

Ans: *Platelets / Thrombocytes*

15. The pacemaker of the heart is * _____ *.

Ans: *SA Node*

16. The blood vessel that carries deoxygenated blood to the heart is * _____ *.

Ans: *Vena Cava*

17. * _____ * blood cells fight against infections.

Ans: *White Blood Cells / WBCs*

18. The valve between left atrium and left ventricle is * _____ *.

Ans: *Bicuspid / Mitral Valve*

19. * _____ * is called the "Fluid of Life".

Ans: *Blood*

20. In human heart, there are * _____ * chambers.

Ans: *4

3.questions

1. write the significance of protein.

2. What is respiration? Explain internal, external and cellular respiration.

3. write the procedure of urine formation.

4. What is osmoregulation.