

# **PAPER-1 FISH BIOLOGY**

## **SEMESTER –III, INTERNAL-2**

### **Choose the Correct Answer**

1.The skeleton of fishes is mainly composed of

- A) Cartilage only
- B) Bone only
- C) Cartilage and bone
- D) Chitin

Answer: C

2.The skull of fishes is also called

- A) Dermatocranium
- B) Neurocranium
- C) Splanchnocranium
- D) All of the above

Answer: D

3.Autostylic jaw suspension is characteristic of

- A) Sharks
- B) Bony fishes
- C) Lung fishes
- D) Amphibians

Answer: C

4.Amphistylic jaw suspension is seen in

- A) Teleosts
- B) Elasmobranchs
- C) Cyclostomes

D) Birds

Answer: B

5. Vertebral column of fishes develops from

A) Notochord

B) Neural tube

C) Mesoderm

D) Endoderm

Answer: A

6. The main digestive gland in fishes is

A) Pancreas

B) Liver

C) Gall bladder

D) Intestine

Answer: B

7. Respiration in fishes mainly occurs through

A) Skin

B) Lungs

C) Gills

D) Buccal cavity

Answer: C

8. The respiratory pigment in fish blood is

A) Hemocyanin

B) Hemoglobin

C) Myoglobin

D) Chlorocruorin

Answer: B

9.The heart of fishes is

- A) Two-chambered
- B) Three-chambered
- C) Four-chambered
- D) Five-chambered

Answer: A

10.Single circulation is found in

- A) Amphibians
- B) Reptiles
- C) Birds
- D) Fishes

Answer: D

11.Functional kidney in adult fishes is

- A) Pronephros
- B) Mesonephros
- C) Metanephros
- D) Archinephros

Answer: B

12.Main nitrogenous waste in fishes is

- A) Urea
- B) Uric acid
- C) Ammonia
- D) Creatinine

Answer: C

13.The brain region controlling vision is

- A) Forebrain

- B) Midbrain
- C) Hindbrain
- D) Cerebellum

Answer: B

14. Lateral line system is concerned with

- A) Smell
- B) Taste
- C) Equilibrium
- D) Detection of water vibrations

Answer: D

15. Pineal gland is related to

- A) Growth
- B) Metabolism
- C) Biological rhythms
- D) Digestion

Answer: C

16. Gonads in fishes are derived from

- A) Ectoderm
- B) Endoderm
- C) Mesoderm
- D) Neural crest

Answer: C

17. External fertilization is common in

- A) Sharks
- B) Teleost fishes
- C) Rays

D) Lung fishes

Answer: B

18.Cleavage in fish eggs is

A) Holoblastic

B) Meroblastic

C) Radial

D) Spiral

Answer: B

19.Larval stage of fishes is called

A) Tadpole

B) Fry

C) Nauplius

D) Zoea

Answer: B

20.Yolk sac provides

A) Protection

B) Respiration

C) Nutrition

D) Excretion

Answer: C

## II. Fill in the Blanks

1. The skeletal system of fishes provides **support and protection**.
2. The brain box of skull is called **neurocranium**.
3. Jaw suspension connecting jaws to skull is known as **hyostylic**.
4. Vertebral column replaces the **notochord** in adult fishes.
5. The digestive tract begins with the **mouth**.
6. Gills are supported by **branchial arches**.
7. Counter-current mechanism increases **respiratory efficiency**.
8. Fish heart pumps **deoxygenated** blood.
9. Blood flows from heart to gills in **single circulation**.
10. Excretory unit of kidney is **nephron**.
11. Ammonotelic fishes excrete **ammonia**.
12. The largest part of fish brain is **medulla oblongata**.
13. Lateral line organs are called **neuromasts**.
14. Thyroid gland secretes **thyroxine**.
15. Endocrine glands are **ductless glands**.
16. Ovaries produce **ova**.
17. Testes produce **sperms**.
18. Fish eggs contain large amount of **yolk**.
19. Cleavage in fishes is **discoidal**.
20. Post-embryonic development includes **metamorphosis**.

### **III. One-Mark Questions**

1.What is the function of skeletal system in fishes?

Answer: Support, protection, and locomotion.

2.Name the jaw suspension in bony fishes.

Answer: Hyostylic.

3.What is the function of gills?

Answer: Respiration.

4.Name the respiratory pigment of fishes.

Answer: Hemoglobin.

5.How many chambers are present in fish heart?

Answer: Two chambers.

6. What type of excretion occurs in most fishes?

Answer: Ammonotelism.

7.Which organ maintains equilibrium in fishes?

Answer: Inner ear (labyrinth).

8.What is lateral line system used for?

Answer: Detection of water movements.

9.What type of fertilization is common in fishes?

Answer: External fertilization.

10.What is the larval stage after hatching called?

Answer: Fry.