

**Salahaddin University-Erbil**  
**College of Education**  
**Department of Biology**

**Subject: Question Bank of Embryology**

**Question// Fill the blanks with scientific and suitable terms or phrases:**

1. \_\_\_\_\_ is blood circulating between heart and lungs, while the circulation that provides the heart wall with blood is called \_\_\_\_\_.
2. The fertilization in amphioxus is \_\_\_\_\_ while in frog it is \_\_\_\_\_.
3. Seminiferous tubules comprise of convoluted tubules called \_\_\_\_\_ and straight tubule called \_\_\_\_\_.
4. The complete cleavage is also called \_\_\_\_\_ and it have two types; it is either \_\_\_\_\_ or \_\_\_\_\_.
5. The two dorsal erectile tissues of the penis is called \_\_\_\_\_.
6. \_\_\_\_\_ is a neuroglia that supports neurons physically and metabolically in CNS, although the cells that acts as epithelial tissue are called \_\_\_\_\_.
7. The transformation of a single layered embryo into 3 layered embryos termed as \_\_\_\_\_.
8. Nerve tissue consists of 2 principal types of cells \_\_\_\_\_ and \_\_\_\_\_.
9. The testes lie outside the body in a pouch of skin called the \_\_\_\_\_.
10. The four parts of fallopian tubes are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
11. \_\_\_\_\_ Are neurons that have multiple processes, and are located mostly in \_\_\_\_\_.
12. The function of the Leydig cell is \_\_\_\_\_.
13. The mother cell of ova is called \_\_\_\_\_ while the mother cell of sperm is called \_\_\_\_\_.
14. The most permeable type of capillaries is \_\_\_\_\_ which can be found in \_\_\_\_\_.
15. The neuroglia responsible for forming myelin in CNS is called \_\_\_\_\_ while the in the PNS is called \_\_\_\_\_.
16. During circulation supply blood to heart is called \_\_\_\_\_ circulation, while the circulation between the heart and lungs, called \_\_\_\_\_.
17. Testes are responsible for the manufacture of \_\_\_\_\_ and \_\_\_\_\_.
18. The heart consists of four chamber two atria, which are \_\_\_\_\_ chambers two ventricles are the \_\_\_\_\_ chambers.
19. Male accessory organs are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
20. Layers of uterus includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

21. A collection of nerve cell bodies in the PNS is called \_\_\_\_\_, while the collection of axons in the CNS is called \_\_\_\_\_.
22. Type of capillary in the brain is \_\_\_\_\_ while the type of capillary in the small intestine is \_\_\_\_\_.
23. At ovulation, the follicle ruptures collapse, and shrinks what remains becomes a structure called \_\_\_\_\_ if there is no pregnancy, it degenerates into a scar tissue called \_\_\_\_\_.
24. The morphological transformation of a spermatid into spermatozoa is called \_\_\_\_\_.
25. The macrophage in the blood is called \_\_\_\_\_ while in CNS is called \_\_\_\_\_.
26. Veins that are closer to the surface of the skin are called \_\_\_\_\_.

**Question// put true or false for the following, then correct the false one if found?**

- 1- Nervous system is divided anatomically into Central nervous system and Peripheral nervous system
- 2- In the Graafian follicle the oocyte is surrounded by a layer of granulosa cells called the zona pelucida
- 3- The surface of the ovary is covered by a stratified cuboidal epithelium.
- 4- Each **testis** is surrounded by a dense connective tissue capsule, called the **Tunica vaginalis**
- 5- Deep Veins: These are located deep within the muscle tissue.

**Question// A- Match the structure from column 1 with their functions from column 2:**

	Column 1		Column 2
1	Sertoli cells	A	Formation of neural tube
2	Microglial cell	B	Transmit signals
3	Neuron	C	Blood-testis barrier
4	Prostate gland	D	Phagocytosis
5	Neurulation	E	Secrete fluid and enzymes

**B- compare between Frog & Amphioxus according to the following:**

	Frog	Amphioxus
Type of egg according to distribution of yolk		
Type of egg according to amount of yolk		
Fertilization		
Type of cleavage		
Blastula		

**Question// what are the differences between the artery and vein:**

No.	Artery	Vein
1		
2		
3		
4		
5		

**Question// Match the structure with its function for the following:**

Structure	Answer	Function
Acrosome	A	Testosterone production
Valve	B	Washing dishes
Leydig cell	C	Penetration of ova
Sinoatrial node	D	Metabolic support
Astrocyte	E	Generation of stimulus
	F	Prevent backflow

**B- Write the embryonic origin (embryonic layer) of the following:**

	Organ/system	Origin
1.	Brain	
2.	Muscle	
3.	Spinal cord	
4.	Digestive system	
5.	Skin	

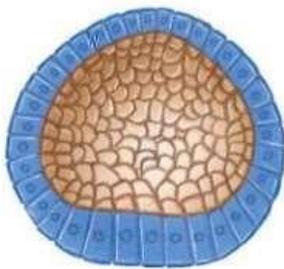
**Question// Count the following:**

- Steps of follicle growth.
- Types of egg based on the amount of yolk
- Types of holoblastic cleavage based on the cleavage planes.
- Types of capillary.
- Types of veins.
- Types of Neuron based on function.
- Tissue Layers of blood vessels.
- Type of arteries.
- Layers of vas deferens.
- Types of neuroglia in CNS.
- Male reproductive organs.
- Parts of the oviduct.

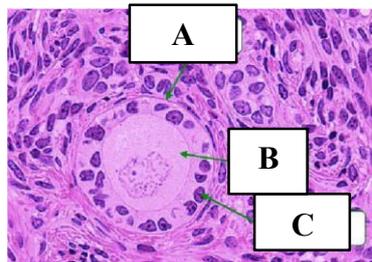
**Question// A- What is the main function of the following:**

1. Ovary
1. Vas deferens
2. Arteries
3. Autonomic nervous system
4. Mid-piece of the mature sperm
5. Glands of Littre (urethral glands)
6. Fimbriae
7. Testis
8. Uterus
9. Oligodendrocytes cells
10. Sertoli cell.
11. Oviduct.
12. Capillary.
13. Schwann cell.
14. Epididymis.

**Question// Identify the following figures then label it if found:**



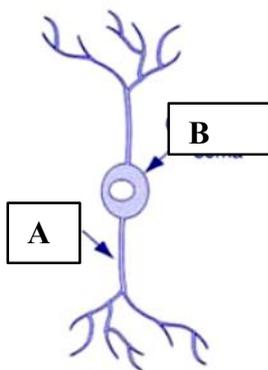
1



2



3



4



5