

**KSU Faculty of Science /Department of Zoology**

**The first trial Exam (Zoo 424) Principal of experimental embryology**

**First question:-place the tick for correct (T) or (F) for the incorrect:**

1-Hans Dersig is found in respiratory enzymes in embryos ( )

2-The growth process in nerve cells of the type stable configuration. ( ) 3-Embryonic differentiation occurs before Inductions ( )

4-Embryonic cancer theory assumes the presence of cancerous cells in the embryo during development. ( )

5. Cell determination is needed for differentiation in embryos. ( )

6-Cell direct contact is necessary for the process of cell differentiation in embryos. ( )

7-The dorsal lip is the embryonic organizer of the frog embryo. ( )

8-Hensen node is the embryonic organizations in mammalian embryos. ( )

9-The nucleus, cytoplasm, hormones and environmental factors, all they play an important role in the process of cellular differentiation of embryos ( )

10- Teratoma is tumors derived from viral cells. ( )

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**Second question:-Choose the correct answer from the following:**

**1-Which of the following cell: it grows in volume of cytoplasm**:

a) - Skin cells b) Liver cells c) Ova d) Blood cells.

**2. Cellular determination is**:

a) An increase in the size of cells b) Induced by embryonic organizations c) Process occurs by cellular differentiation. d) All previous answers right

**3. The inhalation of chloroform causes the:**

a) Skin cancer b) Lung cancer

c) Intestinal cancer d )Liver cancer

**4. The carcinoma is a cancer cell derived from:**

a) Pigmented cell b) Connective or mesoderm cell

c) Epithelia or endoderm cells d ) Germ cells.

**5. The low oxygen in embryo media causes:**

a) Exogastrolation b) Two trunk

c) Tow heads d )Microcephaly

**6) Hans Spemann discover the:**

1. Respiratory enzymes b) Embryonic organizer

c) Hensen node d) Oncogene.

7)

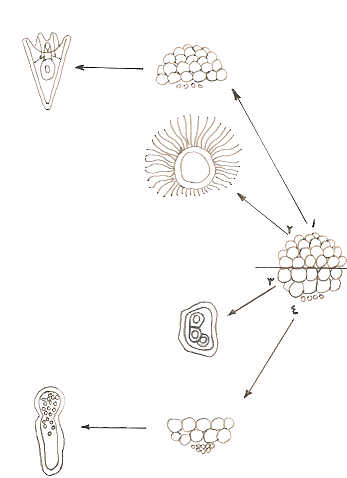
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**3- Write the explanation of the following :**

1. **The Preformation theory**

**b)Embryo cancer cell theory**

1. **Explain the following diagram:**

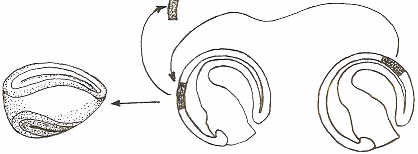


**4) Explain the following:**

A) Explain the induction of the embryonic cell how it occurs?

B) Explain the similarity differences between the embryonic and cancer cell?

C) Explain the following diagram



With my best wishes: Alhimaidi Ahmed