

B.Sc.- II (CBCS Pattern) Semester-IV  
**USCZOT07 - Core Paper-VII - Zoology Paper-I - Developmental Biology**

P. Pages : 1

Time : Three Hours



**GUG/W/24/12004(S)**

Max. Marks : 50

- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw well labeled diagrams wherever necessary.

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|-----------|--|-----------|
| <b>1.</b> | Give a detailed account on types of cleavage.                      | <b>10</b> |
|           | <b>OR</b>  |           |
|           | a) Types of blastula.  | <b>5</b>  |
|           | b) Mechanism of fertilization.                                     | <b>5</b>  |
| <b>2.</b> | Write an essay on extra embryonic membrane in chick.               | <b>10</b> |
|           | <b>OR</b>  |           |
|           | a) Epiboly in frog.  | <b>5</b>  |
|           | b) Formation of primitive streak in chick.                         | <b>5</b>  |
| <b>3.</b> | Write an essay on the process of Oogenesis.                        | <b>10</b> |
|           | <b>OR</b>  |           |
|           | a) Structure of ovum.  | <b>5</b>  |
|           | b) Implantation in mammals.  | <b>5</b>  |
| <b>4.</b> | Explain in detail sources of stem cells & its applications.        | <b>10</b> |
|           | <b>OR</b>  |           |
|           | a) Significance of apoptosis.                                      | <b>5</b>  |
|           | b) Test tube baby.   | <b>5</b>  |
| <b>5.</b> | Write four or five lines on each of the following <b>any ten</b> . | <b>10</b> |
|           | i) Alecithal egg   |           |
|           | ii) Vitellogenesis   |           |
|           | iii) Blastocyst  |           |
|           | iv) Emboly   |           |
|           | v) Blastodisc  |           |
|           | vi) Amnion   |           |
|           | vii) Placentation  |           |
|           | viii) Zonary placenta  |           |
|           | ix) Corpus luteum  |           |
|           | x) IVF   |           |
|           | xi) Vasectomy  |           |
|           | xii) Oral contraceptives   |           |

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