

U.G. 6th Semester Examination - 2020**ZOOLOGY****Course Code : BZOOCCHC601****Course Title : Developmental Biology**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** questions: 1×10=10
- Name two Wnt antagonists which act as head inducers.
 - What is Nieuwkoop centre?
 - What is spermioteleosis?
 - What are the secretion of Sertoli cells?
 - Define blastomere.
 - What do you mean by micolecithal egg?
 - What is corpus albicans?
 - What is golgi rest?

- Define ectopic pregnancy.
 - Cell division without growth is _____.
 - Name two hormones that cause the contraction of uterus.
 - The begining of menstruation is known as _____.
 - Which hormone is the basis for pregnancy test?
 - What is the fate of blastopore in case of Tunicates?
 - What is epiboly?
2. Answer any **five** of the following: 2×5=10
- What is discoidal placenta?
 - Why head region of amphibian gastrula does not undergo convergent extension?
 - Mention the body parts of Ectodermal and Mesodermal origin.
 - What is gray crescent and mention it's significance?
 - Write briefly on superficial cleavage.
 - Write the difference between invagination and involution.

[Turn over]

g) Describe the significance of chemotaxis in fertilization with proper example.

h) What is the difference between blastocoel and archenteron?

3. Answer any **two** of the following: $5 \times 2 = 10$

a) Mention the components of cortical granules and describe their role to prevent sperm entropy. $2 + 3 = 5$

b) Write a short note on influence of yolk in cleavage. 5

c) Briefly describe the hormonal regulation of follicular phase. Describe the changes in mammalian egg, just after fertilization.

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$
