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**W—112—2018**

**FACULTY OF SCIENCE**

**B.Sc. (First Year) (Second Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2018**

**(CBCS/CGPA Pattern)**

**ZOOLOGY**

**Paper IV**

**(Developmental Biology)**

**(MCQ & Theory)**

**(Wednesday, 24-10-2018)**

**Time : 10.00 a.m. to 12.00 noon**

**Time—2 Hours**

**Maximum Marks—40**

**N.B. :— (i) Attempt All questions.**

**(ii) Use OMR sheet for Question No. 1.**

**(iii) One mark to each correct answer of an MCQ.**

**(iv) Negative marking system is applicable.**

**(v) Use black ball point pen to darken the circle of correct choice in OMR answer-sheet.**

**(vi) Draw diagrams wherever necessary for Question Nos. 2, 3 and 4.**

**MCQ**

1. (i) Production of gamets is called : 10

(a) Spermatogenesis

(b) Gametogenesis

(c) Oogenesis

(d) All of these

(ii) Spermatozoon is the :

(a) Egg

(b) Ova

(c) Female gamet

(d) Male gamet

(iii) Chalaza is found in the egg of :

(a) Wall lizard

(b) Rat

(c) Rabbit

(d) Hen

**P.T.O.**

- (iv) Failure in the development of uterus, it is :
- (a) Female infertility (b) Male infertility  
(c) Both (a) and (b) (d) None of these
- (v) The fertilized egg is divided by the process of :
- (a) Cleavage (b) Oogenesis  
(c) Regeneration (d) Invagination
- (vi) Fertilisation in frog is :
- (a) In uterus (b) Internal  
(c) External (d) None of these
- (vii) The main function of Allantois is :
- (a) Protection (b) Nutrition  
(c) Excretion (d) None of these
- (viii) Bone marrow contains a stem cell is :
- (a) Nerve cell (b) Haematopoietic  
(c) Embryonic (d) Totipotent
- (ix) GIFT means :
- (a) Gamete intra uterine transfer  
(b) Zygote intra fallopian transfer  
(c) Gamete intra fallopian transfer  
(d) Zygote intra uterine transfer
- (x) Complete parthenogenesis is found in :
- (a) Birds  
(b) Wasps  
(c) Both (a) and (b)  
(d) None of the above

**Theory**

2. Describe the process of spermatogenesis. 10

*Or*

Write notes on :

- (a) Types of eggs on the basis of amount of yolk
- (b) Infertility in male.

3. Describe the process of Blastulation in frog. 10

*Or*

Write notes on :

- (a) Structure of ovum of frog
- (b) Sources of stem cells.

4. Define placenta. Describe classification of placenta on the basis of mode of distribution of villi. 10

*Or*

Write notes on :

- (a) Functions of Placenta
- (b) Natural parthenogenesis.