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B—133—2019

FACULTY OF SCIENCE

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

MARCH/APRIL, 2019

(CBCS/CGPA Pattern)

ZOOLOGY

Paper IV

(Developmental Biology)

(MCQ+Theory)

(Wednesday, 3-4-2019)

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 a well labelled diagrams wherever necessary for Q. Nos. 2, 3 and 4..

(MCQ)

1. Multiple choice questions :

- (i) Spermatogenesis takes place in
 - (A) Ovary
 - (B) Testis
 - (C) Liver
 - (D) Kidney
- (ii) The sperm of frog is
 - (A) Haploid
 - (B) Diploid
 - (C) Both (A) and (B)
 - (D) None of these
- (iii) Process of fusion of male and female gamete is called
 - (A) Regeneration
 - (B) Metamorphosis
 - (C) Parthenogenesis
 - (D) Fertilisation

P.T.O.

- (iv) In Blastula, macromeres lie towards
- (A) Centre (B) Periphery
(C) Animal pole (D) Vegetal pole
- (v) Cleavage that divides the egg completely is known as
- (A) Superficial (B) Meroblastic
(C) Discoidal (D) Holoblastic
- (vi) Which stem cells are also called as somatic stem cells
- (A) Nerve cells (B) Stromal cells
(C) Embryonic stem cells (D) Adult stem cells
- (vii) The inability or failure to conceive is called
- (A) Sterility (B) Fertility
(C) Infertility (D) All of these
- (viii) The first test tube baby was
- (A) Robert Brown (B) Louise Brown
(C) Robert Edwards (D) Robert Anderson
- (ix) Cotyledonary type of placenta is found in
- (A) Pig (B) Cow
(C) Camel (D) Elephant
- (x) Parthenogenesis produced experimentally in the laboratory is called
- (A) Incomplete parthenogenesis
(B) Complete parthenogenesis
(C) Artificial parthenogenesis
(D) All of the above

(Theory)

2. Describe the process of Oogenesis.

Or

Write notes on :

- (a) Types of eggs on the basis of distribution of yolk.
(b) Infertility in female.

3. Describe the process of fertilisation in frog.

Or

Write notes on :

- (a) Structure of sperm of frog
- (b) Embryonic and adult stem cells.

4. Define placenta. Describe classification of placenta on the basis of mode of origin.

Or

Write notes on :

- (a) Extra embryonic membrane-yolk sac.
- (b) GIFT.