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R—106—2017

FACULTY OF SCIENCE

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

MARCH/APRIL, 2017

(CBCS/CGPA Pattern)

ZOOLOGY

Paper IV

(Developmental Biology)

(MCQ+Theory)

(Saturday, 8-4-2017)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

- N.B. :-*
- (i) Use separate OMR answer-sheet for Question No. 1.
 - (ii) One mark to each correctly answered of MCQ.
 - (iii) Negative marking system for wrong answer is applicable.
 - (iv) Use black ball point pen to darken the circle of correct choice in OMR answer-sheet.
 - (v) Darken only one circle for the answer of an MCQ.
 - (vi) Draw a well labelled diagram, wherever necessary for Q. Nos.

2, 3, 4.

(MCQs)

1. Select the *correct* answer for each of the following MCQs : 10

- (i) The production of gamete is called

 - (a) Oogenesis
 - (b) Gametogenesis
 - (c) Parthenogenesis
 - (d) Spermatogenesis

- (ii) The germinal epithelium cells separated by giant cells is called as

 - (a) Interstitial cells
 - (b) Sertoli cell
 - (c) Germ cells
 - (d) None of these

P.T.O.

- (iii) When an egg contains a small or negligible amount of yolk it is said to be
- (a) Alecithal (b) Microlecithal
(c) Macrolecithal (d) None of these
- (iv) In egg, the yolk is highly concentrated towards the vegetal pole.
- (a) Macrolecithal (b) Telolecithal
(c) Homolecithal (d) Centrolecithal
- (v) The process of fusion of male and female gamete is called
- (a) Matamorphosis (b) Parthenogenesis
(c) Fertilization (d) Regeneration
- (vi) The fertilized egg is divided by the process of
- (a) Regeneration (b) Oogenesis
(c) Cleavage (d) Invagination
- (vii) Among invertebrates the regenerative power is exceedingly high in the
- (a) Coelenterates (b) Molluscs
(c) Arthropod (d) Nematode
- (viii) The main function of allantois is
- (a) Nutrition (b) Protection
(c) Excretion (d) None of these
- (ix) Cotyledonary type of placenta is found in
- (a) pig (b) cow
(c) camel (d) elephant
- (x) The development of egg without fertilization is known as
- (a) Gametogenesis (b) Oogenesis
(c) Parthenogenesis (d) Spermatogenesis

(Theory)

2. Describe the process of spermatogenesis. 10

Or

Write notes on :

- (a) Megalecithal egg
(b) Infertility in female.

3. Describe the process of Blastulation in frog. 10

Or

Write notes on :

- (a) Structure of ovum of frog
(b) GIFT.

4. Describe the structure of yolk sac and allantois and add a note on its function. 10

Or

Write notes on :

- (a) Function of placenta
(b) Artificial parthenogenesis.