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BF—104—2016

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2016

ZOOLOGY

Paper IV

(Developmental Biology)

(MCQ+Theory)

(Friday, 9-12-2016)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Use separate answer-sheet (OMR) for Question No. 1.

(ii) One mark to each correctly answered of MCQ.

(iii) Negative marking system 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 and 4.

(MCQ)

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

(i) Spermiogenesis is the process in which

(a) Spermatids changes into spermatozoa

(b) Spermatogonia produces spermatid

(c) Spermatocytes give rise to spermatozoa

(d) Spermatozoa multiply by meiotically

(ii) The sertoli cells nourish the developing

(a) Ovum

(b) Sperm and ovum

(c) Spermatozoa

(d) None of these

(iii) When the egg contains small amount of yolk it is said to be egg.

(a) Teleolecithal

(b) Microlecithal

(c) Megalecithal

(d) Alecithal

P.T.O.

- (iv) The egg of frog is
- (a) Diploid (b) Both (a) and (c)
(c) Polyploidy (d) Haploid
- (v) In frog fertilization is
- (a) Monospermy (b) Biospermy
(c) Triospermy (d) Tetraspermy
- (vi) First cleavage plane in frog is
- (a) Vertical (b) Meriodinal
(c) Equatorial (d) Transverse
- (vii) In chick embryo the main function of chorion is
- (a) Excretion and respiration
(b) Digestion and respiration
(c) Respiration and protection
(d) Digestion and excretion
- (viii) Cotyledonary type of placenta is found in
- (a) Cow (b) Pig
(c) Camel (d) Dog
- (ix) The maintenance and repair of tissue is a function of
- (a) Stem cells (b) Embryonic stem cells
(c) Adult stem cells (d) Nervous stem cells
- (x) In bees types of parthenogenesis is occur.
- (a) Artificial (b) Obligatory
(c) Haploid (d) Natural

(Theory)

2. Describe the process of spermatogenesis.

10

Or

Write notes on :

- (a) Types of egg on the basis of amount of yolk.
(b) Test tube baby.

WT

(3)

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3. Describe the process of fertilization in frog.

10

Or

Write notes on :

(a) Blastula of frog.

(b) Causes of infertility in male.

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

10

Or

Write notes on :

(a) Metadiscoidal placenta

(b) GIFT technique.

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