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W—133—2018

FACULTY OF SCIENCE

B.Sc. (Third Semester) EXAMINATION

OCTOBER/NOVEMBER, 2018

(CBCS/CGPA)

ZOOLOGY

Paper-VI

(Genetics)

(MCQ+Theory)

(Thursday, 25-10-2018)

Time : 2.00 p.m. to 4.00 p.m.

Time—Two Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) All questions carry equal marks.

(iii) Draw neat and labelled diagrams wherever necessary.

MCQ

10

1. Select *correct* answer from the given multiple choices :

(i) The organism carrying non-identical genes for particular character is called as

(a) Heterozygous

(b) Hybrid

(c) Homozygous

(d) Both (a) and (b)

(ii) The character which disappears in F1 generation is called as

(a) Dominant character

(b) Recessive character

(c) Degenerative character

(d) Aggressive character

(iii) Epistasis means

(a) Stopping

(b) Inhibiting

(c) Both (a) and (b)

(d) Ending

P.T.O.

- (iv) The theory of linkage was proposed by
- (a) T.H. Morgan (b) Bateson
- (c) De Vries (d) Malphigi
- (v) The O blood group person is called as
- (a) Universal Recipient (b) Universal Donor
- (c) Common Donor (d) Normal Donor
- (vi) The colourblindness in man shows
- (a) Cris cross inheritance (b) Zig-zag inheritance
- (c) Both (a) and (b) (d) Straight inheritance
- (vii) The chromosomal theory of sex determination was proposed by
- (a) M.C. Clug (b) Morgan
- (c) Bridges (d) John Cotto
- (viii) The sudden, abrupt and inheritable changes in genes and chromosomes are called as
- (a) Modifications (b) Mutations
- (c) Adaptations (d) Recombinations
- (ix) is called as Mongolism 'or' Mongoloid idiocy.
- (a) Klinefelter's syndrome (b) Down's syndrome
- (c) Turner's syndrome (d) Albinism
- (x) The micromolecular model of DNA was proposed by
- (a) Watson and Crick (b) Mendel
- (c) Chargaff (d) Punnet

Theory

2. What is interaction of genes ? Explain complementary factors with a suitable example. 10

Or

Write short notes on :

- (a) Incomplete dominance
- (b) Klinefelter's syndrome

3. What is linkage ? Explain complete linkage in male *Drosophila*. 10

Or

Write short notes on :

- (a) Inheritance of ABO blood group.
- (b) Genetic codes.

4. What is sex linked inheritance ? Explain with reference to colour blindness in man. 10

Or

Write short notes on :

- (a) Holandric genes
- (b) Turner's syndrome.