

Paper-107K.V. Chaibasa
M. Sc. ZOOLOGY - 3rd Semester

F.M-70.

Answer Q₁ and Q₂ is compulsory
and answer any three from Gr B.

Q₁ . Choose the correct Answer - 1x10 = (10)

(a) The most accepted theory of Biological clock is

- (i) Exogenous theory (ii) Darwin's theory
(iii) Photoperiod theory (iv) Endogenous theory

(b) In which of the following is not a kind of cell in a comb of honey bee —

- (i) Attachment cells (ii) Brood cells
(iii) Storage cells (iv) Feeding cells

(c) In Ethology reward is related to

- (i) Imprinting (ii) Habituation
(iii) Learning (iv) Reflex action

(d) The genetic material in virus is

- (i) DNA and RNA (ii) RNA only
(iii) DNA only (iv) DNA or RNA-

(e) The generation time for E. coli is

- (i) 20 minutes (ii) 35 minutes
(iii) 2 minutes (iv) 13 minutes

(f) In AIDS HIV kills

- (i) Bone marrow cells (ii) T-helper cells
(iii) Antibody molecules (iv) C- Glycolytic cells

(g) Cosmid vectors are used for

- (i) Cloning small fragments of DNA
(ii) cloning large fragments of DNA
(iii) cloning eukaryotic DNA only

- (iv) cloning prokaryotic DNA only
- (v) Genomic Library construction is
- (i) Gene isolation
 - (ii) plasmids
 - (iii) Protein production
 - (iv) Antibiotics

(2) At what temperature do the denaturation of DNA double helix takes place?

- (i) 60°C (ii) 54°C (iii) 74°C (iv) 94°C

(3) To avoid ligation of separate DNA fragments which of the enzyme is used?

- (i) phosphatase (ii) Kinase (iii) Ligase
(iv) Endonuclease

Q2: Answer any three short notes - 5x3.

- (i) DNA fingerprinting
- (ii) DNA probe
- (iii) prion
- (iv) Pandemic
- (v) Virion
- (vi) DNA Ligase
- (vii) Polymerase chain Reaction

Gr-B. Answer Any three

Q3: What is orientation in Animals. (15)

Explain Kinesis, Types of Kinesis

Taxes - types.

Q4. Occurrence & Significance of Circadian

Circannual, circasyzygic clocks

Explain their biological rhythms

Q5. What do you understand by Metastasis? 15

Explain Cancer as a Curse for human beings?

Q6. How would you justify that Control of microbial growth in society is essential with the help of chemical agents & physical methods to control virus

Q7. Explain Social behavior in Insects - particularly the movement of Honey bees their division of labour also.

Q8. What do you understand by Gene Library.

Answer of Multiple Questions

Set-1

- (a) IV (b) IV (c) III (d) IV (e) I
(f) II (g) II (h) I (i) IV
(j) (i)



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