

Sig. of Supdt. ....

MRD-XII-16(A)  
**BIOLOGY**  
(Part – II)  
(Fresh / New Course)

Roll No. ....

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Fig. # .....

Fig. # .....

Time Allowed : 3 Hrs.

**BIOLOGY**  
(Part – II)  
(Fresh / New Course)

Total Marks: 85

NOTE : There are THREE sections in this paper i.e. Section A, B and C.

Time : 20 Mins.

**Section "A"**

Marks: 18

NOTE : Use this sheet for this section. No mark will be awarded for cutting, erasing or over writing.

Q. 1 Write the correct option i.e. A, B, C and D in the empty box provided opposite to each part.

- i) .....is the type of non-directional orientation.  B (i)  
(a) Taxils (b) Kinesis (c) Tropism (d) Imprinting
- ii) The number of linkage group in man is .....  B (ii)  
(a) 2 (b) 23 (c) 46 (d) 92
- iii) Law of segregation is related to .....  C (iii)  
(a) Test cross (b) Back cross (c) Monohybrid cross (d) Dihybrid cross
- iv) The symptom of Alzheimer disease is .....  D (iv)  
(a) Shaking of hands (b) Headache (c) Photophobia (d) Memory Lapse
- v) The following are symptoms of meningitis except one .....  C (v)  
(a) Photophobia (b) Severe headache (c) Memory losses (d) Vomiting
- vi) BCG vaccine is a type of .....vaccine.  B (vi)  
(a) Killed (b) Live attenuated (c) Conjugated (d) Subunit
- vii) The protective coat which surrounds the embryo is .....  D (vii)  
(a) Chorion (b) Allantosis (c) Chorio-allantoic (d) Amnion
- viii) .....is a classic symptom of hyperthyroidism.  A (viii)  
(a) Exophthalmia (b) Goiter (c) Rickets (d) Microcephaly
- ix) The H-substance gene is present on chromosome number .....  A (ix)  
(a) 19 (b) 10 (c) 9 (d) 12
- x) Within the ovary progesterone is produced by the .....  B (x)  
(a) Corpus luteum (b) Corpus albicans (c) Tertiary follicles (d) Primary follicles
- xi) .....is characterized by increases oxalate level in urine.  A (xi)  
(a) Hyperoxaluria (b) Hypercalcemia (c) Hyperurecemia (d) None of these
- xii) Which is not salient feature of Darwin theory?  A (xii)  
(a) Use and disuse of organ (b) Overproduction  
(c) Struggle for existence (d) Variation
- xiii) Insight learning was observed in .....  C (xiii)  
(a) Rats (b) Dogs (c) Chimpanzees (d) Cats
- xiv) In succession lithosere takes place on .....  D (xiv)  
(a) Sand (b) Water (c) Forest floor (d) Bare rocks
- xv) Wheat has .....number of chromosomes.  A (xv)  
(a) 42 (b) 43 (c) 44 (d) 46
- xvi) Genes for milk, is an example of .....trait.  A (xvi)  
(a) Sex limited (b) Sex influenced (c) Sex linked (d) None of these
- xvii) HIV destroy a type of defense cell in the body called a .....helper lymphocyte.  A (xvii)  
(a) CD4 (b) CD8 (c) CD24 (d) CD28
- xviii) A condition of excessive thirst is known as .....  B (xviii)  
(a) Polyuria (b) Polydipsia (c) Polyphagia (d) All of these

MED-2113(A)  
**BIOLOGY**  
(Part – II)  
(Fresh / New Course)  
**Section – B & C**

Total Marks : 67

Time Allowed : 2:40 Hrs.

Section – B

Marks : 40

**Q. 2 Answer any Ten parts. Each part carries equal marks.**

- (i) How regulation of blood flow to skin is helpful to maintain body temperature?
- (ii) Briefly describe the territorial behavior.
- (iii) Define Hardy Weinberg principle.
- (iv) List down the control measures against HIV infection.
- (v) Write down a note on Otitis Media.
- (vi) Why human testes are located outside the abdominal cavity?
- (vii) What is Hamburger's phenomenon?
- (viii) Differentiate between special creation and evolution.
- (ix) How ADH controls the concentration of urine?
- (x) Briefly discuss sex-limited trait.
- (xi) What is recapitulation theory?
- (xii) What do you know about the gene therapy of cystic fibrosis?
- (xiii) What are Toxoid vaccines?

Section – C

Marks : 27

**NOTE :** Attempt any THREE questions. Each question carries equal marks.

- Q. 3 What is ecological succession? Write its types. How ecological succession takes place in extremely dry condition?
- Q. 4 Explain Mendel's law of independent assortment.
- Q. 5 How embryonic development of human occur?
- Q. 6 Write notes on any two.
  - (a) Discuss acid rain.
  - (b) Influence of deforestation on environment.
  - (c) Ozone layer