

# **BIOLOGY**

- 21. Central dogma in molecular biology was proposed by [NCERT XII Pg. No. 97]
  - (1) Watson
- (2) Meischer
- (3) Francis Crick
- (4) Willkins
- 22. Total number of base pairs in a DNA is found to be  $4.6 \times 10^6$ . Calculate the total length of the genetic material.

# [NCERT XII Pg. No. 97]

- (1) 2.2 m
- (2) 1.5 mm
- (3) 3.6 m
- (4) 3 mm
- 23. Vertical rise = [NCERT XII Pg. No. 97]
  - (1) Distance between two nucleotide base pairs in a DNA.
  - (2) Total length of a genetic material.
  - (3) Length of hydrogen bonds between nitrogen bases in an RNA
  - (4) Sum of glycosidic bonds and hydrogen bonds in a DNA.
- 24. During DNA replication, Okazaki fragments are used to elongate

### [NCERT XII Pg. No. 106] (NEET 2017)

- (1) the leading strand towards replication fork.
- (2) the lagging strand towards replication fork
- (3) the leading strand away from replication fork
- (4) the lagging strand away from replication fork
- 25. The unequivocal proof that DNA is the genetic material came from the experiments of Hershey and Chase using

### [NCERT XII Pg. No. 101]

 $(1) N^{15}$ 

 $(2) N^{14}$ 

 $(3) S^{32}$ 

 $(4) P^{32}$ 

- 26. Semiconservative method of DNA replication was performed by scientist Taylor in [NCERT XII Pg. No. 105]
  - (1) *E.coli*
  - (2) Vicia faba
  - (3) Human
  - (4) Pisum sativum
- 27. A disease caused by an autosomal primary non-disjunction is

### [NCERT XII Pg. No. 92]

- (1) Klinefelter's syndrome
- (2) Turner's syndrome
- (3) Sickle cell anaemia
- (4) Down syndrome
- 28. Which of the following characteristics represent 'Inheritance of blood groups' in humans?

### [NCERT XII Pg. No. 77] [NEET 2018]

- A. Dominance
- B. Co-Dominance
- C. Multiple allelism
- D. Incomplete dominance
- E. Polygenic inheritance
- (1) B, D and E
- (2) A, B and C
- (3) B, C and E
- (4) A, C and E
- 29. Select the correct match

# [NCERT XII Pg. No. 91]

- (1) Phenylketonuria Autosomal dominant trait
- (2) Sickle cell anaemia Autosomal recessive trait
- (3) Thalassemia X linked
- (4) Haemophilia Y linked
- 30. Dominant trait for pod colour in pea plant
  [NCERT XII Pg. No. 71]
  - (1) Yellow
- (2) Green
- (3) Violet
- (4) White