# Model Paper Biology (9th Fresh) 

Time Allowed: $\mathbf{2}$ Hours and $\mathbf{3 0}$ minutes
Note: There are THREE sections in this paper i.e. Section A, B, C.
Attempt Section-A on the same paper and return it to the Superintendent within the given time. No marks will be awarded for Cutting, Erasing or Overwriting.

## Section - "A"

Time allowed: 15 minutes
Marks: 12
Q.1. Write the correct option i.e. A, B, C or D in the empty box provided opposite to each part.
i. The study of fossils of the extinct organism is called.
A. Entromology
B. Pileontology
C. Embryology
D. Taxonomy
$\square$
ii. Recorded observations and measurements are.....
A. Hyothesis
B. Conculsion
C. Information
D. Data
$\square$
iii. Which of the following is the basic unit of classification?
A. Family
B. Order
C. Genus
D. Species
$\square$
iv. Microscopic examination of a cell was first done by.
A. Aristotle
B. Robert Hooke
C. Robert Brown
D. Leeuwenhoek

v. Which of the following enters plant cell by active transport?
A. Water
B. Oxygen
C. Nitrate ions
D. Carbon dioxide.
vi. The Nuclei of human cell contains.... of autosomes and 1 pair of sex chromosomes.
A. 21 pairs
B. 22 pairs
C. 23 pairs
D. 46 pairs
vii. All Enzymes are ..... in nature
A. Carbohydrates
B. Starch
C. Proteins
D. Fats
$\square$
viii. Light Reaction of Photosynthesis takes place in the ...... of Chloroplasts.
A. Stroma
B. Grana
C. Lysosomes
D. Ribsomes
ix. About..... of the body's Calcium is stored in bone tissues.
A. $66 \%$
B. $77 \%$
C. $88 \%$
D. $99 \%$
$\square$
x . Poor eating habits can cause the following disease.
A. Heart attack
B. Stroke
C. Mumps
D. Diabetes
$\square$
xi. A student sucks cold drink with a drinking straw. It resembles with:

A. Diffusion
B. Root pressure
C. Flow of materials in Xylem
D. Flow of materials in Phloem
xii. Blood circulation in human beings was first described by a Muslim Anatomist....
$\square$
$\square$
A. Abudul Malik Asmai
B. Ibn al-Nafees
C. Bu Ali Sina
D. Jabir Bin Hayyan

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Note: Time allowed for Section-B and Section-C is 2 hours and 15 minutes.

## Section-B

QII. Answer any Eight parts, each part carries Four marks.

1. Define: Biotechnology, Immunology, Embryology and Microbiology.
2. What are the importance of "Binominal Nomenclature"?
3. Differentiate between Prokaryotic and Eukaryotic Cells.
4. Write down the Significance of Mitosis.
5. Write four characteristics of Enzymes.
6. Differentiate between Aerobic and Anaerobic respiration.
7. Write note on Constipation and Diarrhea.
8. Write any four functions of Blood.
9. Draw neat diagram of Human Heart and label any of its four parts.
10. Describe "Transpiration is a Necessary Evil".
11. Compare the process of Photosynthesis and Respiration.

## Section-C

Marks: 21

## Note: Attempt any three questions. All questions carry equal marks (Draw neat and labeled diagram where necessary).

Q.III. (a) Link the study of Biology with that of Biochemistry and Biogeography. 4
(b) Define Biological Method. Describe various steps of Scientific Methods. 3
Q.IV (a) Identify causes of deforestation and its effects on Biodiversity 4
(b) Define Plastids. Describe various types of plastids. 3
Q.V. (a) Describe the phenomenon of Diffusion, Facilitated diffusion,
Osmosis and Active Transport.
(b) What is Non-disjunction? Describe its consequences. 3
Q.VI. (a) Define Enzyme. Describe the Mechanism of Enzymes Action through
"Lock and Key Model". 4
(b) Specify the food sources and metabolic functions of Vitamins A, C and D. 3

