

Biological Science - Model Paper 3
General Science Paper - II

Time: 2½ Hrs.

Max. Marks: 50

PART – A

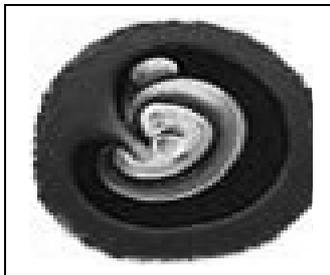
TIME: 2 hrs

Marks: 35

SECTION – 1 (4 x 1 = 4 Marks)

NOTE: Answer any four Questions from the following.

- 1) While eating you are advised not to talk. Why are you advised so?
- 2) What is the role of roughages in the alimentary track?
- 3) Why mitochondria are called “power houses of cell”.
- 4) Labelle the diagram of foetus



- 5) What is lymphatic system and mention its function
- 6) What happens to plant if the rate of respiration becomes more than the rate of Photosynthesis in plants

SECTION – II (5 x 2 = 10 Marks)

NOTE: Answer any five questions time from the following choosing at least TWO From each Group A and B.

GROUP - A

- 7) This strange kind of reproduction occur in bees, ants and wasps
- 8) Write about different type of nerves present in human body
- 9) The Urine formation involves three steps. Mention and explain the three steps
- 10) Pre - natal sex determination has been prohibited by law. State two reasons.

GROUP – B

- 11) Write about Bioaccumulation and Biomagnifications.
- 12) Darwin’s theory of evolution in a nutshell
- 13) Write effective methods of controlling pests which have far less harmful effects on Environment
- 14) Mention variations in the cow you observed

SECTION – III (4 x 4 = 16 Marks)

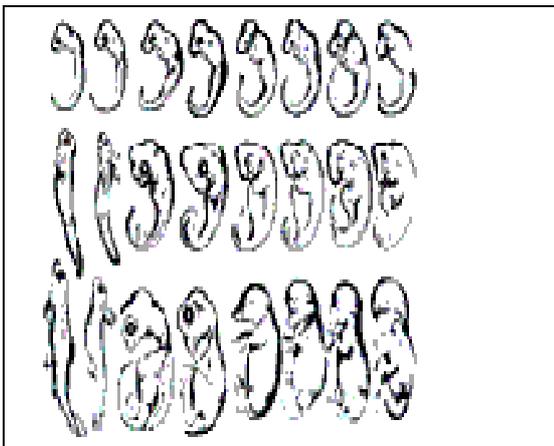
NOTE: Answer any FOUR Questions from the following choosing at last TWO from A group & B Group

GROUP-A

- 15) Write any four of endocrine glands in human beings their hormones and functions.
- 16) Explain how Root Pressure occurred
- 17) What are tropic movements in plants? Explain giving examples.
- 18) How muscles of esophagus support to execute its peristaltic movement

GROUP-B

19) observe the following diagram and explain about it



1) Fish 2) Salamander 3) Tortoise 4) Chick 5) Pig 6) Calf 7) Rabbit 8) Human

- 21) What do you understand by survival of fittest give some situations or examples that you observed in your Surroundings
- 22) Why forest are important

SECTION IV (5 x 1 = 5 Marks)

*Note: .1) Answer any ONE Question from the following
2. This Question carries five marks*

- 23) Draw a neatly labeled diagram of Brain and write few points how it is protected.
- 24) Draw labeled diagrams of the cell organelles which are responsible for photosynthesis and Respiration

Biological Science
General Science Paper - II

PART – B

30 Minutes

Marks: 15

I Write Capital letter showing the correct answer for the following questions in the brackets 10 x 1/2 = 30

- 1) The pulse rate is equal to ()
A) Brain beat b) lun beat C) A& B D) heart beat
- 2) Which vitamin deficiency leads to delayed coagulation of blood? ()
A) Vitamin A B) Vitamin K C) Vitamin C D) Vitamin A& K
- 3) Which rays of light important to plant photosynthesis ()
A) Red & blue B) red & violet C) yellow & green D) red& yellow
4. Which of the following opinion is correct? ()
a) Ravi said, xylem and phloem cells arranged one upon the other to form a tube like structure.
b) John said, xylem and phloem are not separate tube like structures.
c) Salma said, xylem and phloem cells connect together to form a tube like structure.
d) Hari said, because of its shape they said to be tube like structures
- 5) Organism that perform single circuit blood circulation ()
A) Fish B) rabbit C) cockroach D) cow
- 6) Oxygen was discovered by Priestly in 1774 the name oxygen was coined later by In the year 1775. who coined the name
A) Van Neil B) Anon C) Priestly D) Lavoisier
- 7) Seeds are to be stored for a long time _____ hormone can help.
A) AAA B) NAA C) ABA D) ETHYLINE



- 8). which one the above diagram shows ()
A) Fern sporophyll B) Mass sporophyte C) bryophillum leaf D) rhizopus
- 9) Which of the following organisms take the food by parasitic nutrition? ()
a) Yeast b) Mushrooms c) Cucuta d) ameoba
- 10) What does a food chain always start with - ()
(a) The herbivore (b) The carnivore (c) The producer (d) none of them
- 11) Mastication occurred in ()
A) Stomach B) duodenum C) pharynx D) mouth

- 12) When did anti peristalsis movement takes place ()
A) Bolus moves towards stomach B) Drinking water
C) During vomiting D) during fasting
- 13) The part of the female reproductive system that produces the eggs? ()
a) Ovary b) Vagina c) Cervix d) Fallopian tube
- 14) Which of the following is the correct sequence of steps in the human life cycle? ()
a) Babyhood, childhood, adolescence, adulthood b) Childhood, babyhood, adulthood, adolescence
c) Adolescence, babyhood, adulthood, childhood d) none of these
- 15) Olfactory receptors present in _____ trigger signals to brain ()
A) Mouth B) tongue C) nose D) both b&c
- 16) Respiration is a catabolic process because of ()
A) breakdown of complex food molecules b) conversion of light energy
c) Synthesis of chemical energy d) energy storage
- 17) Peristalsis is because of ()
a) Contraction of longitudinal muscles. b) Contraction of circular muscles
c) Under control of autonomous nervous system d) Digestive secretions.
- 18) Augustus Weismann tested this theory by an experiment on rats. ()
A) Rats B) pea C) Dog D) Giraffe
- 19) Cutting the apex or tip of plants so that there are several lateral buds _____ hormone
Can be used.
A) Auxine B) gibberillin C) ethylene D) abscisic acid
- 20) In single celled animals the food is taken ()
a) By the entire body surface b) Mouth c) Teeth d) Vacuoles

II Fill in the Blanks

- 21) Respiratory Substance _____
- 22) End products of light reaction _____
- 23) Lung of the world _____
- 24) Pericardium related _____
- 25) Biomass transferred _____ % of energy from one trophic level to another in a food chain

III) Match the following

- 26) RNA A) Anaerobic respiration
- 27) Nicotine B) Tobacco
- 28) Quinine C) cinchona
- 29) Pyrethroid D) xylem
- 30) Tracheids E) Aerobic respiration
F) Virus

KEY TO PART B

Q No	ANSWER		Q No			ANSWER	
1	D		11	D		21	CARBOHYDRATES & FATS
2	B		12	A		22	O ₂ ,ATP ,NADPH
3	A		13	A		23	FORESTS
4	A		14	A		24	HEART
5	A		15	D		25	10-20
6	D		16	A		26	D
7	C		17	C		27	E
8	A		18	A		28	F
9	C		19	A		29-	A
10	C		20	A		30	B