

**Biological Science - Model Paper 2**  
**General Science Paper - II**

*Time: 2 1/2 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) After reading this lesson Respiration what precautions you would suggest to your elders about edema
- 2) Phloem is a food source for some animals. How can you justify this statement?
- 3) Blood that flows from stomach to go heart via liver why?
- 4) Why do fish and frog produce a huge number of eggs each year?
- 5) How do scientists utilize the information about fossils?
- 6) What would be the consequences if there is no meiosis in organisms ?

**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) Write the functions of placenta and amniotic sac
- 8) Differentiate between bolus and Chime
- 9) What Questions do you ask the doctor to know the Contagious means to got HIV? write them
- 10) what are nutrition deficiency diseases ? write their symptoms

**GROUP – B**

- 11) One experimenter cut the tails of parent rats, what could be the traits in off springs? Who is? That scientist .what is your interpretation?



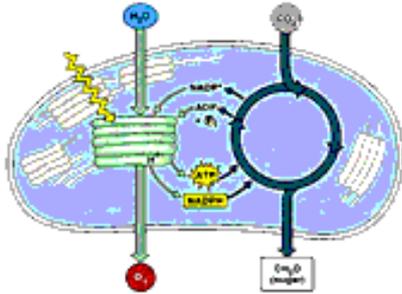
- 12) what the above logos represents
- 13) what do pyramids and food chain indicates in an ecosystem
- 14) Write different steps in '*Interphase*' and Write what happens in this phases ?

**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) What is the pathway taken by air in the respiratory system? Illustrate with a flow chart.
- 16) Observe the following diagram and write a note on light dependent, light independent reactions.



- 17) Write the evolution of transport system from unicellular to mammals.
- 18). Write the answers by observing the experiment performed at your school..
  - i) Why the potted plant was kept in dark room for week days prior to the experiment?
  - ii) Why do you keep KOH pellets in the glass jar?
  - iii) What results do you get when you perform this experiment in shade?
  - iv) What apparatus you used to perform this experiment?

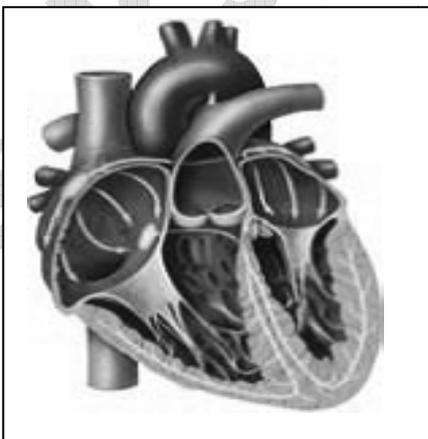
**GROUP-B**

- 19) How can you justify the enteric nervous system as the second brain of the gut?()
- 20) What are the advantages of sexual vegetative propagation ?
- 21) Natural resources are decreasing more rapidly. Guess what will the consequences?
- 22) Appreciate the role of stomach in digestive system

**SECTION IV ( 5 x 1 = 5 Marks )**

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

- 23) Identify the following diagram and label the parts given bellow in the diagram



- (1) Superior ven cova      2) inferior ven cova
- (3) Pulmonary artery      (4) pulmonary vein
- (5) Right ventricle      (6) left ventricle
- (7) Right arum      8) left atrium

- 24) Draw labeled diagram of plant fertilization. Explain about double fertilization

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PART – B

30 Minutes

Marks: 15

I Write Capital letter showing the correct answer for the following questions in the brackets  $20 \times 1/2 = 10$

- 1 Lenticels are the respiratory organs exist in \_\_\_\_\_ ( )  
A) Root B) stem C) leaf D) flower
- 2 Observe the below statement ( )  
a) Chloroplast converts simple inorganic substances into complex organic substances.  
b) Light energy is used in the above reaction  
(A) a, b correct (B) a correct, b False (C) b correct, a False (D) both a, b False.
- 3 Digestion of PROTEINS begins in which of the following human organs? ( )  
A) Small intestines B) colon C) mouth D) stomach
4. Percolation tanks helps to ( )  
(A) Supply water for agriculture (B) increase ground water level  
(C) preserve rain water (D) prevent overflow of water from tanks during rainy season
- 5) Contraception means ( )  
A) Preventing fertilization women B) preventing ovulation women  
C) Preventing maturation women D) none of the above
- 6) Plants absorb soil water through roots by the process ( )  
A) osmosis .B) diffusion C) Reverse osmosis D) transpiration
- 7) Why are egg cells larger than sperm cells? Choose the option you think is right. ( )  
A) Egg cells have more cells in them B) Have food store to help growth after fertilization  
C) Have thicker cell membranes D) Have larger nuclei
- 8). Chemical regulation of the body involves which system: ( )  
A) Lymphatic B) circulatory C) nervous D) endocrine
- 9) Which of the following is NOT part of a neuron? ( )  
A) Synapse B) axon C) Missal bodies D) dendrite
- 10) Deficiency of Niacin causes this disease ( )  
A) Transpiration B) Respiration C) photosynthesis D) pellagra
- 11) Pulmonary respiration occurs through ( )  
A) Transpiration B) Respiration C) Lungs D) reproduction
- 12) BP means ( )  
A) Aria pressure B) ventricular Pressure C) Lymph Pressure D) Blood Pressure in artery
- 13 ) This are used in tanning of leather ( )  
A) Tannins B) alkaloids C) Gums D) Blood Pressure

- 14) End products of Light reaction ( )  
A) Oxygen, NADPH, ATP B) Starch Oxygen C) Oxygen, CO<sub>2</sub> D) NADPH, ATP
- 15) **Plant Hormone which is in gaseous form** ( )  
A) Auxine B) ethylene C) ABA D) gibberellins
- 16) **As per scientist life is originated in** ( )  
A) The soil B) The hills C) The desert D) The sea
- 17) **The zygote which has inherited X chromosomes from he father will develop into** ( )  
A) Baby girl B) Baby Boy C) adult D) none
- 18) **Government of A.P declared Kolleru Lake as** ( )  
A) Animal sanctuary B) bird sanctury C) floral sanctuary D) None
- 19) **Which of he following is not fissile fuel?** ( )  
A) LPG B) Natural gas C) CNG D) Bio Mass
- 20) **Sustainable development means** ( )  
(A) Prevention of wastage (B) stable growth  
(C) development without damaging (D) High yielding in less time

**II Fill in the Blanks**

- 21) Membranes of lungs are called \_\_\_\_\_
- 22) One gram of Glucose gives \_\_\_\_\_ calories of energy
- 23) Urethra is guarded by \_\_\_\_\_
- 24) From three months on words embryo is called \_\_\_\_\_
- 25) Animals without red blood cells \_\_\_\_\_

**III. MATCHING**

- | <i>Group A.</i>            | <i>Group B</i>                  |
|----------------------------|---------------------------------|
| 26. <b>Longerhans</b>      | ( ) A) <b>origin of species</b> |
| 27. <b>Rudolf Virchow,</b> | ( ) B) <b>fossil</b>            |
| 28. <b>Charles Elton</b>   | ( ) C) <b>Auxine</b>            |
| 29. <b>F.W .Vent</b>       | ( ) D) <b>pancreas</b>          |
| 30. <b>Charles Darwin</b>  | ( ) E.) <b>Cell division</b>    |
|                            | F) <b>Ecological Pyramid</b>    |