

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or Pen ink on the answer sheet provided.

- 1.1. The amount of CO_2 in Arterial blood per 100ml is:

(A) 50ml	(B) 54ml	(C) 73ml	(D) 79ml
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2. The process of Guttation takes place through:

(A) Stomata	(B) Lenticels	(C) Bark	(D) Hydathodes
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3. Red blood cells are formed in:

(A) Heart	(B) Lungs	(C) Red bone marrow	(D) Kidney
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4. Which one is not a viral disease?

(A) Mumps	(B) Cow pox	(C) Tetanus	(D) Small pox
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5. The normal percentage of glucose in human body is:

(A) 8%	(B) 0.08%	(C) 0.8%	(D) 7.4%
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6. The lock & key model was proposed by:

(A) Koshland	(B) Emil Fischer	(C) M. Mischer	(D) P.A. Levene
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7. The chromosome number of Garden Pea is:

(A) 14	(B) 48	(C) 08	(D) 26
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8. The botanical name of brinjal is:

(A) Solanum melogena	(B) Solanum specie	(C) Solanum tubersum	(D) Lycopersicum esculentum
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9. The example of disinfectant is:

(A) Lifebuoy	(B) Dettols	(C) Antibiotics	(D) Phenols
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10. The example of actinopods is:

(A) Forams	(B) Radiolarians	(C) Vorticella	(D) Stentor
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11. The scientists who study the fungi are known as:

(A) Phycologist	(B) Bryologist	(C) Mycologist	(D) Psychologist
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12. The fruit type of family solanaceae is known as:

(A) Caryopsis	(B) Berry	(C) Pod	(D) Lomentum
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13. Which phylum includes the series Deuterostomia?

(A) Mollusca	(B) Nematoda	(C) Annelida	(D) Echinodermata
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14. Trochophore larva is found in the life history of:

(A) Leech	(B) Nereis	(C) Earthworm	(D) Loligo
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15. The first action spectrum was obtained by:

(A) Niel	(B) Bohar	(C) Engelmann	(D) Garaham
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16. What percentage of surface area is covered by stomata?

(A) 10 - 12 %	(B) 6 - 8 %	(C) 3 - 6 %	(D) 1 - 2 %
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17. Stunted growth of root is caused by the deficiency of:

(A) Phosphorus	(B) Nitrogen	(C) Magnesium	(D) Calcium
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SECTION-I

Rwp-11-2-23

2. Write short answers of any eight parts from the following:

(8x2=16)

- What are terpenoids, give example?
- In what way enzyme concentration affects the rate of enzyme action?
- What are inhibitors? Give example.
- Define co-factor, give example.
- Differentiate Ascomycetes with Basidiomycetes and give example.
- Compare spores with conidia.
- Define polymorphism, give example.
- Compare parazoa with metazoa.
- Differentiate acoelomate with coelomate.
- Justify earth worm as natural plough.
- What are accessory pigments? Give their role.
- Differentiate between chlorophyll "a" and "b".

3. Write short answers of any eight parts from the following:

(8x2=16)

- Differentiate between deductive and inductive reasoning.
- Define biome. How it is named?
- Why mitochondria are called power house of cell?
- How ribosomes of prokaryotes differ from eukaryotes?
- What are diatoms?
- Give importance of dinoflagellates.
- What are Kelps?
- Discuss role of both nuclei in ciliates.
- Write down names of living and extinct members of psilopsida.
- Define circinate vernation. in which class of pteropsida it is important character?
- What is incipient plasmolysis?
- What do you know about hypertension?

4. Write short answers of any six parts from the following:

(6x2=12)

- What are symptoms of AIDS?
- How chemosynthetic bacteria are autotrophic in nature?
- What is filter feeding nutrition? Give example.
- Which plant nutrients cause chlorosis?
- Differentiate between cutaneous respiration and pulmonary respiration.
- Give names of hormones secreted by human digestive system.
- What are Alveoli? Give their function.
- What changes occur in diving mammals during diving reflex?
- What is photorespiration? Give its consequences.

SECTION-II

Note Attempt any three questions. Each question carries equal marks:

(8x3=24)

- Relate cloning with sexual reproduction?
 - Explain circulatory system of cockroach?
- Describe at least four comparisons between DNA and RNA.
 - Write down methods of nutrition in fungi.
- Write down characteristics of cyanobacteria.
 - Describe evolution of leaves.
- Give the biological classification of corn, Zea mays.
 - Describe the Calvin cycle with reference to carbon fixation and reduction.
- Write a note on structure and function of Golgi apparatus.
 - Explain the mechanism of absorption of food in small intestine.