PM SHRI KENDRIYA VIDYALAYA SITAPUR (FIRST SHIFT)

Class – XI SUB-BIOLOGY (UT -2)

M M-40

TOTAL TIME -90 MINUTES

Section - A

MCQ Type Questions (1 mark each)

- Q1. The end product of glycolysis is:
 - a) Glucose b) Fructose c) alcohol d) Pyruvic acid
- Q2. The raw material for aerobic respiration is
 - a) Carbohydrates b) Proteins c) fats d) all of these
- Q3. The 'bakanae' (foolish seedling) disease of rice seedlings, was caused by a fungal pathogen-

a) Gibberella fujikuroi. b) penicillin c) Mucor d) None of these

- Q4. . Each haemoglobin molecule can carry a maximum of
 - a) Four oxygen molecules. b) Three oxygen molecules c) two oxygen molecules d) none of these

Q5. Value of R.Q. (Respiratory Quitrents) of which substance is one.

- a) Protein b) Fats c) Carbohydrates d) All of these
- Q6. Emphysema is related to :
 - a) Digestive system b) respiratory system c) circulatory system d) all of these
- Q7. RBCs have an average life span of
 - a) 80 Days b) 120 Days c) 07 Days d) None of these

Q 8-The alveoli present in...

a)liver b) kidney c) heart d)Lungs

Directions: In the following questions, a statement of assertion is followed by a statement of reason.

Mark the correct choice as:

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- (b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
- (c) If Assertion is true but Reason is false.
- (d) If both Assertion and Reason are false.

Q.9. Assertion: In most of the mammal RBCs are devoid of nucleus.

Reason: Red colour is filled in the entire cytoplasm of RBCs, iron containing complex protein called haemoglobin.

Q.10. Assertion : Prothrombinase enzyme act as antiheparin.

Reason : Heparin prevent coagulation of blood in blood vessels.

Section B: Short Answer Questions (2 marks each)

- 11. Define photoperiodism and give an example.
- 12. Explain the role of Auxin in plant growth and development.
- 13. Describe the process of inspiration during breathing.
- 14. Differentiate between systole and diastole.

- 15. What is double circulation? Explain
- 16. Write the different steps of glycolysis properly. What is its site?
- 17. List five main groups of natural plant growth regulators. Write any two functions of Auxins.
- 18. Diffusion of gases occurs in the alveolar region only and not in the other parts of respiratory system. Why?

Section D: Very Long Answer Questions (5 marks each)



19-Write the answer of the following

- (i) Which blood vessel transport blood from lower part of body to the heart?
- (ii) What is the name of major artery which supplies blood to all parts of the body?
- (iii) Write the name of valves present between right atrium and right ventricle.
- (iv) Which vein carries oxygenated blood and artery carry deoxygenated blood?
- (v) Write the Functions of SA-Node

OR

. Describe the cardiac cycle and the events that occur during it.

20. Discuss the mechanism of gas exchange in plants and animals.

OR

.Explain the krebs cycle with ray diagram and write its importance.