

Periodic -iii

CLASS –IX

SUB- SCIENCE

TIME -90 MINUTES

SESSION- 2018-19

MM- 40

NOTE:- NOTE: - All questions are compulsory. Draw suitable diagram where necessary. Solve each section in a separate answer sheet.

### SECTION-A (BIOLOGY)

1. Where are smooth muscle tissues located in the body ?  
1
2. Mention an organisms which exhibits characters of both plants & animals.  
1
3. Against which disease BCG vaccine is employed ? 1
4. Name the two nucleic acids present in a cell. What are their functions ?  
2
5. What is difference between aerenchyma and parenchyma ? 2
4. 2
5. (a) Draw the diagram of a plant cell and label any four parts. 3  
(b) Why is plasma membrane called a selectively permeable membrane? 2

### SECTION-B (CHEMISTRY)

- Q1. Write Latin names of sodium and iron. [1]
- Q 2. What is CGS unit of volume ? [1]
- Q3. What is solute and solvent in air ? [1]
- Q4 An atom has 4 protons and 5 neutrons. What is its valency ? [2]
- Q 4. State three drawbacks of Rutherford's model of atom [3]
- Q 5(A) What are polyatomic ions ? [1+2]
- [B] How many molecules are present in  
(i) 9 g of water? [atomic mass H= 1 u, O= 16 u ]  
(ii) 17 g of NH<sub>3</sub> ? [atomic mass of H =1 u, N=14 u]
- Q6. Give the reason- We can get the smell of perfume sitting several metres away. [2]

## SECTION-C (PHYSICS)

1 A coolie is walking on a railway platform with a load of 30 Kg on his head. How much work is done by coolie ? [1]

2 how is kilogram weight related to SI unit of force? . [1]

3 what does the speedometer of an automobile measure? [1]

4 write any two equation of motion. [1]

5 what is difference between displacement and distance. [2]

6 Draw the graph for stationary or rest object between velocity and time. [2]

7 A bus starting from the rest moves with a uniform acceleration  $0.2 \text{ m/s}^2$  for 2 min find the speed acquired and the distance travelled. [3]

8 An object starting from rest travels 20 m in first 2s and 160 m in next 4s .What will be the velocity after 7s from the start? [2]

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Chapter name	V.S.A [1]	S.A [2]	S.A [3]	L.A [5]	Total
(1) Fundamental unit of life	3x1	4x2	1x3	-----	
(2)matter in our surroundins	1x1	3x2	2x3	-	
(3) motion	4x1	3x2	1x3	-	
Matter in our surroundings	1x1				
Is matter around us pure	1x1				
Atoms and molecules	1x1	2x2			
Structure of atom			1x3		
Tissues	1x1				
Diversity in living organisms	1x1				
Why do we fall ill	1x1				
Force and law of motion					
Gravitation					
Work & Energy					
Improvement un food resource					
Total					