

# CENTRAL PUBLIC SCHOOL

Subject – Science

TAJPUR ROAD, SAMASTIPUR

Time- 3 Hrs.

Class – IX

MID TERM EXAM – 2019

F. M. – 80

## Section - A (Physics)

1. Define non-uniform motion. 1
2. Write an example of uniform acceleration. 1
3. Define inertia. 1
4. Write the S.I unit of uniform circular motion. 1
5. What do you mean by gravity? 1
6. Define relative density. 1
7. What is upinrust? 1
8. Define 1 joule (1 J) of work done. 1
9. An object of mass 100 kg is accelerated uniformly from a velocity of  $5ms^{-1}$  to  $8ms^{-1}$  in 6 second. Calculate the initial and final momentum of the object. 3
10. Calculate the volume of g by universal law of gravitation. 3
11. Write the 2<sup>nd</sup> Low of motion and establish  $F=ma$ , where F-applied force  
m=mass of the body and a= produce acceleration. 3
12. Write Archimedes Principle and prove it by an activity. 5
13. (a) Define fluids. 1
- ~~(b) Define kinetic energy and potential energy with its algebraic expression.~~ 2
- (c) <sup>Difference between distance and displacement.</sup> The volume of 50g of a substance is  $20cm^3$ . If the density of water is  $1g\ cm^{-3}$ . Will the substance float or sink? 2

## Section B (Chemistry)

14. Define sublimation. 1
15. Define inter molecular force. 1
16. Define chromatography. 1
17. What is ductility of a metal? 1
18. What do you mean by law of conservation of mass? 1
19. Define a molecule. 1
20. What is polyatomic ions? 1
21. Define atomic mass unit (unified mass). If atomic mass unit of sodium is 23 u,  
what does it mean? 3
22. What do you mean by atomicity of elements? Write the atomicity of Helium,  
Nitrogen, phosphorus and sulphur. 3

23. Write the difference between evaporation and vapourisation. At least two differences. 3
24. How can we separate a mixture of two miscible liquid? Name the process. Draw the diagram and label. 5

### Section C (Biology)

25. (a) Write the law of constant proportion and explain with example. 3  
 (b) What produces more severe burns, boiling water or steam? Why? 2
26. Write the smallest and longest cell of the human body. 1
27. Where the protein synthesised inside the cell? 1
28. Who classified the five kingdom of the world of organism? 1
29. Name the tissue that store fat in our body. 1
30. Define stimuli. 1
31. Bacteria is the soul of Monera. Explain with example. 3
32. What do you mean by symbiotic relation? Explain with example. 3
33. Write two examples of each group: 3
- a. Thallophyta
  - b. Bryophyte
  - c. Pteridophyta

Or,

- ✓ Write the three differences between manure and fertilizers. 3
34. Draw a labelled diagram of Euglena or Paramecium. 3
35. (a) Define epithelial tissue. 1  
 (b) Write its types with one character of each. 2  
 (c) Draw the diagram any one of the epithelial tissue. 2
36. (a) Write the differences between mitochondria and plastids. 2  
 (b) What is osmosis? 1  
 (c) Write two features of cardiac muscle. 2

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