

Madhav Vaid

VIII - I

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NEW ERA PUBLIC SCHOOL  
Summative Assessment - II (2016-2017)  
Class VIII  
Subject: Science

Time: 2 ½ hrs.

Max Marks: 60

**General Instructions:**

- (i) All questions are compulsory.
- (ii) Section A: Questions 1-9 carry 1 mark each.
- (iii) Section B: Questions 10-18 carry 2 marks each.
- (iv) Section C: Questions 19-24 carry 3 marks each.
- (v) Section D: Questions 25-27 carry 5 marks each.

**Section-A**

1. State one difference between compression and rarefaction. (1)
2. Name the two sex hormones in females. (1)
3. Why is it difficult to move objects on a rough surface than a smooth surface? (1)
4. If the two mirrors are placed perpendicular to each other, using the formula calculate the number of images formed. (1)
5. Name the following:  
(i) positive electrode (ii) negative electrode (1)
6. Ovulation in the body of a woman started at the age of 13 and stopped at the age of 50. At what age she had (i) menarche? (ii) menopause? (1)
7. Give a difference between static and sliding friction. (1)
8. What is the audible range of frequency for human ears? (1)
9. Write two measures to reduce friction in machines. (1)

**Section B**

10. (i) Define earthing.  
(ii) State the law of electrostatic force of attraction and repulsion. (2)
11. Give reasons:  
(i) Nose bleed is common at higher altitudes.  
(ii) Deep sea divers wear special swim suits. (1+1)
12. Explain the working of an electroscope. (2)
13. (i) How can you prove that water always comes to rest at the same level?  
(ii) Why is it better to have a sharp needle than a blunt one while getting an injection? (1+1)
14. Enlist any two disadvantages of friction. (2)
15. Suggest four changes that occur in boys and girls during puberty? (2)
16. What is fluid friction? Name the factors which affect it. (2)
17. Give two differences between contact and non contact forces. (2)
18. Define : (i) frequency (ii) time period (1+1)



### Section C

19. A pencil appears bent in water.  
i) What is this phenomenon called? (1+2)  
ii) Explain the above phenomenon
20. (i) How are charging by induction and charging by conduction different? (two points)  
ii) How does attraction between the charges change when the distance between them is doubled? (1+2)
21. Draw the structure of ear and label the following parts: (3)  
(i) ear drum (ii) pinna (iii) cochlea (iv) Eustachian tube
22. (i) Give an example each for balanced and unbalanced forces.  
ii) When is an object said to be in a state of rest? (2+1)
23. (i) Name the gases formed on decomposition when the following solutions undergo electrolysis:  
a) Tap water. b) hydrochloric acid  
ii) Name the electrode at which zinc gets deposited, when electric current is passed through zinc sulphate solution. (2+1)
24. Sakshi believed that it was her mother who was responsible for her being a girl. However, her friend Shobha, corrected her and explained her the mechanism of sex determination.  
i) Draw a flow diagram to show how sex is determined in humans.  
ii) What values were depicted by Shobha? (2+1)

### Section D

25. (i) State Pascal's law.  
ii) How does a hydraulic press work?  
iii) A farmer weighs 800 N. If his feet occupy an area of 0.025 square metres each, how much pressure does he exert on the ground? (1+2+2)
26. (i) Give reasons: (3+2)  
(a) Tap water conducts electricity while distilled water does not.  
(b) We cannot use electrolytes in the solid form for electrolysis.  
(c) Parallel circuit is more advantageous to connect electrical appliances.  
ii) Describe how a steel spoon can be electroplated with silver.
27. (i) State the laws of reflection.  
ii) Explain the structure of human eye.  
iii) What do you mean by the dispersion of light? (2+2+1)

*Shobha*