

**PHYSICAL SCIENCE (EM)**  
**EVALIATION KEY INDICATOR**

**VIII – Class**

**PART -A**

- |    |   |   |
|----|---|---|
| 1. | Gravitational force                                       | 1 Mark  |
| 2. | i. They are less reactive metals                          | any one point                                   |
|    | ii. They do not corrode                                   | 1 Mark  |
|    | iii. They do not react with oxygen                        |   |
| 3. | i. Papers vibrate   |   |
|    | ii. I observe the to and fro motion of papers             | any one point                                   |
|    | iii. Sound produced due to movement of papers             | 1 Mark  |
| 4. | i. Used in the manufacture of detergents                  |   |
|    | ii. synthetic fibers                                      | any two related points                          |
|    | iii. Used as fuels  | 2 x ½ = 1mark                                   |
|    | iv. Used in paints  |   |
|    | v. Used in face creams                                    |   |
|    | vi. Used manufacture of matches.                          |   |
| 5. | i. Static friction:                                       |   |
|    | Ex : The friction between (rest) stool and floor.         |   |
|    | The friction between computes and table.                  |   |
|    | ii. Sliding friction:                                     |   |
|    | Ex: If we drag a cot, the friction between cot and floor. | Any two concepts                                |
|    | If we slip down, the friction between foot and floor      | with one example                                |
|    | iii. Rolling friction:                                    | 4 x ½ = 2Marks                                  |
|    | Ex: The friction between moving ball and floor.           |   |
|    | The friction between moving marbles and floor.            |   |
| 6. | Contact Forces  | Field Forces                                    |
|    | i. Applied force by touching<br>the object                | i. Applied force without touching<br>the object |
|    | ii. ex: Hoisting flag                                     | Ex: Magnet attract nails                        |
|    |   | any related<br>two points<br>2x1=2Marks         |

7. i. How does it produce sound?  
 ii. Is sound produced without vibration? Any two related points  
 iii. Which part is vibrating?  $2 \times 1 = 2M$   
 iv. What is the mechanism in this instrument?

8.  $4 \times \frac{1}{2} = 2M$

Rapid Combustible substances	Spontaneous Combustible substances
1. Petrol	1. Sodium metal
2. Spirit	2. White phosphorous

9. i. It is very useful to discover alternative energy sources.  
 ii. It is a great effort to produce pollution free energy sources. Any two points  
 iii. Discovery of alternative fuels leads to clean environment.  $2 \times 1 = 2M$   
 iv. I appreciate them discovery as they reduced pollution.

10A.

Related any four points

$4 \times 1 = 4M$

Musical instruments	Production of Sound
Veena	Produced sound by vibrating the strings
Flute	Produced sound by vibrating air column
Drum	Produced sound by vibrating the membrane
Violin	Produced sound by vibrating the strings

10B. Sounds responsible for sound pollution:

- i. Loud horns  
 ii. Sounds from industries any four points  
 iii. Sounds from explosions  $4 \times \frac{1}{2} = 2M$   
 iv. Sounds at foundries

Controlling measures:

- i. Attach silencers to bikes  
 ii. Machines that produce less sound should be manufactured  
 iii. Tone down the volume while using TV any four points  
 iv. Planting trees  $4 \times \frac{1}{2} = 2M$

- 11A. i. PET bottle - 1M
- ii. Electric switch, Computer keyboard -  $2 \times \frac{1}{2} = 1M$
- iii. Polythene bag - 1M
- iv. Pet bottle - 1M
- 11B. i. Hydrogen - 1M
- ii. 45000 KJ -  $2 \times \frac{1}{2} = 1M$
- iii. LPG, Hydrogen -  $2 \times \frac{1}{2} = 1M$
- iv. Biogas, wind energy - 1 M
- (any one point related )
- 12A. i. Friction doesn't depends upon area of contact – 1M
- ii. Experiment: 3M
- i. Tie a thread along length and breadth of a brick.
- ii. Keep the brick horizontally, and drag it with spring balance until get movement. The ready in spring balance is equal to the friction.
- iii. Keep the brick vertically ,and drag it with spring balance until gets movement. The ready in spring balance is to the (area of contact is less) static friction.
- iv. In both cases the static friction doesn't depends upon surface area.
- v. Then we circled static friction doesn't depends upon surface area.
- 12B. i. Take a plastic glass.
- ii. Play songs on mobile phone with high volume
- iii. Keep the phone in the glass.
- iv. Close the glass with stretched rubber strip and tie with rubber band.
- v. Place some sugar crystals at the diaphragm.
- vi. This proved that the sound has energy. 4M
- 13A. i. Material: boiling tubes-2, Stands-2, Delivery tube, Jet tube, Water, Rubber corks-2, Spirit lamp, Coal - 1M
- ii. Diagram - 3marks

13B. i. Diagram – 2marks

Page no : 104

ii. Parts – 1 M

iii. Black zone (or) Dark zone (or) inner zone - 1M

PART – B

14.	19.	24.	29.
15.	20.	25.	30.
16.	21.	26.	31.
17.	22.	27.	32.
18.	23.	28.	33.