

**Govt PU College, High School Section, Megaravalli**  
Tirthahalli Tq, Shivamogga Dist.

**Date :**

**Class: 10B**

**Formative assessment 4**

**Total Marks : 20**

**[chapters 5,11, 14, 16 ]**

**I. Choose the correct answer .**

**1x3=3**

1. An important limitation of Mendeleev's periodic classification is that he,
  - a) left some empty spaces for undiscovered elements
  - b) arranged elements in the increasing order of their atomic mass
  - c) has not explained the position of isotopes
  - d) has not predicted the discovery of inert gases.
2. By constructing Khadin check-dams in level terrains,
  - a) underground water level decreases
  - b) underground water level increases
  - c) vegetation in the nearby areas are destroyed due to excess moisture
  - d) underground water gets polluted
3. Element used in the manufacture of solar cells is,
  - a)Carbon      b) Iron      c)Sodium      d)Silicon

**II. Answer the following questions in a word or sentence each.**

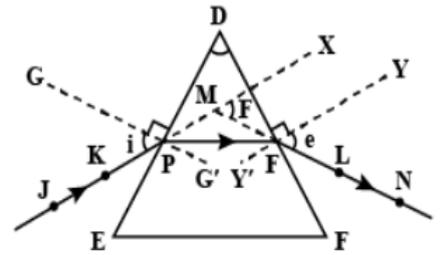
**1x3=3**

4. Forests are 'biodiversity hotspots'. Justify.
5. Draw the diagram to show the recombination of the spectrum of white light.
6. Write any two hazards of nuclear power generation.

**III. Answer the following questions in two or three sentences each.**

**2x4=8**

7. A student sold her old note books to scrap collector while another student has prepared bags, craft materials from used papers. Which act is better from the point of view of conservation of environmental resources? Why?
8. a) State modern periodic law.  
b) Write any two limitations of Newlands classification.
9. Diagram of Refraction of light through a triangular glass prism is given identify and name the
  - a)Incident ray                      b)Emergent ray
  - c) Angle of deviation      d) refracted ray,
10. Draw the diagram of biogas plant and label the following parts
  - a) gas tank      b) slurry



**IV. Answer the following questions.**

**3x2=6**

11. Atomic radius of elements of third group are given in the table. Answer the questions that follows by studying this information.

Elements	P	Na	Ar	Cl	Mg	Si	S	Al
Atomic radius (pm)	98	190	71	79	145	111	88	118

Name the element with -a)Least metallic nature, and b)Highest atomic size and give reason for your answer.

12. a) What is myopia ? How can it be corrected ?  
b) Why does the Sun appear reddish early in the morning? Explain.

**Raghavendra Bhat- 9483810224**



10. eÉÉ«PÀ C⊗ , ÁÜªÁgÀzÀ , ÁAPÉwPÀ avÀæ SgÉzÀÀ C) ¥ÁZÀPÀ, D) C⊗ , ÀAUÁæªPÀ UÀÁgÀw¹.

**F PÉ¼ÀVÉÀ ¥Àæ±ÉBUÀ½UÉ GvÀÛj¹**

3x2=6

11. ªÀÁÆgÀÉÉÁ DªÀvÀðzÀ zsÁvÀÁUÀ¼ÁÁ ªÀÁvÀÁÛ CªÀÁUÀ¼Á ¥ÁgÀªÁiÁtÁ wædªªÀÉÁÁB PÉÆÁµÀªPÀzªªè

ªÁqÀ-ÁVzÉ.

zsÁvÀÁUÀ¼ÁÁ	P	Na	Ar	Cl	Mg	Si	S	Al
¥ÁgÀªÁiÁtÁ wædª (pm)	98	190	71	79	145	111	88	118

a) Cw PÀrªÉÁ -ÉÆÁ»ÁiÁÁ UÀÁt, b) Cw ªÉZÁÁÑ ¥ÁgÀªÁiÁtÁ UÁvÀæ, - ªÉÆAçgÀªªª zsÁvÀÁUÀ¼ÁÁÉÁÁB ªÉ, Áj¹ ªÀÁvÀÁÛ ªªÁÁ GvÀÛgÀPÉi , ÀÆPÀÛ PÁgÀt ªÁr.

12. a) , À«ÁÁ¥ÁzÀÈ¶Ö (ªÀÁiÉÆÁiÁÁ) JAzÀgÉÉÉÁÁ? EzÀÉÁÁB ªÉÁUÉ , Àj¥Ár , À§ªÁzÁÁ.

b) , ÀÆAiÁÁðÉÁÁ ªÀÁÁeÁÉÉ PÉA¥ÁVgÀª PÁgÀªªÉÉÉÁÁ ? «ªj¹

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