### **GN-84**

# DISTRICT COMMON EXAMINATION BOARD, WARANGAL SUMMATIVE ASSESSMENT - I, October-2016

## PHYSICAL SCIENCE (Paper-I)

(English Version)

(Max Marks: 40)

Time: 2.45 Hrs.

#### Instructions:

Class : X

- i) This questions paper contain three sections (A, B and C) with questions from 1 to 29.
- ii) 15 minutes time is allotted exclusively for reading the question paper and 2 hours 30 min. for answering the questions.
- iii) All the answers are to be written on the seperate answer booklet.
- iv) Make use of the last page of the answer booklet fro rough works if necessary, while answering the questions under section 'C'.

#### **SECTION - A**

Note: i) Answer all the questions.

 $7 \times 1 = 7$ 

- ii) Each question carries one mark.
- 1. State the cases where a real image is formed?
- 2. Mention the types of lenses based on the nature of their curved surfaces?
- 3. Where an object is to be placed to get a real and diminished image with a concave mirror?
- 4. Identify the "Dobereiner triad" in the elemetrs Li, Sr, K, Ca, Na and I.
- 5. Write the list of materials required to get a rainbow in the class room.
- 6. Acid + Basc Salt + Water

What do you conclude from those two reactions?

7. Identify the Acidic and Basic materials from the follwoing table.

Lime Juice	Distilled Water	Washing Soda	Blood
2.2	7	12.8	7.4

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#### SECTION - II

Note: i) Answer all the questions

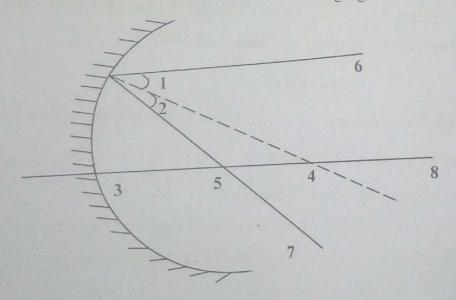
 $6 \times 2 = 12$ 

- ii) Each question carries 2 marks.
- iii) Answer each question in 4 to 5 sentences.
- 8. Ravi Watched certain images in the steel Vessels in his house. He asked to his brother Kiran a few questions about the images. Do you imagine What are those questions? Write that questions
- 9. What precautions we have to take on using the following formulae

i) 
$$\frac{1}{f} = (n-1) \left[ \frac{1}{R_1} - \frac{1}{R_2} \right]$$
 and ii)  $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$ 

State the conditions to use the above formulae.

10. Identify the numbered parts in the following figure



- 11. Why pure acitic acid is not an electric conductor explain.
- 12. Write the electronic configuration of following elements.

Element	C	N	Ne	Na
Atomic number	6	7	10	11

from which, identify the element whose outer shell is completely filled with electrons.

13. Draw the shape of Methane molecule using dot structure.

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#### SECTION - III

Note: i) Answer all the questions

 $4 \times 4 = 16$ 

- ii) There is an internal choice for each question. only on option for each question is to be attempted.
- iii) Each question carries four marks.
- iv) Answer each question in 8 to 10 sentences.
- 14. A) Write the properties of the images formed by
  - a) convex mirror
- b) conceave mirror

Write the cases where of convex and concave mirrors are used with two examples.

(OR)

- B) Explain "hypermetropia" with a neat diagram. How it will be adjusted?
- 15. A) Two lenses of different focal lengths are in the same system. Find the resultant focal length when
  - i) Two lenses are in contact and
  - ii) At a distance of d from each other

(OR)

- B) Explain the procedure to determine the focal lenght of a convex lens.
- 16. A) Balance the following chemical reactions

i) 
$$Al + Fe_2O_3 \longrightarrow Al_2O_3 + Fe$$

i) Nacl + 
$$H_2O \longrightarrow NaoH + Cl_2 + H_2$$

What information do you get from a balanced equation?

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ignitephysics.weebly.com **GN-84** 4 (OR) B) Explain the formation of a triple bond with an example A) Write the uses of Banking Soda and Washing soda in your daily life situa-17. tions. (OR) B) State the importance of pH scale in our daily life.

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	PART-B				
Class: X (PAPE	R-I) Subject: PHYS	Subject: PHYSICAL SCIENCE			
		10 x 1	1/2=5		
Note: Choose the c	orrect answer. Each question carries 1	/2 Marks.			
1. Always distanc	es are measured from, When using	spherical mirr	ors.		
		(	)		
A) object	B) pole				
C) Image	D) focus				
. If focal length is	If focal length is positive, the lens is		)		
A) concave	B) convex				
C) plain	D) convexo concav	re			
. In VIBGYOR II	In VIBGYOR light has the least wave length		)		
A) Green	B) Red				
C) Blue	D) Indigo				
The angle of sigh	at of a healthy man is		)		
A) 40°	B) 42 <sup>0</sup>				
C) 60°	D) 90°				

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