

E - 9

DISTRICT COMMON EXAMINATION BOARD - E.G.D. KAKINADA REVISION TEST - I - 2018 - 2019

GENERAL SCIENCE - Paper - I

(PHYSICAL SCIENCE)

(English Medium)

Class : X]

(Max. Marks : 20)

[Time : 1 Hr.

PART - A

SECTION - I

Note : 1) Answer in the following questions one or two sentences.

2) Each question carries 1 mark.

2 x 1 = 2

1. 'Acid should be added to water and not water to the acid'. Justify your answer.
2. How do you appreciate the role of spherical mirrors in daily life.

SECTION - II

Note : 1) Answer the following questions in four or five sentences.

2) Each question carries 2 marks.

3 x 2 = 6

3. Your friend says that both 'Boiling' and 'Evaporation' are phase change from liquid to gas, and hence they are same. What questions could you ask to make him to know the difference between them.
4. What do you mean by corrosion ? How can you prevent it ?
5. P^H values of four solutions A,B,C and D are given in the table. Based on P^H values of solutions answer the following questions.

Solution	P ^H
A	8
B	7
C	3
D	12

[Turn Over

- i) Which is neutral solution ?
- ii) Which is strong base ?
- iii) Which colour gives by methyl orange indicator to solution C ?
- iv) Which gives pink colour by phenolphthalein indicator ?

SECTION - III

Note : 1) Answer all the questions in eight to ten sentences.

2) Each question has internal choice.

3) Each question carries 4 Marks.

2 x 4 = 8

6. a) What is the difference between displacement and double displacement reactions ? Give one example to each reaction and write their balanced chemical equation.

(Or)

b) Observe the table in which temperatures of substances given in various situations and answer the following questions.

Situation	1	2	3	4
Substance A	100°C	0°C	10°C	27°C
Substance B	273K	373K	10K	300K

- i) Identify the situations in which heat transfer occur from A to B when they are in thermal contact ?
 - ii) In which situation heat transfers from B to A when they are in thermal contact.
 - iii) Identify the situations in which heat does not transfer between A and B why ?
 - iv) If the temperature of substance A is 57°C and A, B are in thermal equilibrium then what would be the temperature of substance B ? In kelvin measure.
7. a) What are the apparatus required to prove experimentally that compounds such as alcohols and glucose contain Hydrogen but are not categorised as acids. Describe the activity.

(Or)

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- b) Where do you keep the object before a concave mirror to get a virtual image. Draw the ray diagram for this situation and write the nature of image.

PART - B

SECTION - IV

Note : 1) Answer all the questions

2) Each question carries $\frac{1}{2}$ mark.

8 x $\frac{1}{2}$ = 4

1. Condensation is ()

A) Cooling process	B) Warming process
C) Surface phenomenon	D) Phase change from liquid to gas

2. Match the following ()

(i) heat	P) Cal / g
(ii) Specific heat	Q) Cal
(iii) Latent heat	R) Cal / g - °C
A) i - Q, ii- P, iii - R	B) i - R, ii- P, iii - Q
C) i - Q, ii- R, iii - P	D) i - R, ii- Q, iii - P

3. $2 \text{PbO} + \text{C} \longrightarrow 2\text{pb} + \text{CO}_2$ which of the following is correc. ()

A) Lead is reduced and carbon is oxidized
B) Lead oxide is reduced and carbon is oxidized
C) Lead oxide is reduced and carbon dioxide is oxidized
D) Lead is reduced and carbon dioxide is oxidized

4. The chemical equation $\text{BaCl}_2 + \text{Na}_2\text{SO}_4 \longrightarrow \text{BaSO}_4 + 2\text{NaCl}$ represents the following type of chemical reaction ()

A) Combination	B) Decomposition
C) Displacement	D) Double displacement

5. Mirror formula is ()

A) $\frac{1}{f} = \frac{1}{u} - \frac{1}{v}$	B) $f = u + v$
C) $\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$	D) $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$

[Turn Over

6. Assertion (A) : When we move object towards the eye, the size of image increases.
Reason (R) : Angle made by object at eye will increase. Which is correct among the following. ()
- A) Both A and R are true and R is correct explanation to A
B) Both A and R are true and R is not correct explanation to A
C) A is true and R is false
D) Both A and R are false
7. Which of the following is the test for hydrogen gas evolved in a reaction ()
- A) Burning match stick put off
B) Burning match stick gives pop sound
C) Turns lime water into milky white
D) Burning match stick burns with more flame
8. The final temperature of a mixture of 50 gram of water at 20°C temperature and 50 grams of water at 40°C temperature is ()
- A) 20°C B) 30°C C) 25°C D) 35°C

