TELANGANA – WARANGAL

DISTRICT COMMON EXAMINATION BOARD

SUMMATIVE ASSESSMENT-I - OCTOBER-2016

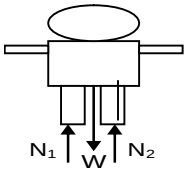
GENERAL SCIENCE , Paper – I

(Physical Sciences)

(Telugu Version)

Class-08 - Principles of Evaluation - PART-A &B

<table>
<tr><th>Q.No</th><th>Points for Evaluation</th><th>Marks allotted</th><th>Total Marks</th></tr>
<tr><td>1.</td><td>(i) Never use a sodium piece larger than a horse gram or pea.
(ii) Wear a safety mask and goggles.
(iii) We should made the activity from distance.
(any related point also suitable. Only one point is needed)</td><td>1</td><td>1</td></tr>
<tr><td>2.</td><td>(i) We have to use less carry bags.
(ii) Government should ban LDPE plastics.
(iii) The organizations also create awareness among people towards the problems of using polythene bags.
(iv) We have to create awareness about implementation of 4R’s.
(v) We take oath to use less number of plastic carry bags.
(any related point also suitable. Only two points are needed)</td><td>2x½</td><td>1</td></tr>
<tr><td>3.</td><td>Light selects the path which takes the least time to travel.
(any related point also suitable.)</td><td>1</td><td>1</td></tr>
<tr><td>4.</td><td>When we listen musical sounds we feel happy. Because
They delivered in an order.
The intensity of such sound are audible.
(OR)
We do not feel pleasant when listen to music all time.
If we listen classical music, we may feel happy.
If we listen sad songs , we may not feel happy.
But Music and its intensity effects the feelings.
(any related point also suitable. Only two points are needed.)</td><td>2x½</td><td>1</td></tr>
<tr><td>5.</td><td><table><tr><th>Real image</th><th>Virtual image</th></tr><tr><td>Real image is formed always in front of the mirror.</td><td>Virtual image is formed always behind the mirror.</td></tr><tr><td>Image can be obtained on the screen.</td><td>Image can not be obtained on the screen.</td></tr><tr><td>It is formed when light converges to a point after reflection or refraction.</td><td>It is formed when light appears to be diverges from a point after reflection or refraction.</td></tr><tr><td>It is always inverted.</td><td>It is always erect.</td></tr></table>(any related point also suitable. Only two points are needed.)</td><td>2x½</td><td>1</td></tr>
<tr><td>6.</td><td>The physical properties of aluminium made it a very important
(i) As aluminium is a cheap, utensils are made with aluminium.
(ii) As it a good malleable metal, used to make thin foils to pack chocolates, food items.
(iii) As it is a good conductor of heat and electricity, used in electrical wires, cables.
(iv) As it has luster, used in silvery white paints.
(v) As it is light weight and strong, used in manufacturing of spare parts of aeroplane, space crafts
So I appreciate the role of aluminium for its wide range of utility.
(any related point also suitable. Only 2 points/conclusion is needed)</td><td>2x½</td><td>1</td></tr>
</table>

<table>
<tr><td>7.</td><td>(i) It creates a lot of trash on the earth.
(ii) They take several years to decompose, causes earth pollution.
(iii) The plastics waste does not dissolve in water and led to the deaths of aquatic life.
(iv) The plastics which were eaten by animals were not digested and a cause to the death of animals
(v) The garbage of plastic bags led to drainage problems in cities.
(vi) If we burn the plastic, they produce poisonous fumes and causes to air pollution.
(any related point also suitable. Only two points are needed)</td><td>2x½</td><td>1</td></tr>
<tr><td>8.</td><td>A man is standing still on a level floor.
Two forces act on the man.
 

(i) Gravitational force
(ii) Normal force
Note : Friction can also be shown.
(any related points also suitable.)</td><td>Diagram 1

2x½</td><td>2</td></tr>
<tr><td>9.</td><td><table><tr><th>Synthetic fibre</th><th>House hold Articles</th></tr><tr><td>Nylon</td><td>Ropes, Bristles, Sarees</td></tr><tr><td>Rayon</td><td>Clothes, Bed sheets, Carpets</td></tr><tr><td>Acrylic</td><td>Sweaters,Carpets, Sportswear</td></tr><tr><td>Polyester</td><td>Clothes, Wires, Film tapes</td></tr></table>(any related points also suitable . Only about two fibres and two examples for each are needed.)</td><td>2x½
2x½</td><td>2</td></tr>
<tr><td>10.</td><td>(i) We can not use utensils to cook food.
(ii) We can not use agricultural instruments to cultivation.
(iii) We can not manufacture cars, trains and other vehicles.
(iv) We can not have electricity as the wires made up of metals
(v) No almirahs, No sewing machines, No scissors, No blades, No knifes, No other materials which we are using in our daily life.
(vi) Simply if there is no metals , the stone age repeats.
(any related points also suitable. Only four points are needed)</td><td>4x½</td><td>2</td></tr>
<tr><td>11.</td><td>(i) What forces acting on the roller when it is in rest?
(ii) What forces acting on the roller when it moves?
(iii) What is the net force acting on the roller?
(iv) Does the motion of the roller depends upon the roughness of the surface?
(v) Are same forces act on the roller whether it is pushed or pulled?
(any related diagram also suitable. Only two points are needed)</td><td>2x1</td><td>2</td></tr>
<tr><td>12.</td><td>(i) Angle of incidence = 45^o
(ii) Angle of reflection = 45^o
(any related graph also suitable. Only two points are needed)</td><td>2x1</td><td>2</td></tr>
</table>

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13.	(i) 4R's are useful to reduce plastic usage. (ii) Useful to reduce earth pollution (iii) Useful to utilize waste plastic material in other way (iv) Useful to convert plastic garbage in to energy resources (v) Useful to Save environment **(any related points also suitable. Only four points are needed)**	4x½	2
14A.	(i) **Ductility**: Metals can be drawn into fine wires. **Ex:** Copper wires used in electric wires. Iron mesh have iron strings. (ii) **Malleability** :Metals can be beaten and made into thin sheets. **Ex:** Silver foils used in sweets. Gold foils used in jewellary (iii) **Electrical conductivity**: Metals are good conductors of electricity. **Ex:** Copper is used in electric wires. Aluminium is used in current supply lines (iv) **Heat conductivity**: Metals are good conductors of heat. **Ex:** Aluminium is used in utensils. Copper is coated at the bottom of utensils **(any related points also suitable. Only one example for each is needed)**	Details ½ One ex: ½ For each 4x1	4
14B.	(**a**) Blending : The process of combining any synthetic fibre with two or more other fibres is called blending. (**b**) Bio degradable : The materials (Fruits) which can be easily decomposed by natural processes are called bio-degradable. (**c**) Recycling : The broken plastic materials are not comfortable for usage. So they were given a proper treatment to make to reuse. This process is called recycling. (**d**) Decomposition : The materials break down into smaller pieces in the presence of water, sunlight and oxygen. They further broken down by bacteria. This is called decomposition. **(any related points also suitable. Only four points are needed)**	4x1	4
15A.	Friction reduces the speed of a body in motion. If there is rough surface the friction is more. To move a vehicle on rough surface we have to use more energy. It means more fuel is utilized. So friction causes energy wastage. To reduce energy wastage by friction and to save fuel we adopt various methods like using lubricants, grease, oils and ball bearings. Also making surfaces smooth is useful to reduce energy wastages. **(any related points also suitable. Only 4 points are needed)**	2 2	4
15B.	(i) Attach silencers to bike and other vehicles. (ii) Machines with less noise to be manufactured. (iii) While listening tape recorder, keep down the volume. (iv) Save plants as they reduce sound pollution. **(any related point also suitable. Only 4 points are needed.)**	4x1	4

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16A.

Natural fibres	Artificial fibres
Hair	Piece of plastic
Wool	Thread of sweater
Silk	Piece of nylon
Paper	
Cotton	

8x½ | 4

(any related points also suitable. Classification is must.)

16B.

Musical instruments	Vibrating parts while producing sound
Veena	Strings
Guitar	Strings
Tabala	Membrane, Air
Flute	Air column
Drums	Membrane, Air
Violin	Strings
Piano	Strings
Harmonium	Air column

8x½ | 4

(any related points also suitable. Only one part in each is needed)

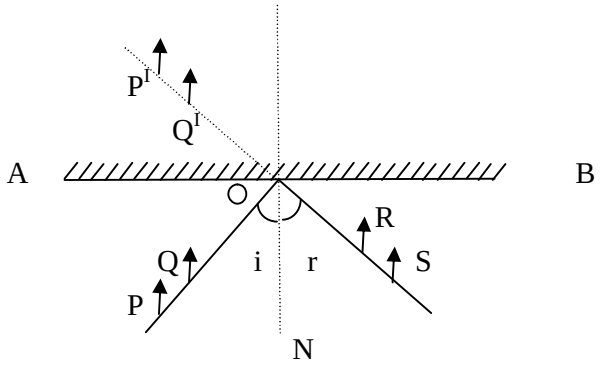
17A.

Verification of laws of reflection:

Fix a white paper on a drawing board with the help of clamps. Draw a straight line AB at the centre of the paper and a normal (ON) to AB at 'O'. Draw a straight line PQ making certain angle ($\hat{i}$) with ON. Fix two pins at P and Q on the paper vertically. Observe the images P^I and Q^I of the pins P and Q, in the mirror kept along the line AB. Fix two more pins R and S such that they are in the same line as that of P^I and Q^I. Join R, S and O Measure the angle between RS and ON (angle of reflection).

We find that angle of incidence = angle of reflection. (1st law) — ½

Incident ray, Reflected ray, normal lie on same plane. (2nd law) — ½



1

2 | 4

(any related points also suitable. No need of number of points)

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17B.	Take a plastic glass. Close the mouth of bottle with a balloon using rubber band. Stretch it tightly so as to behave like a diaphragm. Place some sugar crystals or small size of sand particles on the balloon diaphragm. When there is no cell phone inside the bottle, sand particles on the diaphragm remain stationary. While the cell phone plays songs inside the bottle, the diaphragm vibrates which can be seen through dancing of sand particles. The sound produced by cell phone inside the bottle is responsible for these vibrations. Thus, sound has energy to make sand particles vibrate on the diaphragm. Ex: (i) The glass on stereo shakes (ii) The vessels can shake while using grinder **(any related points also suitable. Only four points are needed.)**	3 2x½	 4

PART - B

S. No	Ans.	S. No	Ans.
1	D	6	B
2	D	7	C
3	B	8	B
4	D	9	*
5	B	10	A

Note : * means allot full marks. Each question carries ½ mark.

Bit:9: What is meant by f_s, f_k and f_r. No information given in text book.

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