

SCIENCE

1. a) ~~A convex lens~~

2. b) ~~20 Hz to 20000 Hz~~

3. c) ~~Bromine~~

4. d) ~~Industrial waste~~

5. ~~Neptune is the planet that has been named after a Roman sea god.~~

6. ~~Astronauts are not able to talk directly to one another on the moon as we do on earth because there is no atmosphere i.e. no material medium for propagation of sound vibration. Sound can't travel in vacuum.~~

7. ~~Cassiopeia is a prominent constellation looking like distorted form of the letter 'W' or 'M'.~~

8. 1) We should use mugs and buckets for bathing rather than shower.

2) We should ^{not leave} ~~live~~ the tap open while brushing.

3) We should not throw away the ^{used} water if it can be used again for ^{watering} ~~planting~~ plants etc.

10. ~~Sodium and potassium are more reactive than Aluminium.~~

- 11. i) Ceres is the largest asteroid.
- ii) Halley's Comet is a periodic comet.
- iii) Photosphere is a visible layer of the sun.
- iv) Mercury is a planet which can be seen with naked eyes.

12. Power of accommodation is the property of the eye that enable us to see nearby as well as far off objects.
The ciliary muscles attached to eye lens contract or relax to change the curvature and focal length of the lens depending upon the position of object, whether it is near or far off.

13. The phenomenon involved in it is dispersion of light.
Definition → It is the phenomenon in which a ray of white light gets ~~do~~ ~~so~~ splitted into seven colours as it passes through a transparent refracting medium like prism.

14. a) Caesium is a metal having very low melting point.
b) Silicon, Germanium are metalloids.

15. a) 18 carat gold ^{Pure} means 18 parts of gold are there in 24 parts mixture of gold and other metals.
b) ^{we use} 18 carat gold rather than 24 carat gold because 24 carat

② gold is pure gold which is very soft and hence can't be used to make jewellery. But 18 carat gold is a homogenous mixture of gold and other metal which strengthens it and makes it hard ^{enough} to ~~be used~~ make jewellery.

16. a) 1) Nylon is long lasting, elastic and hence used for making socks.

2) It is also used for making ropes, parachutes.

3) It is also used to make combs, toothbrushes, hooks.

b) 1) Acrylon is used to make sweater and shawls.

2) It is also used to make blankets which gives the same warmth as that of wool blanket.

3) It is also used to make cheap ^{clothes} and clothes dyed in beautiful colours.

17. When a ray of light comes from the tip of the pencil and passes ~~the~~ water to ~~enter~~ the air medium, it gets refracted away from the normal as ~~water~~ ^{air} is optically rarer ~~than~~ ~~than~~ water. This refracted ray of light appear to come from a point exactly above the tip of the pencil. This same thing happens with all ~~parts~~ remaining part of the pencil under the water. Hence it

