## ANNUAL EXAMINATION: 2024 VIII:PHYSICS

Max. Score:20

## Time: 40 minutes

- 1. coulomb
- 2. A: North, B: North
- 3. dB

7.

- 4. Hacksaw blade [Question is not correct.]
- 5. f = R/2 = 20/2 = 10 cm
- 6. i. Magnetic field lines never intersect each other.ii. Magnetic field lines direct from the north pole to the south pole outside of the magnet.



- 8. Sound requires a medium for transmission. Since there is no atmosphere in space, direct communication becomes difficult. That's why astronauts use radio devices.
- 9. Fundamental Quantities: length, mass Derived quantities: density, area
- 10.

Features: small, inverted and real

- 11. Yes. Bats can navigate in darkness using ultrasonic waves that they produce. These waves are reflected from obstacles in their path, helping them detect the presence of obstacles.
- 12. i.Do not operate electrical devices. ii. Stay away from metal objects like poles, grills, etc.. iii. Avoid seeking shelter under trees. iv.Avoid activities that involve water.

13.

Concave mirror	Convex mirror
Used as make up mirror.	Used as rear view mirror in vehicle
Used as shaving mirror	Used as reflectors in street lights
Used in solar concentrator	Placed on the side of curved roads