

Question 8

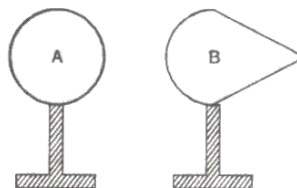
- (a) Explain the effect of ozone depletion. [3]
- (b) [4]
- What is the use of thermos flask?
 - Draw a labeled diagram of thermos flask.
 - What contribution does the vacuum between the two walls give to the functioning of a thermos flask?
 - What is the function of the two shining walls of the glass vessel in the thermos flask?
- (c) A test tube made of ordinary glass cracks on plunging into boiling water whereas a red hot test tube made of fused silica can be safely plunged into normal water, why? [3]

Question 9

- (a) [4]
- Select the luminous objects from the following:
Candle flame, stars, moon, red hot wire of heater, polished surface, and firefly.
 - In a room, the light is not reaching directly, even then it is illuminated. Why?
 - What will be the colour of the sky for space travellers?
- (b) In what way, a point source should be placed in front of a concave mirror to get the parallel beam and the divergent beam. [3]
- (c) Compare the frequencies of two waves X and Y while velocity and wavelength of X are 5×10^3 m/s and 25 m respectively and for Y, 4×10^3 m/s and 20 m respectively. [3]

Question 10

- (a) A and B are two negatively charged and insulated conductors as shown in the figure. State, with reason, which conductor will tend to lose charge. [3]



- (b) Draw a labelled diagram of Leclanche cell. Why is it not suitable for continuous use? [3]
- (c) [4]
- What is the general law of attraction and repulsion between magnetic poles?
 - What defines the direction of the magnetic field?
 - The middle region of a bar magnet is:
 - A north pole
 - A north seeking pole
 - Unmagnetized
 - Magnetized
 - Name two magnetic substances. 5