

Exercise 15.2

Q.1 In fig 15.17, line n is a transversal to lines m and l . Identify the following

- (i) Alternate angles and corresponding angles in fig 15.17
- (ii) Angles alternate to $\angle d$ and $\angle g$ and angles corresponding to angles $\angle f$ and $\angle h$ in fig 15.17 (ii)
- (iii) Angle alternate to $\angle PQR$, angle corresponding to $\angle RQF$ and angle alternate to $\angle PSE$ in fig 15.17 (iii)
- (iv) Pairs of interior and exterior angles on the same side of the transversal in fig 15.17 (ii)

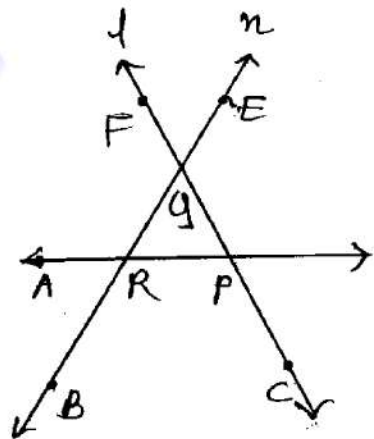
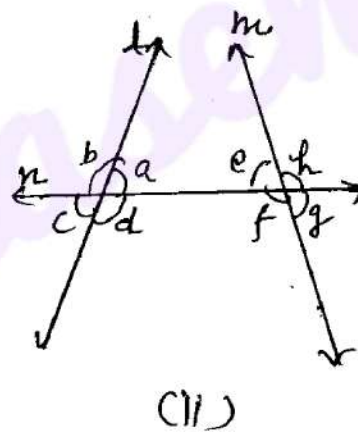
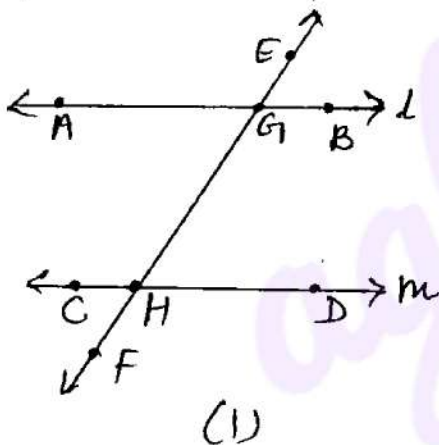


Fig 15.17

Solution: (i)

Alternate angles: $\angle BGH$ and $\angle CHG$; $\angle AGH$ and $\angle DHG$

Corresponding angles: $\angle EGB$ and $\angle QHD$; $\angle EGA$ and $\angle GHC$
 $\angle BGH$ and $\angle DHF$; $\angle AGH$ and $\angle CHF$

(ii) Alternate angles to $\angle d$ are $\angle e$,

Alternate angles to $\angle g$ is $\angle b$

Corresponding angle to $\angle f$ and $\angle h$ are $\angle c$ and $\angle a$ respectively

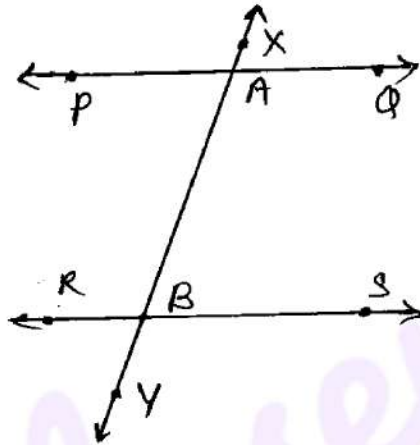
Q.2 Match column A and column B with the help of the fig 15.18

Column A

- (i) Vertically opposite angles
- (ii) Alternate angles
- (iii) Corresponding angles

Column B

- (a) $\angle PAB$ and $\angle ABS$
- (b) $\angle PAB$ and $\angle RBY$
- (c) $\angle PAB$ and $\angle XAQ$



Solution: (i) $\rightarrow$ c (ii) $\rightarrow$ a (iii) $\rightarrow$ b.