

Ex 5.1

- 10) fares are Rs 15, Rs 23, Rs 31, Rs 39, ...
which forms an A.P. [increases by 8 each time]
- (i) volumes of air in cylinder taking volume of filled cylinder as x are
 $x, \frac{3}{4}x, \frac{3}{4} \times \frac{3}{4}x, \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}x, \dots$
 $= x, \frac{3}{4}x, \frac{9}{16}x, \frac{27}{64}x, \dots$
which does not form an A.P.
- (ii) Cost for dig. are Rs 150, Rs 150+50, Rs 150+50+50, ...
 $= Rs 150, Rs 200, Rs 250, \dots$
which forms an A.P. [increases by 50 each time]
- (iii) $P = Rs 10000$, rate = 8% p.a.
The amounts are
 $10000 \left(1 + \frac{8}{100}\right), 10000 \left(1 + \frac{8}{100}\right)^2, 10000 \left(1 + \frac{8}{100}\right)^3, \dots$
which does not form an A.P.
- 20) a = 10, d = 10
First 4 terms are 10, 10+10, 10+10+10, 10+10+10+10
 $= 10, 20, 30, 40$
- (i) a = -2, d = 0
First 4 terms are -2, -2+0, -2+2x0, -2+3x0
 $= -2, -2, -2, -2$
- (ii) a = 4, d = -3
First 4 terms are 4, 4-3, 4+2(-3), 4+3(-3)
 $= 4, 1, -2, -5$