

**Ex 5.1** NCERT Solutions by Dev Anoop (Bathinda)

- 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  $-2, -2+0, -2+2 \times 0, -2+3 \times 0$   
 $= -2, -2, -2, -2$
- (ii)  $a = 4, d = -3$   
First 4 terms are  $4, 4-3, 4+2(-3), 4+3(-3)$   
 $= 4, 1, -2, -5$