Exercise 21(D)

1. Use tables to find sine of:
(i) 21°
(ii) 34° 42'
(iii) 47° 32'
(iv) 62° 57'
(v) 10° 20' + 20° 45'
Solution:

(i) sin 21° = 0.3584
(ii) sin 34° 42'= 0.5693
(iii) sin 47° 32'= sin (47° 30' + 2') =0.7373 + 0.0004 = 0.7377
(iv) sin 62° 57' = sin (62° 54' + 3') = 0.8902 + 0.0004 = 0.8906
(v) sin (10° 20' + 20° 45') = sin 30°65' = sin 31°5' = 0.5150 + 0.0012 = 0.5162

2. Use tables to find cosine of:
(i) 2° 4'
(ii) 8° 12'
(iii) 26° 32'
(iv) 65° 41'
(v) 9° 23' + 15° 54'
Solution:

(i) cos 2° 4' = 0.9994 - 0.0001 = 0.9993
(ii) cos 8° 12' = cos 0.9898
(iii) cos 26° 32' = cos (26° 30' + 2') = 0.8949 - 0.0003 = 0.8946
(iv) cos 65° 41' = cos (65° 36' + 5') = 0.4131 -0.0013 = 0.4118
(v) cos (9° 23' + 15° 54') = cos 24° 77' = cos 25° 17' = cos (25° 12' + 5') = 0.9048 - 0.0006 = 0.9042

3. Use trigonometrical tables to find tangent of:
(i) 37°
(ii) 42° 18'
(iii) 17° 27'
Solution:

(i) tan 37° = 0.7536
(ii) tan 42° 18' = 0.9099
(iii) tan 17° 27' = tan (17° 24' + 3') = 0.3134 + 0.0010 = 0.3144