

[10-11-10-5021]

260. The English alphabet has 26 letters of which 5 are vowels.

- (i) How many 5 letter words containing 3 different consonants and 2 different vowels can be formed?
- (ii) How many of them contain the letter  $b$ ?
- (iii) How many of them contain the letters  $b$  and  $c$ ?
- (iv) How many of them begin with  $b$  and contain the letter  $c$ ?
- (v) How many of them begin with  $b$  and end with  $c$ ?
- (vi) How many of them contain the letters  $a$  and  $b$ ?
- (vii) How many of them begin with  $a$  and contain  $b$ ?
- (viii) How many of them begin with  $b$  and contain  $a$ ?
- (ix) How many of them begin with  $a$  and end with  $b$ ?
- (x) How many of them contain the letters  $a$ ,  $b$  and  $c$ ?

ORDERED AND UNORDERED PARTITIONS