Qns 1 A word contains 5 vowels and 5 consonants (all different)

How many words can be formed so that

(1) all vowels are together   Ans 86400

(2) No two vowels are together   Ans 86400

(3) all vowels never together   Ans 3542400

(4) all the vowels together and all the consonants together   Ans 28800

(5) vowels occupy even places   Ans 14400

(6) vowels and consonants are alternating   Ans 28800

(7) start and end with a vowel   Ans 806400

(8) Start with vowel and end with a consonant   Ans 1008000

(9) Two particular vowels are never together   2903040

(10) there are always three letters b/w two particular vowels   Ans 483840

(11) 5 letter words containing 3 vowels and 2 consonants

(12) 5 letter words starting and end with a consonant

Qns 2 →
word   **INDEPENDENCE**

(1) total No of words using all letters   ANS 1663200

(2) all the vowels occur together   Ans 16800

(3) all the vowels never occur together   Ans 1646400

(4) Start with I and end with P   Ans 12600

Q.3 word   ALLAHABAD

(1)   vowels occupy the even positions   Ans 60

(2)   both L do not occur together   Ans 5880

Qn.4 → Find the rank of the word   ZENITH

and   SURITI   Ans (1) 616 (2) 236

Qn.5 → How many four letter words can be formed from the word MATHEMATICS   Ans 2454

Qn.6 → How many four letter words can be formed from the word INEFFECTIVE   Ans 1422

Qn.7 → word PERMUTATIONS. Find no of words so that there are always 4 letters b/w P and S

Ans 2540l600

Qn.8 → Word ~~AGAIN~~ AGAIN

what will be the 5th word   Ans NAAIG

Qn.9 → Find Rank of word RANDOM   Ans 614

Qn.10 → word HARYANA

(1) Start with H and end with N   Ans 20

(2) H is always next to N   Ans 120

(3) H & N never together   Ans 600

— x —