

Ans. 256

(iii) Find the difference in number of pots placed in 7th row and 5th row

- (a) 98 (b) 97 (c) 82 (d) 96

Ans. 96

(iv) If Rahul wants to place 510 pots in total, then find the total number of rows formed in this arrangement.

- (a) 8 (b) 9 (c) 10 (d) 99

Ans. 8

ASSERTION AND REASONING QUESTIONS-

3. **Assertion (A):** The binomial theorem provides an expansion for the expression $(a + b)^n$ where $a, b, n \in \mathbf{R}$.

Reason (R): All coefficients in a binomial expansion may be obtained by Pascal's triangle.

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
(e) Both A and R are false.

Ans. Both A and R are true and R is the correct explanation of A.

4. **Assertion (A):** If the letters W, I, F, E are arranged in a row in all possible ways and the words (with or without meaning) so formed are written as in a dictionary, then the word WIFE occurs in the 24th position

Reason (R): The number of ways of arranging four distinct objects taken all at a time is $C(4,4)$.

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
(e) Both A and R are false.

Ans. A is true but R is false