

SERIES BASED QUESTIONS

- a. $3^3+4^4+5^5 \dots\dots\dots N^N$
- b. $1/3+2/5+3/9 + 4/15\dots\dots\dots(10 \text{ TERMS})$
- c. $1+X^2/2!+X^3/3!+ X^4/4!\dots\dots\dots X^N/N!$
- d. $1, 11,111,1111,11111\dots\dots\dots N \text{ TERMS.}$
- e. $1, 12, 123, 1234, 12345\dots\dots\dots N \text{ TERMS.}$
- f. $1, 4, 9, 16, 25\dots\dots\dots N \text{ TERMS.}$
- g. $0,7, 26, 63\dots\dots\dots N \text{ TERMS.}$
- h. $1!, 2!, 3!\dots\dots\dots N \text{ TERMS.}$
- i. $S= 1-2+3-4 \dots\dots\dots N \text{ TERMS.}$
- j. $S = 1/1! + 2/2! + 3/3! + \dots\dots\dots + N/N!$
- k. $S = 1 + X + X^2 + X^3 + \dots\dots\dots + X^N$
- l. $S = X/1! + X/2! + X/3! + X/4! + \dots\dots\dots + X/N!$
- m. $S = 1- X^2/2! + X^3/3! -X^4/4! \dots\dots\dots + X^N/N!$
- n. $S = 1 + 2+ 3 + 4+ \dots\dots\dots +N \text{ TERMS.}$
- o. $S = 1 + X + X^2 + X^3+ \dots\dots\dots + X^N$
- p. $S = X/1! + X/2! + X/3! + \dots\dots\dots +X/N!$
- q. $1,8,27,64,125\dots\dots\dots N \text{ TERMS}$
- r. $1,2,4,8,16\dots\dots\dots 10 \text{ TERMS}$
- s. $1,2,6,24,120\dots\dots\dots(10 \text{ TERM})$
- t. $1,3,9,27,81\dots\dots\dots(10 \text{ TERM})$
- u. $0,1,1,2,3,5,8,13\dots\dots\dots N \text{ TERMS}$
- v. $1/2+2/4+3/8+4/16\dots\dots\dots(10 \text{ TERMS})$
- w. $1+X+X^1/1!+X^2/2!+X^3/3!+X^4/4!\dots\dots\dots X^N/N!$
- x. $X-X^2/2!+X^3/3!-X^4/4!\dots\dots\dots X^N/N!$
- y. $X^2/2!-X^4/4!+X^6/6!-X^8/8!\dots\dots\dots X^N/N!$
- z. $(1)+(1+2)+(1+2+3)\dots\dots\dots(1\dots\dots N).$
- aa. $1/1! - 1/2! + 1/3! - 1/4! + 1/5! \dots\dots\dots N.$
- bb. $1,(1+2),(1+2+3),(1+2+3+4),\dots\dots\dots N$
- cc. $1+2/1*2,1+2+3/1*2*3,1+2+3+4/1*2*3*4,1+2+3+4+\dots\dots\dots N/1*2*3*4* \dots\dots N$
- dd. $S = 1 \times 2 + 2 \times 3 + 3 \times 4 + \dots\dots + 19 \times 20$