I. JEE Advanced/IIT-JEE

A. *Fill in the Blanks*

Mathematical Induction and Binomial Theorem

ai24btech11020 K.Rishika

1.The larger of $99^{50} + 100^{50}$ and 101^{50} is.....

1982- 2 Marks

2.The sum of the coefficients of the polynomial $(1 + x - 3x^2)^2163$ is .....1982- 2 Marks

3.If $(1 + ax)^n = 1 + 8x + 24x^2 + ...$ then a=.... and n=.....

1983- 2 Marks

4.Let n be positive integer. If the coefficients of 2nd, 3rd, and 4th terms in the expansion of $(1 + x)^n$) are in A.P, then the value of n is.....1994- 2 Marks

5.The sum of the rational terms in the expansion of $(\sqrt{2} + 3^{\frac{1}{5}})^{10}$ is.....

1997- 2 Marks