University of North Bengal
Centre for Distance and Online Education
Assignment questions.
Subject : Commerce
UG B.Com
Paper type: Minor
Paper Code: UACFMIN1101
Paper Title: Business Mathematics- 1

Group A   **12 Marks**

1. i. Find how many words can be formed of the word "FAILURE", so that four vowels always come together?

ii. If ^nP_r = 720 and ^nC_r = 120, then find the value of r.

iii. If a^2+b^2 = 7ab, prove that 2 log (a+b) = log a+ log b+ 2log 3

iv. Find the term independent of the variable **x** in the expansion of $\left(x + \frac{1}{x}\right)^{10}$.

2 + 3 + 4 + 3 = 12

Group B   **8 Marks**

2. i. Which is better option: an annuity of Rs. 150 of last for 10 years or A perpetuity of Rs. 79.2 per annum to commence 7 years hence, the rate of interest being compounded 5% annually.

ii. Find the equation of the line passing through the point (1,2) and perpendicular to x+y+7= 0.   **5+3 = 8**