GOLDEN SAMPLE QUESTIONS

MATHEMATICS For CBSE 2019 (Set 1)

(Q.1 Six Marks)

1. Evaluate $\int_{0}^{\pi} \log (1 + \cos x) dx$

(Q.2 to Q.3 Four Marks)

- 2. The point on the curve $x^2 = 2y$ which is nearest to the point (0, 5) is-
- 3. There are 3 coins, one is a two headed coin, another is a biased coin that comes up heads 75% of the times & third is an unbiased coin. One of the three coins is chosen at random & tossed, it shows head, what is the probability that it was the two headed coin.

(Q.4 Two Mark)

4. Find the direction cosines of a line which makes equal angles with the coordinate axes.

(Q.5 One Mark)

5. Consider the binary operation \land on set {1, 2, 3, 4, 5} defined by $a \land b = \min\{a, b\}$. Write the operation table for \land . Also, write the identity element w.r.t. \land .

