Roll Number	





## INDIAN SCHOOL MUSCAT SECOND PERIODIC TEST

## **MATHEMATICS**

CLASS: XII Sub. Code: 041 Time Allotted: 50min

19.09.2018 Max. Marks: 20

## **GENERAL INSTRUCTIONS:**

- All questions are compulsory.
- Questions 1 to 4 carry TWO marks each.
- Questions 5 to 7 carry FOUR marks each.

1. Evaluate: 
$$\int \frac{1-\cos x}{1+\cos x} dx$$
 (2)

2. Evaluate: 
$$\int \frac{1}{x^2 - 6x + 13} dx$$
 (2)

3. Evaluate: 
$$\int e^x \frac{(1-\sin x)}{(1-\cos x)} dx$$
 (2)

4. Evaluate the definite integral 
$$\int_{0}^{\frac{\pi}{2}} \frac{1}{1 + \sqrt{\tan x}} dx$$
 (2)

5. Evaluate: 
$$\int \frac{3x-1}{(x-1)(x-2)(x-3)} dx$$
 (4)

6. Evaluate: 
$$\int (x \log x) dx$$
 (4)

7. Evaluate the following definite integral as limit of sum:-

$$\int_{1}^{3} (3x^2 - 5x) dx$$

**End of the Question Paper**