

**FIFTH SEMESTER B.Sc. DEGREE (U.G.—CCSS) EXAMINATION  
NOVEMBER 2014**

(SDE)

Core Course—Mathematics

MM 5D 03—MATHEMATICS FOR SOCIAL SCIENCES

**Part A**

	DD	MM	YEAR	
<b>Date of Examination :</b>	<input style="width: 30px; height: 30px;" type="text"/> <input style="width: 30px; height: 30px;" type="text"/>	<input style="width: 30px; height: 30px;" type="text"/> <input style="width: 30px; height: 30px;" type="text"/>	<input style="width: 30px; height: 30px;" type="text"/>	FN/AN
<b>Time : 15 Minutes</b>	<b>Total No. of Questions : 20</b>			

## INSTRUCTIONS TO THE CANDIDATE

1. This Question Paper carries Multiple Choice Questions from 1 to 20.
2. Immediately after the commencement of the examination, the candidate should check that the question paper supplied to him/her contains all the 20 questions in serial order.
3. Write the Name, Register Number and the Date of Examination in the space provided.
4. Each question is provided with choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and enter it in the main answer-book.
5. **Candidate should handover this Question paper to the invigilator after 15 minutes and before receiving the Question paper for Part B Examination.**

## Part A

## Multiple Choice Questions

1. The equation of x-axis is \_\_\_\_\_  
 (A)  $x = 0$ . (B)  $y = 0$ .
2. The x intercept of the line  $y - 8x + 4 = 0$  is \_\_\_\_\_  
 (C)  $\left(-\frac{1}{2}, 0\right)$ . (D)  $(4, 0)$ .
3. The equation of the line passing through  $(0, 0)$  with slope  $-3$  is :  
 (A)  $y - 3x = 0$ . (B)  $y - 3x$ .  
 (C)  $y + 3x = 0$ . (D)  $y + 3 = x$ .
4. The domain of  $f(x) = (x-1)(x+3)$  is \_\_\_\_\_  
 (C)  $-1, 3$ . (D)  $\mathbb{R} \setminus \{1, -3\}$ .
5. If  $f(x) = x^4$  and  $g(x) = \sqrt{x}$  then  $g \circ f$  is \_\_\_\_\_  
 (A)  $x^2$ . (B)  $x$ .  
 (C)  $2x$ . (D)  $\sqrt{2x}$ .
6.  $\ln \sqrt[5]{x}$  is equivalent to \_\_\_\_\_  
 (A)  $\frac{1}{x^5}$ . (B)  $\frac{1}{5} \ln x$ .  
 (C)  $\ln x$ . (D)  $(\ln x)^{1/5}$ .
7. Derivative of  $0 = \ln^2$  is \_\_\_\_\_  
 (A) 2. (B) \_\_\_\_\_  
 (C) 2 (D)  $2 \ln 2$ .