

**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				
Date of Examination :	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>	<input style="width: 40px; height: 30px;" type="text"/>
									FN/AN
Time : 15 Minutes					Total No. of Questions : 20				

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 _____

1

1

(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 $\ln^2 x$ is _____

(A) 2.

(B)

(C) $\frac{2}{x}$.

(D) $2 \ln 2$.