**SAINTGITS COLLEGE OF APPLIED SCIENCES**

**First Internal Assessment Examination, FEB 2019**

**Department of BA Corporate Economics, Semester II**

**Mathematics for Economics II**

Time : **2 hours** Total: **50 Marks**

**Section A**

1.4(2x-1)

2.y=x+2+$x^{-2}$, $\frac{dy}{dx}=1-2x^{-3}$

3.$\frac{3x+1}{\sqrt{3x^{2}+2x+5}}$

4.1+logx

5. 2x+5x4

6.$\frac{dy}{dx}$=-1

 **Section B**

7.$\frac{dy}{dx}$=$\frac{ay-x^{2}}{y^{2}-ax}$

8. $\frac{dy}{dx}$=$x^{logx(}\frac{2logx}{x})$

9.3x2+4x+1

 10.$ \frac{4x}{(x^{2}+1)^{2}}$

11.y1=x+2xlogx, y2=2(1+logx)

 12.20$(x+2)^{3}$

**Section C**

13.(i) prove the result

 (ii)y1=9$x^{2}-4x+6$, y4=0

14.$\frac{12x^{2}+8}{(x-1)^{2}(3x+2)^{2}}$

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