Q. 5 Find - $A^{-1}$ if $\mathrm{A}=\left(\begin{array}{lll}1 & 2 & 3 \\ 1 & 3 & 4 \\ 1 & 4 & 3\end{array}\right)$
Q. 6 Discuss the maximum and minimum function.
Q. 7 Find the equation of the tangent LI NE to a curve at a point.
Q. 8 Calculate the gradient of a curve at any point.
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## BAG-5107

## B.Sc. Agriculture (Math's) -I sem. (Reg./Ex)

Examination, March-2021
Ehementary Mathematics
Time: Three Hours

Note: Attempt any five questions. (Each question carries equal marks)
Q. 5 Define square matrix and upper triangular matrix.
Q. 2 Evaluate lim

$$
x \rightarrow \mathrm{a}\left(\frac{x^{3}-a^{3}}{\mathrm{x}-\mathrm{a}}\right)
$$

Q. 3 Find -
$\frac{d y}{d x}$ if $y=x^{5} \cos x$
Q. 4 (a) Solve - $\int\left(5 e^{x}-\frac{1}{3 x}+2 a^{x}+10\right) \mathrm{d} x$
(b) Solve - $\int \operatorname{Tan}^{-1} x \mathrm{~d} x$

