Name: _____ Roll No: | | | | | | | | | |

Quiz II

Sikkim Manipal Institute of Technology
Department of Mathematics
BBA (II Sem)
Subject: Business Mathematics (MA 1205)
Quiz II

Dur: 15 mins | 22.04.2019 | Max: 5 marks

Instructions

(i) Answer all the questions.

(ii) Each questions carry **ONE** mark (No partial marking)

(iii) Use only the back side of this question paper for rough work.

1. What is the 3rd term in the expansion of $\left(\frac{x^2}{2}-1\right)^5$?

   (a) $\frac{5}{8}x^2$ (b) $\frac{8}{5}x$ (c) $\frac{5}{4}x^6$ (d) None of these

2. What is the Middle term(s) of the expansion of $\left(\frac{p}{x}+\frac{x}{q}\right)^2$?

   (a) $\frac{p}{q}$ (b) $\frac{q}{p}$ (c) $\frac{p^2}{x^2q}$ (d) None of these

3. Let $A=\begin{bmatrix}5 & 8\\ 1 & 0\end{bmatrix}$ and $B=\begin{bmatrix}0 & -1\\ -1 & -1\end{bmatrix}$. What is BA^T?

   (a) $\begin{bmatrix}0 & 0\\ 0 & -1\end{bmatrix}$ (b) $\begin{bmatrix}-8 & -13\\ 0 & -1\end{bmatrix}$

   (c) $\begin{bmatrix}-1 & 0\\ 6 & -8\end{bmatrix}$ (d) Cannot be multiplied

4. Let $A_{25\times100}$, $B_{10\times100}$ and $C_{10\times100}$ be matrices. Which of the following is possible?

   (a) AB^TC (b) BA (c) ABC (d) BC

5. Which of the following is true about $A=\begin{bmatrix}-2 & 1\\ 1 & 0\end{bmatrix}$?

   (a) Inverse of A exists (b) $|A|=-2$

   (c) Inverse of A^2 does not exists (d) None of these

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1. (c) $\frac{5}{4}x^6$

2. (a) $\frac{p}{q}$

3. (b) $\begin{bmatrix} -8 & -13 \\ 0 & -1 \end{bmatrix}$

4. (a) AB^TC

5. (a) Inverse of A exists

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