GURUDAS COLLEGE

(GOVT.SPONSORED)

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Date: 11.12.2020

B.COM SEM V (HONS.)
INTERNAL EXAMINATION – 2020
SUBJECT – ECONOMICS II AND ADVANCED BUSINESS MATHS
PAPER – DSE 5.1 A

Full Marks: 20   **Time : 1hr**

Group A

ECONOMICS II

Answer any **two** questions   2×5

1. Distinguish between the concepts of 'stock' and 'flow' in macroeconomic theory.

2. What are the problems for calculating National Income?

3. Show that $MPC + MPS = 1$.

4. Distinguish between Demand-pull and Cost-pull inflation?

Group B

ADVANCED BUSINESS MATHS

1. Answer the following questions (**any four**) $2\frac{1}{2}$ x 4= 10

(i) If $y = log(sinx)$ then find $\frac{dy}{dx}$ at $x = \frac{\pi}{4}$.

(ii) If A= $\begin{bmatrix} 2 & -3 \\ 0 & 1 \end{bmatrix}$ and B= $\begin{bmatrix} -4 & -3 \\ 5 & 1 \end{bmatrix}$ then find 2A+B.

(iii) Find $\lim\limits_{x \to 0} \frac{\sqrt{3+x}-\sqrt{3}}{x}$

(iv) Find $\int tanx\, sec^2x\, dx$

(v) Find $\begin{vmatrix} 1 & 1+x \\ 1 & 2 \end{vmatrix} = 0$ then find the value of x.

(vi) If v = $3e^{-x}+4e^{x}$ then find the second derivative with respect to x.