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ONLINE INTERMEDIATE EXAMINATION/ASSESSMENT, 2020.
Department of Commerce
B.COM 5th SEMESTER
ADVANCED BUSINESS MATHAMETICS – HONOURS

Group - A

Marks: 50

1. Answer any two questions:

2 x 20 = 40

a) (i) $g(x) = \begin{cases} x^2 & , 0 \leq x < 2 \\ 3x & , 2 \leq x \leq 10 \end{cases}$ find $g(9)$

(ii) $f(x) = [x]$, $x \in R$. Find $f(2.7)$

$[x]$ = the greatest integer less than or equal to x

b) Find the value of $\begin{vmatrix} 1 & w^3 & w^2 \\ w^2 & 1 & w \\ w^2 & w & 1 \end{vmatrix}$ where w is a complex cubic root of unity

c) If $f(x) = \frac{x^2 + 2x + 1}{x^2 - 8x + 12}$ Find domain of the function.

Group-B

1. Answer any one question:

1 x 10 = 10

a) Find the value of $\lim_{x \rightarrow 1} \frac{x^3 - 1}{x^2 - 1}$

b) $A = \begin{pmatrix} 0 & 2 & 3 \\ 2 & 1 & 4 \end{pmatrix}$ and $B = \begin{pmatrix} 7 & 6 & 3 \\ 1 & 4 & 5 \end{pmatrix}$ then $A+3B=?$

Submit your answer at this email id - vm.bcomhonours@gmail.com