## B.Com $4^{\text {th }}$ semester INTRNAL QUESTION (Hons/Pass) <br> BCH/BCP: 4.2: Business Mathematics

Answer any one questions from the followings:

1. Solve by the matrix method:
$3 \mathrm{x}+2 \mathrm{y}+4 \mathrm{z}=19,2 \mathrm{x}-\mathrm{y}+\mathrm{z}=3 \& 6 \mathrm{x}+7 \mathrm{y}-\mathrm{z}=17$
2. Define limit .Discuss the characteristics and Algebra of limit.
3. Find the $2^{\text {nd }}$ and $3^{\text {rd }}$ order differential coefficient with respect to ' $x$ ' when $y=x^{3} \cdot \log x$
4. Define Annuity. Briefly explain the characteristics and various types of annuities with suitable example.
5. Evaluate: $\int x^{4} \cdot\left(\log _{e} x\right)^{2} d x$
6. Write short notes on:-
a) Linear Programming Problem (LPP)
b) Steps in testing continuity of a function.
