



## **[Summary]**

### **[Elementary Difference Equations & Their Applications to Economics ]**

<b>Subject:</b>	Business Economics
<b>Course:</b>	B.A., 6 <sup>th</sup> Semester, Undergraduate
<b>Paper No. &amp; Title:</b>	Paper – 631 Advanced Mathematical Techniques
<b>Unit No. &amp; Title:</b>	Unit - 4 Difference Equations
<b>Lecture No. &amp; Title:</b>	1:  Elementary Difference Equations & Their Applications to Economics

### **Summary:**

- A *difference equation* is an equation that contains a dependent variable, independent variable and its finite difference.
- The maximum difference of the difference intervals of the equation is the *order* of a difference equation.
- A function  $y$  of  $x$  is called a *solution* of a difference equation if every value of  $y$  satisfies the difference equation for all values of the independent variable  $x$ .