

# ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)

## DEPARTMENT OF COMPUTER APPLICATIONS TEACHING LESSON PLAN FOR DIGITAL ELECTRONICS BCA 1<sup>st</sup> Semester (June, 2018 to September, 2018)

**Objective of the subject:** To help students understand applications of electronics in the field of computer hardware.

**Name of the Faculty:** Mr. Amalraj X

**Time/Hours required – 60 hrs**

Sl. No.	Module and Topics	No. of Hours.	Teaching methods	Evaluation of Learning process
Unit I	Hardware units of computer	2	Lecture	Exercise problems and Assignment problems
	Operating Systems	2		
	Types of operating system	1		
Unit II	Number Systems <ul style="list-style-type: none"><li>• Decimal</li><li>• Binary</li><li>• Octal</li><li>• Hexa decimal</li><li>• Gray</li><li>• Gray code</li><li>• 2421 code</li><li>• 8421 code</li><li>• Error detection &amp; correction code</li></ul>	15	Lecture	Exercise problems and Assignment problems
Unit III	Hardware <ul style="list-style-type: none"><li>• Flip flop</li><li>• Counter</li><li>• Register</li><li>• Half adder &amp; Full adder</li><li>• BCD adder</li></ul>	15	Lecture	Exercise problems and Assignment problems

Unit IV	Circuits <ul style="list-style-type: none"> <li>• K Map</li> <li>• 2,3,4 variable</li> <li>• Truth table</li> <li>• Designing logical circuits using expressions</li> </ul>	10	Lecture	Exercise problems and Assignment problems
Unit V	Transistors Diodes Rectifiers Triac Diac V I characteristics BJT, FET	15	Lecture	Exercise problems and Assignment problems