



**Department of Electronics and Communication Engineering**  
**Innovative Teaching Methods**

Activity Title	Role Play
Faculty Name/Department	Dr.Sivakumar
Mapped Course Name & Code	EC8751 Optical Communication
Date	4.7.2022
Benefitted Students (Year / Sem / Dept)	IV/VII/ECE
Topic	Soliton Pulse shaping
Description	Role play is a form of experiential learning. Students takes on assigned roles and the role play can be carried out in groups. In the above activity the students assumed the role of solitons and various scenarios were enacted to understand the features of solitons and the transmission characteristics of solitons were explain ned in a simple way.
Course Outcomes (CO)	CO5: Design optical communication system and its network.
Performance Indicator (PI)	1.4.1
Mail ID ( for review)	ece.sivakumar@msajce-edu.in

**Topics/ Questions:**

1. What are Solitons used for?
2. What is a soliton pulse?
3. What are the applications of Solitons
4. What is Soliton Propagation?
5. What are the advantages of soliton based communication

**Marks:**

Group Name	Reg No.	Topic	Marks		Total
			(10)	(10)	
A	311820106001	Soliton Types	10	10	20
	311820106002		10	10	20
	311820106007		10	10	20
	311820106009		10	10	20
	311820106305		10	10	20
B	311820106003	Soliton Parameters	10	10	20
	311820106004		10	10	20
	311820106005		10	10	20
	311820106005		10	10	20
	311820106006		10	10	20
C	311820106010	Features of Solitons	10	10	20
	311820106011		10	10	20
	311820106013		10	10	20
	311820106014		10	10	20
	311820106016		10	10	20
D	311820106017	Soliton methods of propagation	10	10	20
	311820106020		10	10	20
	311820106021		10	10	20
	311820106022		10	10	20
	311820106025		10	10	20
E	311820106017	Soliton Pulses	10	10	20
	311820106301		10	10	20
	311820106302		10	10	20
	311820106303		10	10	20
	311820106306		10	10	20

**Outcome:**

1. Better understanding of the soliton transmission and propagation system
2. Better understanding of the features of solitons.