Department of Electronics and Communication
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Subject .....SIGNAL.AND.SYSTEM.....
Subject Code .....ECE.....
Experiment No.

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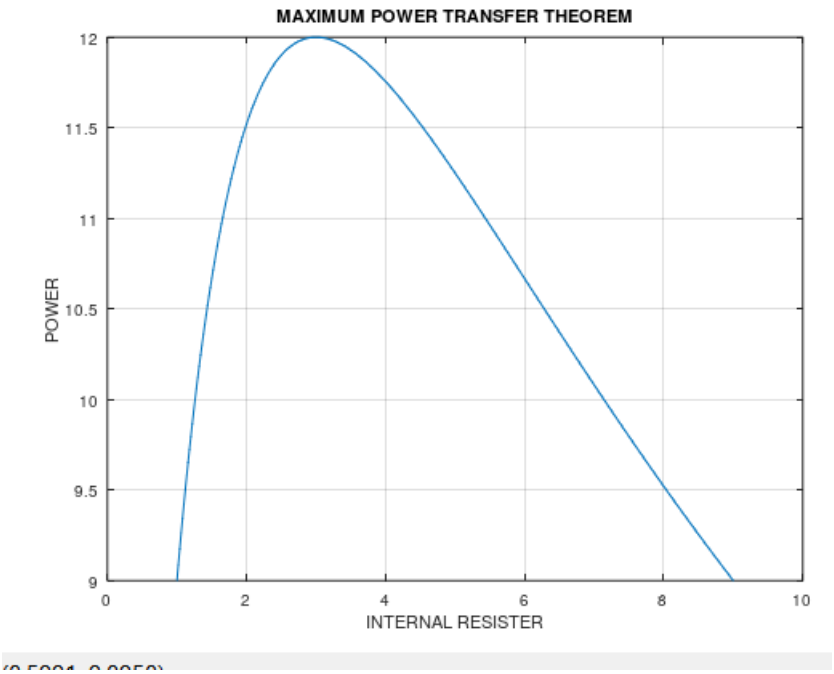
Title: - To prove Maximum power Transfer Theorem using MATLAB

Apparatus required: - Downloaded MATLAB or OCTAVE software in device.

CODE

```
% Maximum power transfer theorem
clc
close all;
clear
vth = input("ENTER THE VALUE FOR vth :-");
Rin = input("ENTER THE VALUE FOR INTRNAL RESISTER :-");
RL = 1:.02:9;
p = (((vth.^2).*RL) ./ (Rin + RL).^2);
plot(RL,p);
xlabel("INTERNAL RESISTER");
ylabel("POWER");
title("MAXIMUM POWER TRANSFER THEOREM");
grid;
```



Result:-If input voltage is set to be 12 and load resister is set to be 3 ohm volt then the resultant graph is as under