

Scheme Of Evaluation
Internal Assessment Test 1 –March.2019

Sub:	Power Generation and Economics					Code:	17EE42		
Date:	07/03/2019	Duration:	90mins	Max Marks:	50	Sem:	IV	Branch:	EEE

Note: Answer Any Five Questions

Question #	Description	Marks Distribution		Max Marks
1	a) Explain the factors to be considered for the selection of site for a hydroelectric power plant. <ul style="list-style-type: none"> Identifying the different factors (6 factors) One line explanation for each factor 	03 M 03M	06 M	10 M
	b) Explain how the hydroelectric plants are classified. <ul style="list-style-type: none"> List the categories of classification List out classification under each categories Give one ex each case 	1.5 M 1.5 M 01 M	04 M	
2	a) Describe the merits and demerits of hydroelectric power plants? <ul style="list-style-type: none"> Merits 6 points (1/2 Mark each). Demerits 4 points (1/2 Mark each). 	03 M 02 M	05 M	10 M
	b) Explain the characteristics of water turbines. <ul style="list-style-type: none"> List out the characteristics Explain any 4 characteristics Each 1 mark 	01 M 04 M	05 M	
3	a) With a neat schematic diagram, explain the essential elements of hydroelectric power plant. <ul style="list-style-type: none"> Neat diagram with proper labeling Define each parts atleast 8 parts (1/2 Mark each) 	3 M 4M	07 M	10 M
	b) Define Hydrological cycle with necessary figure. <ul style="list-style-type: none"> Neat diagram with proper labeling 	2 M		

		<ul style="list-style-type: none"> Explanation 	1 M	03 M	
4	a)	With a neat diagram explain the working of turbine governing. <ul style="list-style-type: none"> Neat diagram with proper labeling Explain the working of the scheme 	03 M 03 M	06 M	10 M
	b)	Neatly draw the plan layout for hydel power plants with impulse turbine and reaction turbine. <ul style="list-style-type: none"> Plan layout of impulse turbine power plant Plan layout of reaction turbine power plant 	02 M 02 M	04 M	
5	a)	Prepare a short note on surge tank. <ul style="list-style-type: none"> Neat figures of surge tank in different positions Purpose of surge tanks 	02 M 04 M	06 M	10 M
	b)	Define the phenomenon “Water hammer”? Explain how surge tanks help to reduce water hammer effect. <ul style="list-style-type: none"> Definition of Water hammer process Effect of surge tank 	02 M 02 M	04 M	
6	a)	With a neat layout describe diesel power plant <ul style="list-style-type: none"> Neat Diagram Explanation of auxiliary systems 	03 M 04 M	07 M	10 M
	b)	Discuss the advantages and disadvantages diesel power plant. <ul style="list-style-type: none"> 4 points advantages (1/2 Mark each) 2 points disadvantages(1/2 Mark each) 	02 M 01 M	03 M	
7	a)	Mention the applications of diesel –electric power plants. <ul style="list-style-type: none"> 6 applications (1/2 Mark each) 	03 M	03 M	10 M
	b)	Define supercharging? Give its advantages and disadvantages <ul style="list-style-type: none"> Detailed definition of supercharging Advantages and disadvantages each 1 Mark 	05 M 02 M	07 M	