

13872

Item Bank Name

MSU Baroda//.../Journalism

Item Text	Option Text 1	Option Text 2	Option Text 3	Option Text 4
For maximum efficiency of vapour power cycle, what should be the critical temperature of working fluid?	the working fluid should have critical temperature as low as possible	the working fluid should have critical temperature as high as possible	the critical temperature does not affect the efficiency of the vapour power cycle	the critical pressure does not affect the efficiency of the vapour power cycle
Consider a simple ideal Rankine cycle. If the condenser pressure is lowered while keeping turbine inlet state the same, (select the correct statement)	The turbine work output will decrease.	The amount of heat rejected will decrease.	The cycle efficiency will decrease.	The moisture content at turbine exit will decrease.
In a regenerative feed heating cycle, the greatest economy is affected	when steam is extracted from only one suitable point of steam turbine	when steam is extracted from several places in different stages of steam turbine	when steam is extracted only from the last stage of steam turbine	when steam is extracted only from the first stage of steam turbine
Live storage of coal in a power plant means	coal ready for combustion	preheated coal	coal in transit	storage of coal sufficient to meet 24 hour demand of the plant
Which component of gas turbine power plant is main cause of its low efficiency?	Gas turbine	Combustion chamber	Compressor	Starting motor
The function of intercooler in gas turbine power plant is:	To remove heat from combustion gas between stages of turbine	To remove heat from compressor between stages of compressor	To remove heat from intake air	To remove heat from exhaust air

The thermodynamic process takes place in combustion chamber of Gas Turbine cycle is	Constant Pressure	Isothermal	Isentropic	Isenthalpic
The gas turbine power plant mainly uses which among the following fuels?	Coal and Peat	Kerosene oil and diesel oil and residual oil	Gas oil	Natural gas and liquid petroleum fuel
Which of the following method will give highest improvement in the thermal efficiency of gas turbine plant?	Regeneration	Reheating	Inter-cooling	Superheating
The following method can be used to improve the net work output of the gas turbine plant	Regeneration	Reheating	Inter-cooling	Combined gas turbines
The intercooling will	Increase the output	Decrease the output	Keep the output same	Won't able to answer
The Reheating will	Increase the output	Decrease the output	Keep the output same	Won't able to answer
The Regeneration will	Increase the output	Decrease the output	Increase the Efficiency	Decrease the Efficiency
The gas turbine power plant in Maharashtra is located in	Tarapur	Uran	Eklahare	Koyna
For air standard Brayton cycle, increase in the maximum temperature of the cycle, while keeping the pressure ratio the same would result in	Increase in air standard efficiency	Decrease in air standard efficiency	No change in air standard efficiency	Increase in the efficiency but reduction in net work
Inter-cooling in gas turbines	Decreases net output but increases thermal efficiency	Increases net output but decreases thermal efficiency	Decreases both net output and thermal efficiency	Increases both net output and thermal efficiency
The use of regenerator in a gas turbine cycle	Increases efficiency but has no effect on output	Increases output but has no effect on efficiency	Increases both efficiency and output	Increases efficiency but decreases output

In a gas turbine cycle with regeneration	Pressure ratio increases	Work output decreases	Thermal efficiency increases	Heat input increases
How work ratio is determined in GTPP ?	Ratio of net work to Compressor Work	Ratio of net work to Heat Supplied	Ratio of net work to turbine work	Ratio of turbine work to compressor work
In an ideal air-standard gas turbine cycle the minimum and the maximum temperatures are respectively 300K and 1200K. Then the optimal pressure ratio of the cycle for the maximum work output is (for air $\gamma = 1.4$)	2.1	1.3	1.2	3.5