

Department of Mechanical Engineering
Innovative Teaching Methods

Activity Title	Quiz
Faculty Name/Department	Mr. Vigneshwaran V / Mech
Mapped Course Name & Code	ME3451 Thermal Engineering
Date	09-03-2023
Benefitted Students (Year / Sem / Dept)	II / IV / Mech
Topic	Steam Turbine
Description	I made an effort to make the inquiries pertinent to the assessment of the engineer with experience in finite element analysis. That being said, knowing the answers to this quiz does not mean that one can create realistic simulations; rather, it simply indicates that one is on the right track and has a good sense of humour. (Rule: No passing Questions)
Course Outcomes (CO)	CO3: Explain the flow in the steam turbines, draw velocity diagrams, flow in gas turbines and solve problems
Performance Indicator (PI)	1.3.1
Mail ID (for review)	mech.vigneshwaran@msajce-edu.in
Activity Photos	 

Topics/ Questions:

1. What is a steam turbine?
 - a) Machine that uses pressurised steam to extract mechanical energy
 - b) Machine that uses pressurised steam to extract thermal energy
 - c) Machine that uses pressurised steam to extract kinetic energy
 - d) Machine that uses pressurised steam to extract electrical energy
2. Which of the following is a type of turbine classified based on the fuel that supplies the driving force?
 - a) Steam Turbine
 - b) Gas Turbine
 - c) Wind Turbine
 - d) All of the mentioned
3. What is rotor steam turbine ?
 - a) Spinning component with wheels
 - b) Spinning component with wheels and blades disconnected
 - c) Spinning component with wheels and blades connected
 - d) Spinning component with blades
4. Which of the following is a type of turbine classified based on the fuel that supplies the driving force?
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 - d) Spinning component with blades
6. Why casing is used in turbine?
 - a) Forms the outside wall of the main flow duct to remain concentric
 - b) Forms the inside wall of the main flow duct to remain concentric
 - c) Forms the outside wall of the main flow duct to not remain concentric
 - d) None of the mentioned
7. Which of the following can also be called as Non Condensing steam turbine?
 - a) Back pressure steam turbine
 - b) Impulse steam turbine
 - c) Extraction steam turbine
 - d) None of the mentioned
8. Steam turbine is classified on basis of _____
 - a) type of Steam flow
 - b) type of blades



- c) exhausting condition
d) all of the mentioned
9. In which of the following Cross compound steam turbines was once used?
- a) marine ships
 - b) automobiles
 - c) generation of electricity
 - d) none of the mentioned
10. Pankaj watches a jet in the air with a long trail of exhaust gas at its rear. What type of engine do they run on?
- a) Jet Propulsion Gas Turbine
 - b) Prop Jet
 - c) Steam turbine
 - d) Back Pressure Gas Turbine
11. ----- of electricity in United States is produced using steam turbine.
- a) 88%
 - b) 56%
 - c) 78%
 - d) 35%
12. In order to generate energy in Sahara Desert where water is available in significantly low amount. Which of the following system can we employ in such a place?
- a) Gas Turbine
 - b) Tidal Engine
 - c) Steam Turbine
 - d) Gas & Steam Engine

Marks:

Group Name (if ITM is a group activity)	Reg No.	Topic	Marks
TEAM A	311821114001	Steam Turbine	20
	311821114002		
	311821114003		
	311821114004		
	311821114005		
	311821114006		
TEAM B	311821114007		20
	311821114009		
	311821114010		
	311821114011		
	311821114012		
	311821114014		
TEAM C	311821114015		10
	311821114016		
	311821114017		
	311821114018		
	311821114301		
	311821114302		
TEAM D	311821114303		20
	311821114304		
	311821114305		
	311821114306		
	311821114307		
	311821114701		
	311820114321		
	311820114322		
	311820114323		
	311820114701		

Outcomes:

Thermal engineering focuses on the transfer of heat, fluid mechanics, and heating and cooling systems, such as those used in the electric power industry, the automobile industry and the heating, ventilation and air conditioning (HVAC) industry. So, this benefits you to understand the details of steam turbine for the theoretical or practical solutions. And this improves the student's interest on the Internal Assessment Test.