

22:08 22% 4G

U Zain JO



THERMAL 🔥

Question 8/11

The Isolated system is always:

- ☐ d. All of the above
- ☐ c. An adiabatic system
- ☐ e. None of the above
- ☐ a. An Isothermal system
- ☐ b. An open system

SUBMIT ANSWER



المزيد



تعديل



Question 4/11

For an insulated piston-cylinder system that have work done on it, one of the following could increase:

- ☐ c. It's internal energy
- ☐ a. It's temperature
- ☐ d. All of the above
- ☐ b. It's pressure
- ☐ e. None of the above


SUBMIT ANSWER

Question 9/11

A piston-cylinder device contains 0.005 m³ of liquid water and 0.9 m³ of water vapor. The system has a pressure of 500 kPa while heat is transferred until the final temperature reached 200 °C.

1. The initial temperature of the system in °C was:
2. The final volume of the system in m³ is:
3. The work during the process in kJ is:

Answer:

← → Paragraph 

Question 8/11

Air enters an adiabatic nozzle steadily at 127°C with a velocity of 100 m/s and leaves the nozzle at 27°C . The velocity at the nozzle exit is:

- ☐ a. 561.30 m/s
- ☐ d. 333.14 m/s
- ☐ e. None of the above
- ☐ b. 648.46 m/s
- ☐ c. 461.11 m/s

SUBMIT ANSWER



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تعديل

Question 1/11

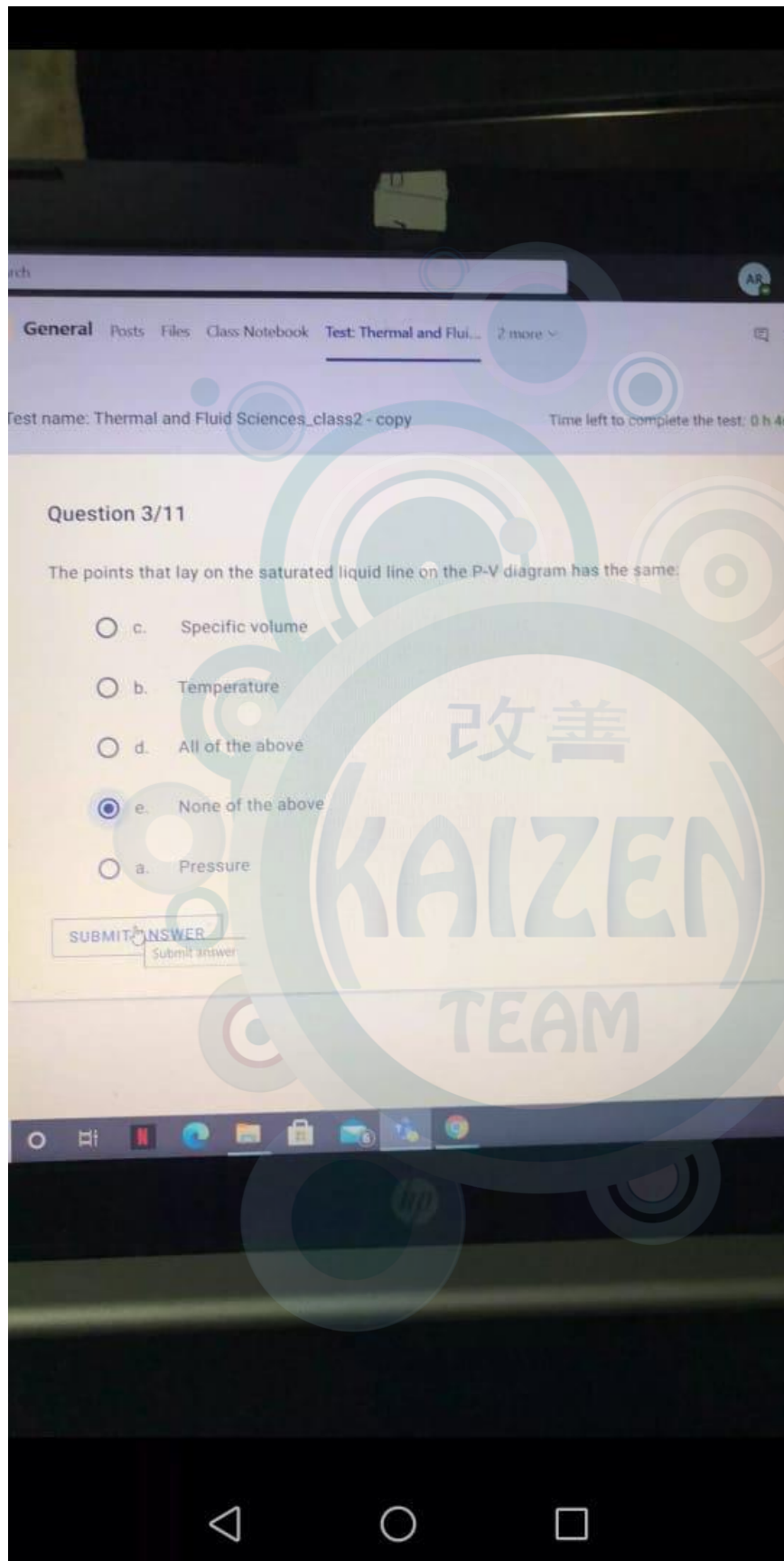
Air is contained in a cylinder device fitted with a piston-cylinder. The piston initially rests on a set of stops, and pressure of 350 kPa is required to move the piston. Initially, the air is at 100 kPa and 27°C and occupies a volume of 0.4 m³. Determine the following, while the temperature increased to 1100 K.

1. The boundary work done, in kJ is _____
2. The mass of the air in kg is _____
3. The amount of heat transferred to the air, in kJ is _____



Answer:

Paragraph



Test name: Thermal and Fluid Sciences, class1

Time left to complete the test: 0 h 18 min 2 sec

Question 4/11

Steam at 5 MPa, 300°C enters a turbine steadily with a velocity of 40 m/s. It leaves this turbine at 100 kPa with a quality of 80% and velocity 200 m/s. The mass flow rate of the steam is 8.5 kg/s. A heat loss of 30 kJ/kg occurs during the process. The power output of the turbine in kW is:

- ☐ b. 5550.4 kW
- ☐ a. 8878.2 kW
- ☐ d. 6771.0 kW
- ☐ e. None of the above
- ☐ c. 7853.9 kW

SUBMIT ANSWER

22:09 22% 4G

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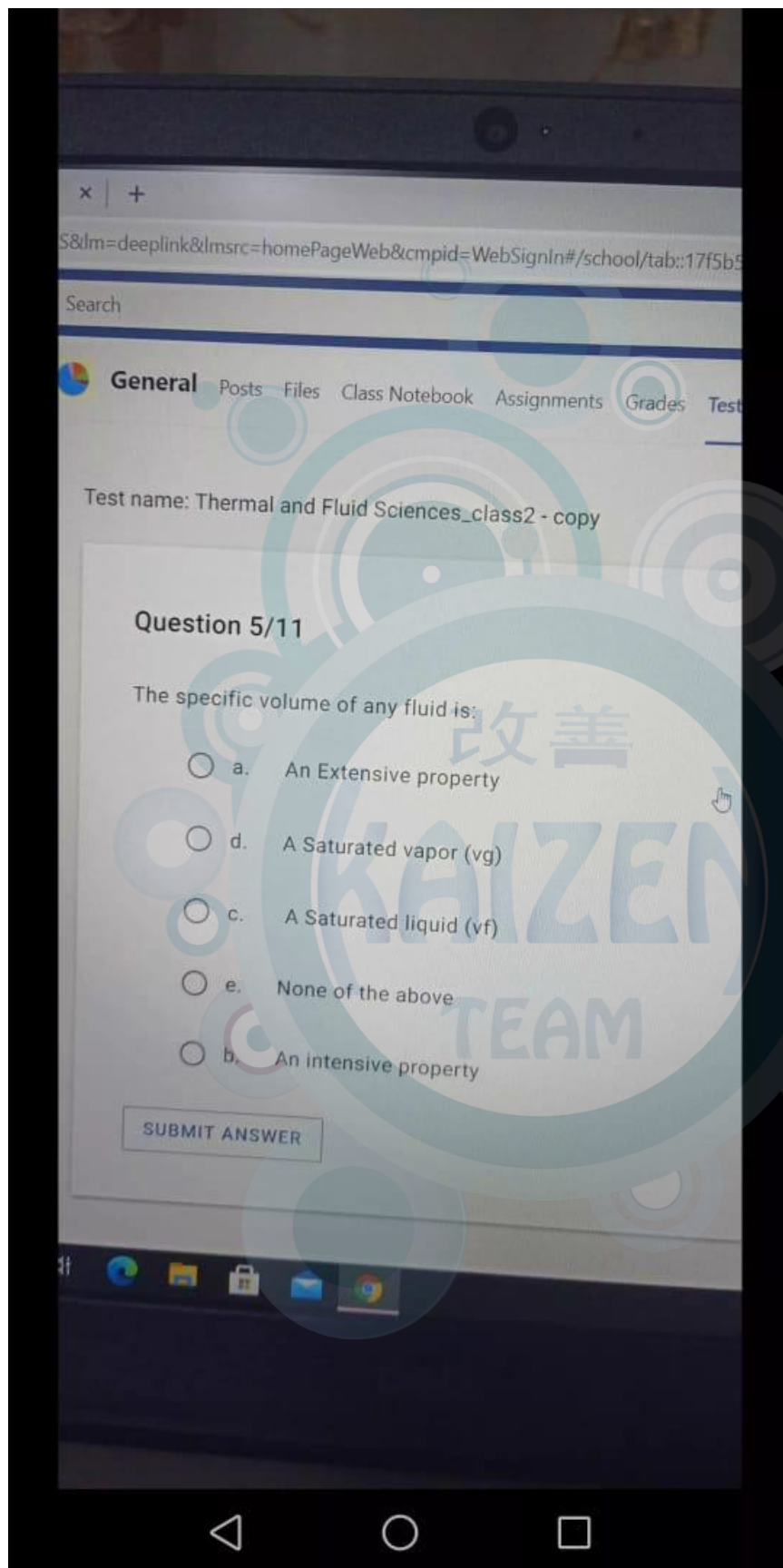
Test name: Thermal and Fluid Sciences_class1

Time left to complete the test: 0 h 32 min 28 sec

Question 7/11

Steam at 2.5 MPa, 300°C flows through a 30 cm diameter pipe with an average velocity of 10 m/s. The mass flow rate of this steam is:

- ☐ b. 23.97 kg/s
- ☐ a. 30.33 kg/s
- ☐ c. 7.14 kg/s
- ☐ e. None of the above
- ☐ d. 15.59 kg/s





Test name: Thermal and Fluid Sciences_class2 - copy

Time left to complete the test: 00:03:00 - 00:00

Question 6/11

A rigid tank that contains a pure gas can go _____ process, as heat addition is occurred:

- ☐ a. Isothermal process
- ☐ c. Polytropic process
- ☐ d. All of the above
- ☐ b. Isobaric process
- ☐ e. None of the above

SUBMIT ANSWER



المزيد



تعديل