## MODEL QUESTION PAPER - 2023

## LESSON - 8

## SUB: PHYSICS (E/M) - CLASS : XI

## DATE : 09. 12.2023 TOTAL MARK : 20M

PART - A (5X1 = 5M)

#### Choose the best correct answer

1. A quasi static process is an infinity ..... process

a) Slow b) fast c) very slow d) very fast

2. The practical refrigerator is always ...... Than ideal refrigerator

a) < b) > c) = d) 0

3. Which of the following is not a scalar?

a) Viscosity b) surface tension c) pressure d) none of the above

4. The Young's modulus unit is.....

a)  $N/M^2$  b)  $NM^2$  c)  $N/M^1$  d) none of the above

5. The efficiency of a heat engine working between the freezing point and boiling point of water

a) 6.25% b) 26.8% c) 20% d) 12.5%

PART - B (5 X 2 = 10M)

# **Answer any FIVE Questions**

6. State Pascal's law in fluids

7. State Archimedes principle

8. Define coefficient of viscosity of a liquid

9. Obtain an ideal gas law from Boyle's law

10. Give the sign convention for Q and W

11. State the second law of thermodynamics in terms of entropy

12. During a cyclic process, a heat engine absorbs 500J of heat a hot reservoir, does work and ejects an amount of heat 300 J into the surroundings (cold reservoir) calculate the efficiency of the heat engine?

## Kindly send me your answer keys to us - padasalai.net@gmail.com

# PART - C (1X5 = 5M)

# **Answer ALL questions**

12 a) Explain in detail the working of a refrigerator

(or)

b) Explain the different types of modulus of elasticity .

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