

LECTURERS IN GOVERNMENT POLYTECHNIC COLLEGES (ENGINEERING AND NON-ENGINEERING) IN A.P TECHNICAL EDUCATION SERVICE. - NOTIFICATION NO.23/2018

MECHANICAL ENGINEERING- 13TH MAR 2020 – S2 – REVISED KEY

Question Number : 13 Question Id : 231098313

In a reversible non-flow process, the gas undergoes a process according to,

$$pV = 2.8$$

Where, p is in bar and volume is in m³. What will be the work done by the gas if pressure of gas increases from 0.7 bar to 7 bar? [Assuming, $e^{2.3} = 10$]

Answer: Deleted

Question Number : 19 Question Id : 231098319

A 30 ohm resistor carrying a constant current of 1 ampere is kept at a constant temperature of 27°C by a stream of cooling water. What will be the rate of change in entropy of universe?

Answer: Deleted

Question Number : 120 Question Id : 231098420

The governor effort is the force applied for:

Answer: Deleted

Question Number : 122 Question Id : 231098422

In case of a slider crank mechanism, if the mass of slider = 1 kg, crank radius = 10 cm, length of the connecting rod = 40 cm, crank speed = 100 rad/s, then the inertia force at the zero crank angle (from Inner dead center) is equal to:

Answer: Deleted

Question Number : 125 Question Id : 231098425

A four-wheeler automobile is taking a turn towards left. Consider W= Weight of the vehicle, $\frac{P}{2}$ = Magnitude of the reaction due to gyroscopic effect on inner or outer wheels, $\frac{Q}{2}$ = Magnitude of the reaction due to centrifugal effect on inner or outer wheels. The total vertical reaction at each inner wheel is:

Answer: Deleted

Question Number : 131 Question Id : 231098431

Which one of the following joining techniques is used for joining of HSS drill bit to carbon steel shank?

Answer: Deleted