

X



reviewer4@nptel.iitm.ac.in ▼

Courses » IC Engines and Gas Turbines

Announcements **Course** Ask a Question Progress FAQ

Unit 6 - Week 4 - Ignition and Lubrication Systems

Register for Certification exam

Course outline

How to access the portal

Week 0 - Introductory Session

Week 1 - Introduction to IC Engines

Week 2 - Air Standard Cycles

Week 3 - Carburation

Week 4 - Ignition and Lubrication Systems

- Lec 1: Classification, Types of Nozzles, Ignition System, Battery and Magneto Ignition Systems

- Lec 2: Classification, Types of Nozzles,

Assignment 04

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. **Due on 2019-02-27, 23:59 IST.**

1) Nozzles for injecting fuel are widely used in the -----engines. **1 point**

- CI engines
- CI and SI engines
- SI engines
- Can't say anything

No, the answer is incorrect.
Score: 0

Accepted Answers:
CI engines

2) Pintle nozzle is less susceptible to clogging since **1 point**

- Plunger helps remove the clogging
- Turbulence of the combustion chamber helps sweeping away the carbon deposits
- Pintle nozzle does not have orifice
- There is separate arrangement to remove clogging.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Plunger helps remove the clogging
Turbulence of the combustion chamber helps sweeping away the carbon deposits

3) Lubricating oil should not require excessive force to transfer the transverse momentum imparted by engine components. **1 point**

- True

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -

A project of



In association with



Funded by

Types of Nozzles, Ignition System, Battery and Magneto Ignition Systems (contd.)

Lec 4: Engine friction, Lubrication Systems, Forces on Piston

Lec 5: Lubricating Oils, Thermo-Chemistry and Fuels, Self-Ignition

Quiz : Assignment 04

Week 5 - Alternative Fuels, Combustion in SI and CI Engines

Week 6 - Fuel Injection Systems

Week 7: Introduction to Gas Turbines

Interaction Session

Week 8 : Performance Analysis of Brayton Cycle

Week 9: Introduction to Various Aircraft Engine and Performance Parameters

Week 10: Components of Brayton Cycle Based Power Plant

Week 11: Components of Brayton Cycle Based Power Plant

Week 12:

effective pressure

- a. A I. losses due to turbulent dissipation in the intake and exhaust
 b. BN II. Lack of hydraulic floating
 c. CN^2 III. Hydraulic shear between the engine lubricated parts

- a – II, b – I, c – III
 a – III, b – I, c – II
 a – II, b – III, c – I
 a – I, b – II, c – III

No, the answer is incorrect.

Score: 0

Accepted Answers:

a – II, b – III, c – I

5) Given the required characteristics of the lubricating oil, state which of those are correct and **1 point** which are wrong

- a. Lubricating oil must have adhesion with the solid surface.
 b. This lubricating oil must resist being squeezed from the mating surfaces even under extreme forces experienced by the engine between some components.

- a is correct, b is wrong
 both a and b are correct
 both a and b are wrong
 a is wrong, b is correct

No, the answer is incorrect.

Score: 0

Accepted Answers:

both a and b are correct

6) According to the working principle of battery ignition system, find the correct order from the **1 point** following

- Charging the condenser -> discharging the condenser -> breaker points are closed
 Charging the condenser -> breaker points are closed -> discharging the condenser
 Breaker points are closed -> charging the condenser -> discharging the condenser
 Discharging the condenser -> charging the condenser -> breaker points are closed

No, the answer is incorrect.

Score: 0

Accepted Answers:

Breaker points are closed -> charging the condenser -> discharging the condenser

7) The empirical relation for frictional mean effective pressure is given by

1 point

- $f_{mep} = A + BN^2 + CN^2$
 $f_{mep} = A + BN^2 + CN$
 $f_{mep} = BN^2 + CN^2 - A$
 $f_{mep} = A + BN + CN^2$

No, the answer is incorrect.

Components of
Brayton Cycle
Based Power
Plant

Score: 0

Accepted Answers:

$$f_{mep} = A + BN + CN^2$$

8) In the battery ignition system, the camshaft drives

1 point

- breaker points
- distributor
- condenser
- primary winding



No, the answer is incorrect.

Score: 0

Accepted Answers:

distributor

9) Identify the correct statements from the following two:

1 point

- a. Single and multiple orifice type nozzles are used for non-turbulent type of combustion.
- b. Pintle nozzles are used for the non-turbulent type of combustion.



- a is correct, b is wrong
- a is wrong, b is correct
- both a and b are correct
- both a and b are wrong

No, the answer is incorrect.

Score: 0

Accepted Answers:

a is correct, b is wrong

10) For better dispersion of fuel in the combustion chamber, we need ----- injection pressure and ----- density of compressed air.

1 point

- higher, higher
- higher, lower
- lower, lower
- lower, higher

No, the answer is incorrect.

Score: 0

Accepted Answers:

higher, higher

Previous Page

End

