Assignment 05

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2019-03-06, 23:59 IST.

1) -------------- the turbulence, -------------- will be the combustion and -------------- will be detonation or knocking.

- Lower, lower, lower
- Higher, higher, lower
- Lower, higher, lower
- Higher, lower, higher

No, the answer is incorrect.
Score: 0
Accepted Answers:
Higher, higher, lower

2) Hydrogen is the best source of energy because

- Higher cetane number
- Low emission
- Number of ways to obtain hydrogen
- Higher octane number

No, the answer is incorrect.
Score: 0
Accepted Answers:
Low emission
Number of ways to obtain hydrogen
Higher octane number

3) Detonation or knocking can be reduced by

- Mild throttling
- Fuel/air ratio is richer
- Keeping main flame speed higher than the secondary
- Use of aromatic compounds in fuel

No, the answer is incorrect.
Score: 0
Accepted Answers:
Low emission
Number of ways to obtain hydrogen
Higher octane number
4) State true or false: Pre-ignition in the engine occurs due to knocking in the engine.
   - True
   - False

   No, the answer is incorrect.
   Score: 0

   Accepted Answers:
   False

5) Alcohols can be used in the SI engines since they
   - Have higher octane percentage
   - Flame is visible
   - Higher volumetric efficiency
   - Avoid vapour lock in the exhaust system

   No, the answer is incorrect.
   Score: 0

   Accepted Answers:
   Have higher octane percentage
   Higher volumetric efficiency

6) For avoiding the ignition delay in the CI engine, engine should have
   - Higher percentage of cetane quantity in fuel
   - Higher octane number
   - Higher temperature of chamber
   - Higher amount of oxygen

   No, the answer is incorrect.
   Score: 0

   Accepted Answers:
   Higher percentage of cetane quantity in fuel
   Higher temperature of chamber
   Higher amount of oxygen

7) The cetane number of fuel is calculated as
   - \% of n-cetane
   - \% of heptamethylnonane
   - \(0.15 \times \% \) of heptamethylnonane
   - \% of n-cetane + (0.15 \times \% \) of heptamethylnonane

   No, the answer is incorrect.
   Score: 0

   Accepted Answers:
% of n-cetane + (0.15 × % of heptamethylnonane)

8) Identify the correct statements from the following:
   a. Splashing lubricating system uses the motion crank.
   b. Pressurized oil distributing system can not be run on electrical power.

   - 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:
   a is correct, b is wrong

9) List out the stable compounds from the following list:
   Paraffin, Nepthane, Benzene, Olefin, Di-olefin

   - paraffin, nepthane, olefin
   - olefin, di-olefin, nepthane
   - paraffin, nepthane, benzene
   - none of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   paraffin, nepthane, benzene

10) The sign of force on the piston due to contact with the engine cylinder is - ve when
    ------------------- and it is + ve when -------------------.

    - θ < 180, 180 < θ < 360
    - θ < 180, 360 < θ
    - θ > 180, 180 < θ < 360
    - Can't say anything.

    No, the answer is incorrect.
    Score: 0
    Accepted Answers:
    θ < 180, 180 < θ < 360