Assignment 09

The due date for submitting this assignment has passed. Due on 2019-10-02, 23:59 IST.
As per our records you have not submitted this assignment.

1) Motor noises are of different origin. Which of the following option represents motor noise which is not due to mechanical cause?

- Windage noise.
- Rotor motion tonal noise.
- Noise due Electromagnetic interaction between stator and rotor.
- Dynamic imbalance.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Noise due Electromagnetic interaction between stator and rotor.

2) What is the reference blade tip speed for a centrifugal compressors?

- Speed of sound in air.
- Speed of sound in water.
- Speed of sound in oil.
- 243.8 m/s

No, the answer is incorrect.
Score: 0
Accepted Answers:
243.8 m/s

3) Consider a compressor with 6 rotor blades and 5 stator blades. What value has to be used for the ‘greatest common factor’ while finding out blade pass frequency?
Lecture 51: 
Noise coming from Motors and Pumps (unit? unit=78&lesson=80)

Lecture 52: 
Noise coming from Pump and Motor Working Simultaneously (unit? unit=78&lesson=81)

Lecture 53: 
Noise coming from Compressors (unit? unit=78&lesson=82)

Lecture 54: 
Example problems regarding Noise coming from Compressor (unit? unit=78&lesson=83)

Quiz: 
Assignment 09 (assessment? name=139)

WEEK 10

WEEK 11

WEEK 12

4) In a company one project was held on reducing noise inside their workspace. When people recorded sound coming from pump working inside the workspace, it was found that the noise signal have a dominant frequency component. Out of the following cases, which can be the reasons for that noise? I. Impact on solid surface II. Dynamic imbalance III. Cavitation IV. Hydraulic pressure fluctuation

I and II
II and III
II and IV
I and IV

No, the answer is incorrect.
Score: 0
Accepted Answers: I and II

5) Which of the following pump noise is electrical in origin?

Impact on solid surfaces.
Dynamic imbalance.
Cavitation.
None of the options are correct.

No, the answer is incorrect.
Score: 0
Accepted Answers: None of the options are correct.

6) Noise generated when the air pushed out while the rotor rotates is called _____________.

Windage noise.
Rotor noise.
Bearing noise.
Dynamic imbalance noise.

No, the answer is incorrect.
Score: 0
Accepted Answers: Rotor noise.

7) What is the reason for Windage noise in motors?

Ageing of motor
Wind
Rotor imbalance
Bearing

No, the answer is incorrect.
Score: 0
Accepted Answers: Wind
8) A loud speaker produces 6kHz sound at 40dB SPL. A person is listening to that sound at 1m away from the source. What will be the sound pressure (SPL) perceived by that listener? You can refer the equal loudness contours for pure tones given in the figure.

No, the answer is incorrect.
Score: 0
Accepted Answers: 40