

### Theory of Machines Objective Questions and Answers Pdf

1. The type of teeth used on a gear used in sugar crushing is

- a. cycloidal
- b. semi-epicycloidal
- c. epicycloidal
- d. involute

Ans: A

2. Forced vibrations

- a. are followed by free vibrations
- b. are preceded by free vibrations
- c. take place at a frequency more than natural frequency
- d. are independent of natural frequency

Ans: D

3. A stretched string of a guitar when operated, is subjected to

- a. free vibrations
- b. forced torsional vibrations
- c. forced transverse vibrations
- d. damped vibrations

Ans: c

4. For fluctuating loads, the appropriate bearing would be

- a. bush bearing
- b. ball bearing
- c. ball bearing with sleeve
- d. needle roller bearing

Ans: D

5. The critical speed of a shaft is affected by

- a. diameter of the disc
- b. eccentricity

- c. span of shaft
- d. a, b and c above

Ans: D

6. Creep in belts due to

- a. elasticity of belt material
- b. plasticity of belt material
- c. elongation of belt due to tension
- d. differential elongation of belt due to difference in tension on two sides of a pulley

Ans: D

7. Motor-cycle shock absorbers are generally designed for

- a. Partial damping
- b. Light damping
- c. Large damping
- d. Critical damping

Ans: D

8. At node of the shaft

- a. the vibrations are maximum
- b. the vibrations are minimum
- c. the vibrations are average
- d. the vibrations are zero

Ans: D

9. Cycloidal gear tooth profile is used for gears in

- a. automobiles
- b. earth moving machinery
- c. machine tools
- d. sugar mill machinery

Ans: D

10. Which of the following is a sliding pair?

- a. bolt and nut
- b. ball and socket joint
- c. belt and pulley
- d. cross head and guides

Ans: D

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