TOM

1. Shaft with key is what type of motion
2. Completely Constrained
3. Incompletely Constrained
4. **Successfully Constrained**
5. Both b and c
6. The no. of independent co-ordinates required to define the position and orientation of a point is
7. Constraint
8. **Degree of Freedom**
9. Inversion
10. Mechanism
11. If there are N no. of links in a mechanism then possible no. of inversion is equal to
12. N+1
13. N-1
14. **N**
15. N-2
16. Ackermann steering gear consists of
17. Sliding pair
18. **Turning pair**
19. Lower pair
20. Higher pair
21. Shaft revolving in a bearing is a type of
22. Rolling pair
23. Turning pair
24. **Lower pair**
25. Higher pair

SOM

1. Factor of Safety =
2. **Ultimate load / working load**
3. Yield load / working load
4. Working load / ultimate load
5. Yield load / ultimate load
6. The Stress induced in a body , when it is suddenly loaded is \_\_\_\_\_\_\_ the stress induced when loaded gradually.
7. Equal b) One-Half c**) Twice** d) 4 times
8. When a body is subjected to two equal and opposite pushes , as a result of which the body tends to reduce its length then \_\_\_\_\_\_
9. The Stress and Strain induced is tensile
10. Only stress is induced
11. Only strain is induced
12. **The stress and strain induced is compressive**
13. The maximum energy stored at elastic limit of a material is called
    1. Toughness
    2. **Resilience**
    3. Brittleness
    4. Stiffness
14. A beam of T-section is subjected to shear force of F. The max. shear force will occur at the
15. Top of Section
16. Bottom of section
17. **Neutral axis of section**
18. Junction of Web and Flange