

WORK SHEET
UNIT-III

1. The failure of a riveted joint may occur due to:
A) Crushing only
B) Shearing only
C) Tearing of plate
D) All of the above
Answer: D) All of the above
2. The efficiency of a riveted joint is defined as:
A) Strength of solid plate / Strength of joint
B) Strength of joint / Strength of solid plate
C) Load / Area
D) Stress / Strain
Answer: B) Strength of joint / Strength of solid plate
3. In riveted joints, tearing occurs along:
A) Rivet head
B) Pitch line
C) Plate thickness
D) Edge distance
Answer: B) Pitch line
4. Eccentrically loaded riveted joints are subjected to:
A) Only direct load
B) Only moment
C) Direct load and moment
D) Shear only
Answer: C) Direct load and moment
5. In welded joints, a fillet weld is commonly subjected to:
A) Compressive stress
B) Tensile stress
C) Shear stress
D) Bending stress
Answer: C) Shear stress
6. The throat thickness of a fillet weld is:
A) Equal to leg length
B) Less than leg length
C) Greater than leg length
D) Zero
Answer: B) Less than leg length
7. Circular fillet welds under torsion are subjected to:
A) Tensile stress
B) Compressive stress
C) Shear stress
D) Bending stress
Answer: C) Shear stress

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8. Welded joints under eccentric loading experience:

- A) Only axial stress
- B) Only shear stress
- C) Combined stresses
- D) No stress

Answer: C) Combined stresses

9. Pre-stressed bolts are mainly used to:

- A) Increase deformation
- B) Reduce load
- C) Improve joint rigidity
- D) Reduce strength

Answer: C) Improve joint rigidity

10. In bolted joints, eccentric loading causes:

- A) Only tensile stress
- B) Only shear stress
- C) Combined shear and tensile stress
- D) No stress

Answer: C) Combined shear and tensile stress

11. Locking devices are used to:

- A) Increase bolt size
- B) Prevent loosening
- C) Reduce strength
- D) Increase load

Answer: B) Prevent loosening

12. A bolt of uniform strength is designed to:

- A) Increase stress concentration
- B) Reduce stress concentration
- C) Increase weight
- D) Reduce diameter

Answer: B) Reduce stress concentration

13. Which of the following is a locking device?

- A) Washer
- B) Split pin
- C) Rivet
- D) Nut only

Answer: B) Split pin

14. The strength of a riveted joint depends on:

- A) Number of rivets
- B) Material
- C) Arrangement
- D) All of the above

Answer: D) All of the above

15. The primary load on rivets in a lap joint is:

- A) Tensile
- B) Shear

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C) Compressive

D) Bending

Answer: B) Shear

FILL IN THE BLANKS

1. The efficiency of a riveted joint is always less than _____.
Answer: 1
2. The tearing of plate occurs along the _____ line.
Answer: pitch
3. Fillet welds are mainly designed for _____ stress.
Answer: shear
4. The throat thickness of a fillet weld is _____ than the leg length.
Answer: less
5. Eccentric loading produces both direct and _____ stresses.
Answer: bending
6. Pre-stressed bolts are used to increase joint _____.
Answer: rigidity
7. Locking devices prevent _____ of nuts.
Answer: loosening
8. A bolt of uniform strength reduces _____ concentration.
Answer: stress
9. Rivets in lap joints are primarily subjected to _____ stress.
Answer: shear
10. Welded joints under torsion experience _____ stress.
Answer: shear



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