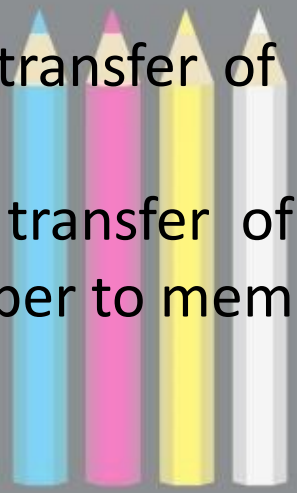
Introduction to Connections

Design of Steel Structures

Select the correct statements/s regarding a connection

1. Connections allow transfer of forces between the members
2. Connections allow transfer of moment between the members
3. Connections allow transfer of moments and forces only between member to member not foundation



a. 1 and 2
b. 2 and 3
c. 1 and 3
d. 1, 2 and 3

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State whether the following statement is true or false

“Connections makes up as the strongest link amongst series of connected members”

a. True
b. False

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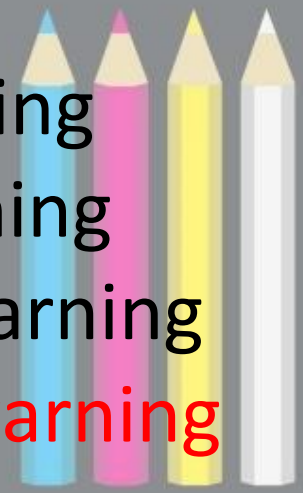
Failure of a connection is ___ thus it provides ___



a. Ductile, warning
b. Sudden, warning
c. Ductile, no warning
d. Sudden, no warning

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___ offers zero restraint to rotation of connected member

a. hinged/pinned connection
b. Semirigid connection
c. Rigid connection
d. None of the above

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In order to allow full rotation allowance between connected members, _____ should be used

a. Rivets
b. Pins
c. Bolts
d. Any of the above

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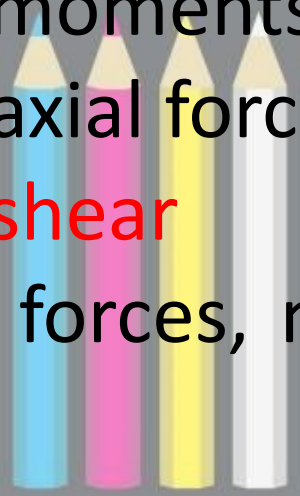
Simple connections are those which

a. Transfer only moments
b. Transfer only axial forces
c. Transfer only shear
d. Transfer axial forces, moments as well as shear



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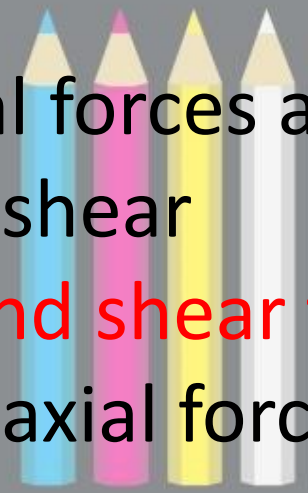
Pinned and simple connections can transfer ___ respectively



a. Moment, axial forces and shear
b. Moment and shear
c. Axial forces and shear force
d. Moment and axial force

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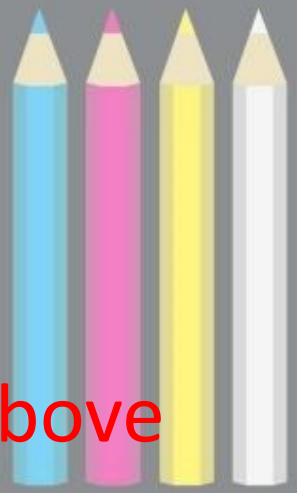
Select a parameter that a rigid connection can not transfer

a. Axial force
b. Shear force
c. Moment
d. None of the above



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State whether the following statement is true or false

“angle between the rigid joint of 2 members remains the same even after loading”

a. True
b. False

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Reason/s because of which bolts have overtaken rivets is/are

1. More labour involved in riveting
2. More supervision required in riveting
3. Noise pollution during riveting

a. 1 and 2
b. 2 and 3
c. 1 and 3
d. 1, 2 and 3

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