## Metal Buildings Institute

Bolting & Aligning Final Test

Name: (Please Print)
Signature Date
Circle the letter that best answers or completes each of the questions or statements.
<ul><li>1.) The length of the bolt is measured from the end of the threads to where ?</li><li>A.) Top of the head</li><li>B.) To the shank</li><li>C.) Underside of the head</li></ul>
2) UNC stands for
<ul><li>A.) United National Coarse.</li><li>B.) Unified National Coarse</li><li>C.) Utility National Coarse</li></ul>
3) On a 3/4 - 20 UNC 2 1/2" bolt, how many threads per inch ?
A.) 20 B.) 2 1/2 C.) 3/4
4) The 3 main types of bolts used in the erection of metal buildings are
A.) B.) C.)
5) What markings must be on the head of the type 1 A325 bolt ?
<ul><li>A.) Three lines @ 120 degrees</li><li>B.) Manufacturers Mark</li><li>C.) A325</li></ul>
6.) Which of the following statements is false?
<ul><li>A.) Torque is the amount of twisting or turning force used to tighten a nut to a bolt.</li><li>B.) Grip is the distance from behind the bolt head to the back of the nut or washer.</li></ul>
C.) The same torque applied to a nut and bolt always results in the same grip. D.) All of the above are true.
7.) Which high strength bolt is always made from alloy steel ?
<ul> <li>A.) A490</li> <li>B.) A325</li> <li>C.) A307</li> <li>D.) All of the above</li> </ul>

8.) What provides a square seat for a bolt head or nut when either is put through a sloping face ?.....

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9.) What 2 types of bolts may never be reused after they have been pretensioned ?

A.)A325

B.) A490

C.) Galvanized

10.) What term is used to describe the point when an impact wrench begins to impact ?

A.) Snug Tight

B.) Tight enough

C.) Tight fit

11.) Name the three parts of a bolt ...

12.) With the turn of the nut method, how much should the nut be turned if the bolt length is up to and including 4 diameters

- A.) 1/2 turn
- B.) 1/3 turn
- C.) 3/4 turn

13.) How often must a torque wrench be recalibrated ?

- A.) Once a day
- B.) Once a week
- C.) Every time it is used

14.) What is a squirter ?

- A.) A leaking caulking gun
- B.) An over oiled bolt
- C.) Direct Tension Indicator

15.) How much can you enlarge a hole for a 3/4 inch bolt ?

- A.) 1/8 inch
- B.) 2/16 inch
- C.) 4/64 inch
- D.) All of the above

16.) What do you do with unused fasteners at the end of a shift ?

- A.) Cover with plastic
- B.) Return to protective storage
- C.) Lay out for next day