Exam Topics

I. Introduction to Welding.

II. Safety in Welding.

III. Shielded Metal Arc Equipment, Setup, and Operation.

IV. Shielded Metal Arc Welding of Plate.

V. Shielded Metal Arc Welding of Pipe.

VI. Shielded Metal Arc Welding AWS SENSE Certification.

VII. Flame Cutting.

VIII. Plasma Arc Cutting.

IX. Related Cutting Processes.

X. Gas Metal Arc Welding Equipment, Setup, and Operation.

XI. Gas Metal Arc Welding.
XII. Flux Cored Arc Welding Equipment, Setup, and Operation.

XIII. Flux Cored Arc Welding.

XIV. Gas Metal Arc and Flux Cored Arc Welding of Pipe.

XV. Gas Metal Arc and Flux Cored Arc Welding AWS SENSE Certification.

XVI. Gas Tungsten Arc Welding Equipment, Setup, and Operation.

XVII. Gas Tungsten Arc Welding of Plate.

XVIII. Gas Tungsten Arc Welding of Pipe.

XIX. Gas Tungsten Arc Welding Plate and Pipe AWS SENSE Certification.

XX. Shop Math and Weld Cost.

XXI. Reading Technical Drawings.

XXII. Welding Joint Design and Welding Symbols.

XXIII. Fabricating Techniques and Practices.

XXIV. Welding Codes and Standards.

XXV. Testing and Inspection.

XXVI. Welding Metallurgy.

XXVII. Weldability of Metals.

XXVIII. Filler Metal Selection.

XXIX. Welding Automation and Robotics.

XXX. Other Welding Processes.

XXXI. Oxyfuel Welding and Cutting Equipment, Setup, and Operation.

XXXII. Oxyacetylene Welding.

XXXIII. Brazing, Braze Welding, and Soldering.
Sample Questions
1. In a(n) ____ process, the joining is performed by equipment requiring the welding operator to observe the progress of the weld and make adjustments as required.
   a. Manual joining
   b. Automated joining
   c. Machine joining
   d. Automatic joining

2. Movement along the x-axis is also referred to as ____ movement.
   a. Longitudinal
   b. Latitudinal
   c. Transverse
   d. Vertical

3. When the welding current is correct and the weld is not too hot or too cold, the ripples should be______.
   a. Rounded
   b. Pointed
   c. Teardrop shaped
   d. High and narrow

4. Why are the GMA and FCA welding processes used?
   a. They both use the same filler metal.
   b. They can rapidly produce high-quality welds.
   c. FCA welding is the preferred process because it is better and faster than GMA welding.
   d. Because once you are certified to make GMA welds, you are automatically certified to make FCA welds too.

5. How can the weld bead be cleaned up?
   a. Hand wire brush
   b. Chipping hammer
   c. Punch and hammer
   d. All of the above