. In helium arc welding, the electrode is made of:
(a) copper
(b) carbon
(c) mild steel
(d) Tungsten
. Which of the following welding processes uses a non-consumable electrode?
(a) LASER welding
(b) MIG welding
(c) TIG welding
(d) Ion-beam welding

\[ \text{TIG} \]

\[ \text{AL/NG} \]
In resistance welding, the pressure is released
(a) just at the time of passing the current
(b) after completion of current
(c) after the weld cools
(d) during heating period.
Oxygen to acetylenes ratio in case of oxidizing flame is

(a) 1:1
(b) 1:2:1
(c) 1.5:1.
(d) 2:1

\[
\frac{CH_2}{O_2} = \frac{1}{1}
\]

\[
\frac{CH_2}{O_2} = \frac{1.2}{0.5}
\]

\[
\frac{CH_2}{O_2} = \frac{0.9}{0.5}
\]
The material used for coating the electrode is called:
(a) protective layer
(b) binder
(c) slag
(d) Flux
Which of the following welding processes uses non-consumable electrode?
(a) Laser welding
(b) MIG welding
(c) TIG welding
(d) Ion beam welding
Which of the following is not a welding accessory?
(a) Cable
(b) Electrode holder
(c) Hand screen
(d) Gloves
In which type of welding is a pool of molten metal is used?
(a) Electroslag
(b) Submerged arc
(c) MIG
(d) TIG
Oxygen to acetylene ratio in case of neutral flame is:

(a) 0.8: 1.0
(b) 1:1
(c) 1.2: 1
(d) 2:1
Projection welding is:
(a) Multi-spot welding process
(b) Continuous spot welding process
(c) Used to form mesh
(d) Used to make cantilevers
Which welding process uses a consumable electrode?
(a) Laser welding
(b) Thermit welding
(c) TIG welding
(d) MIG welding

\[ \text{CONS} \rightarrow \frac{2}{3} \rightarrow \text{ELE. DCAP} \]

1/3 \rightarrow \text{W/P}

\[ \frac{1}{2} \rightarrow \text{Wel} \]
Solder is essentially a
(a) tin-lead base alloy
(b) silver-lead base alloy
(c) bismuth-lead base alloy
(d) tin-silver base alloy
Filler metal is used in:
(a) Spot welding
(b) Projection welding
(c) Gas welding
(d) Seam welding
In Arc welding, the arc length should be approximately equal to:

(a) Diameter of electrode rod
(b) One and a half time the diameter of electrode rod
(c) Twice the diameter of electrode rod
(d) Half the diameter of the electrode rod

Arc (0.50 - 1.20)
. In which type of welding molten metal is poured for joining the metals?
(a) Arc welding
(b) Gas welding
(c) MIG welding
(d) Thermit welding
The soldering process is carried out in the temperature range:
(a) 15-60°C
(b) 70-150°C
(c) 180-250°C
(d) 300-500°C

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In Thermit welding, Aluminium and Iron oxide are mixed in the proportion of:

(a) 1:3
(b) 1:2
(c) 1:1
(d) 2:1

\[ \text{AlFe}_2 \]

1:3
Spot welding is most suitable for joining parts having thickness up to-
(a) 50 mm
(b) 30 mm
(c) 20 mm
(d) 10 mm
Thermit welding differs from other methods of welding in that:
(a) it does not use heat
(b) it is less time consuming
(c) it does not require electrodes
(d) it employs exothermic chemical reaction for developing high temperature
The commonly used flux for brazing is-
(a) Slag
(b) Borax
(c) Lead
(d) Calcium chloride
. If electric current is passed through the metals to be joined and heated to the plastic state and weld is completed by the application of pressure, the welding is known as:
(a) Forge weld
(b) Electric arc welding -
(c) Resistance welding
(d) Thermit welding with pressure
Which of the following is an example of solid state welding?
(a) Gas welding
(b) Arc welding
(c) Thermit welding
(d) Forge welding
Generally used fuel gas in gas welding is:
(a) N2
(b) CO2
(c) C2H2
(d) He
. Spot welding, projection welding and or seam welding belong to the category of:
(a) electric resistance welding
(b) forge welding
(c) thermit welding
(d) arc welding
Electrode used in **TIG** is:
(a) Copper
(b) **Tungsten**
(c) Aluminium
(d) Cast iron
In arc welding temperature generated is of the order of:
(a) 8000°C
(b) 1000°C
(c) 3500°C
(d) 5500°C
. Consumable electrodes are used in-
(a) submerged arc welding
(b) TIG arc welding
(c) carbon arc welding
(d) MIG arc welding
Black colour is generally painted on?
(a) Acetylene cylinder
(b) Hydrogen cylinder
(c) Oxygen cylinder
(d) None of the option
. Reaming is the operation of:
(a) enlarging the end of a hole cylindrically
(b) cone shaped enlargement of the end of a hole
(c) smoothing and squaring the surface around a hole
(d) sizing and finishing a hole

19.19.2
The operation of sharpening a grinding wheel is called:
(a) trueing
(b) dressing
(c) aligning
(d) Balancing
Which of the following machines does not require quick return mechanism?
(a) Slotter  
(b) Planer  
(c) Shaper  
(d) Broaching
Milling machine is classified as horizontal or vertical type, depending on the position of:

(a) spindle
(b) work piece
(c) milling cutter
(d) work table or bed
Continuous chips are formed when machining:
(a) Ductile material
(b) Brittle material
(c) Heat treated material
(d) None of the above
Size of shaper is specified by:
(a) Length of stroke
(b) Size of table
(c) Maximum size of tool
(d) Ratio of forward to return stroke
In a shaper, metal is removed during
(a) forward stroke only
(b) return stroke only
(c) both the forward and the return strokes
(d) neither the forward stroke nor the return stroke
. Lathe bed is made of:
(a) Cast Iron
(b) Alloy Steel
(c) High Carbon Steel
(d) Mild Steel
In which milling operation, is the surface finish better-
(a) Climb
(b) Down
(c) Conventional
(d) Face