

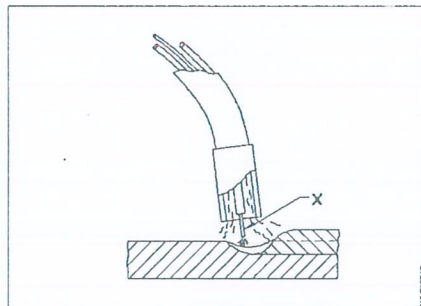
**PAPER – I
WELDER
(THEORY)
SEMESTER – II
(SESSION 2017 -2018) - NSQF LEVEL -4**

TIME: 3 HRS.**MARKS: 150**

Note: Attempt all the questions. All questions carry equal marks.

Choose the correct answer: -

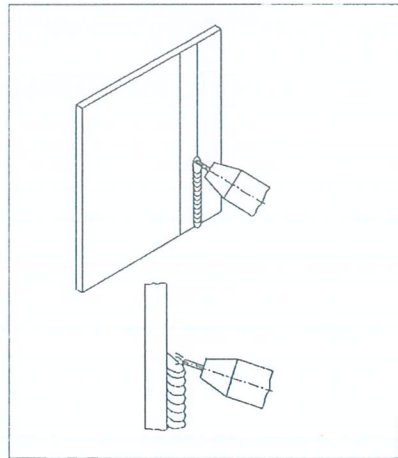
- 1 Which part of the wire feed mechanism turns the drive roller smoothly and constantly for GMAW?
 - a) Centre guide
 - b) Drive motor
 - c) Wire feeder
 - d) Wire spool holder
- 2 What is the name of the part marked 'X' in MIG/MAG torch assembly?



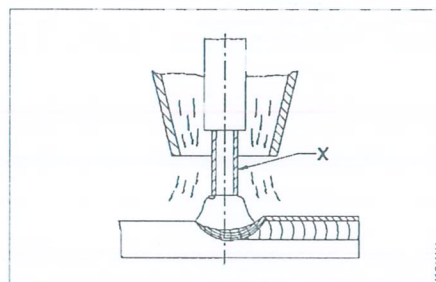
- a) Consumable electrode
 - b) Shielding gas in
 - c) Current conductor
 - d) Arc
- 3 Which gas mixture is used as shielding gas in GMAW spray transfer?
 - a) Argon-helium
 - b) Argon carbon-di-oxide
 - c) Argon-Oxygen
 - d) Helium carbon-di-oxide
- 4 In which metal transfer, the very fine droplets of the electrode wire are rapidly projected?
 - a) Pulsed Transfer
 - b) Spray transfer
 - c) Globular transfer
 - d) Short circuit transfer
- 5 Which type of welding procedure is used for producing butt joints?
 - a) Fillet weld
 - b) Flange weld
 - c) Tack weld
 - d) Groove weld
- 6 Which weld position is a down-hand position?
 - a) Flat position
 - b) Vertical position
 - c) Horizontal position
 - d) Over head position

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7 What is the name of the weld position?

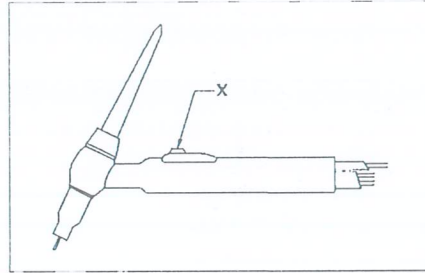


- a) Flat
b) Vertical
c) Overhead
d) Horizontal
- 8 In which type of weld position, the metal is deposited from the upper side of the joint?
a) Flat
b) Vertical
c) Overhead
d) Horizontal
- 9 What is the remedy for the cause of wire feed speed is too high?
a) Select lower wire feed speed
b) Select lower voltage range
c) Use clean drive welding wire
d) Use shorter electrode extension
- 10 What is the name of the defect shallow fusion between the weld metal and base metal?
a) Porosity
b) Lack of penetration
c) Incomplete fusion
d) Excessive spatter
- 11 What is the name of the part marked 'X' in flux cored arc welding?

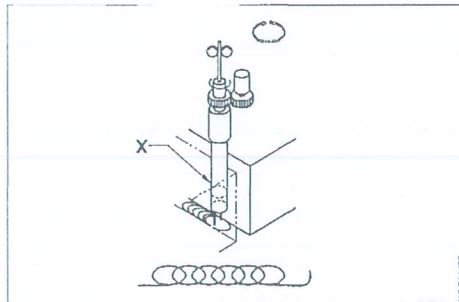


- a) Flux cored wire
b) Contact tube
c) Slag covering
d) Nozzle
- 12 What is the name of the control of ignition, if the time taken for the welding current to reach the maximum value from the zero current?
a) Up slope
b) Pre flow
c) Down slope
d) Forced flow

13 What is the name of the part marked 'X'?



- a) Cap
b) Switch
c) Handle
d) Washer
- 14 What is the colour of pure tungsten electrodes used for TIG welding?
a) Green
b) Black
c) Yellow
d) Orange
- 15 Which part of the TIG torch is the storage area for the excess tungsten?
a) Leads
b) Back caps
c) Collet
d) Ceramic nozzles
- 16 What is the temperature produced by GTAW process?
a) 2500°F
b) 3250°F
c) 3000°F
d) 3500°F
- 17 What is the name of the part marked 'X' in the narrow gap welding with arc rotation?

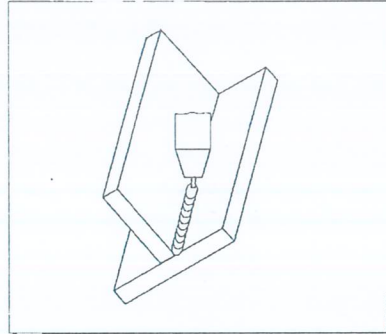


- a) Contact tip
b) Bearing block
c) Rotating motor
d) Electrode nozzle
- 18 Which welding process is used in hitech industries?
a) MIG welding
b) TIG welding
c) MAG welding
d) SMA welding
- 19 Which method of metal transfer is used with most of the common welding wire electrodes in GMAW?
a) Pulse transfer
b) Spray transfer
c) Globular transfer
d) Short circuit transfer

Contd...4/-

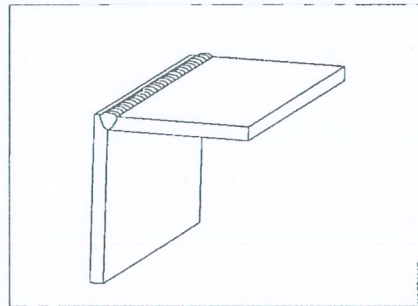


20 What is the name of the weld joint?



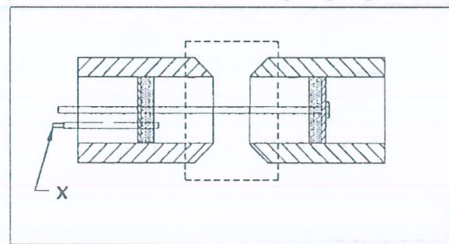
- a) Lap joint
- b) Butt - joint
- c) Corner joint
- d) Tee - joint

21 What is the name of the weld joint?



- a) Lap joint
- b) Butt - joint
- c) Tee - joint
- d) Outside corner joint

22 What is the name of the part marked 'X' in the purging arrangement pipe joint?

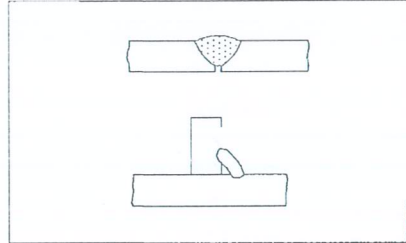


- a) Pipe
- b) Joint
- c) Plywood
- d) Purging gas inlet

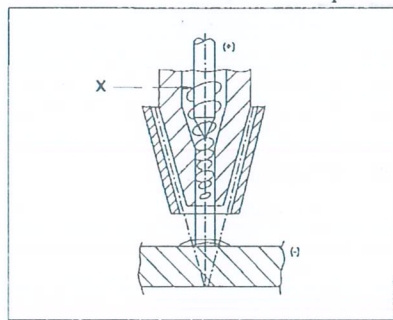
23 What is the name of the defect if the pin holes occur in GTAW process?

- a) Cracking
- b) Porosity
- c) Under cut
- d) Lack of penetration

24 What is the name of the defect in the weld?



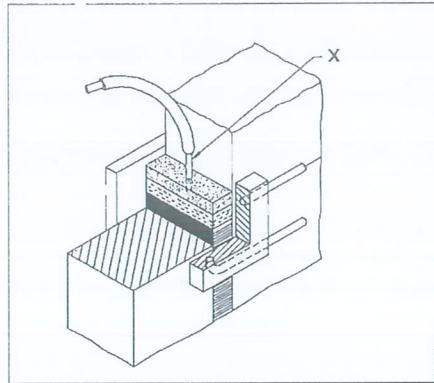
- a) Porosity
b) Incomplete penetration
c) Lack of fusion
d) Under cut
- 25 Which method is low cost for cutting stainless steel?
a) Drilling
b) Gas cutting
c) Hacksawing
d) Plasma arc cutting
- 26 What is the name of the part marked 'X' in dual flow plasma arc welding?



- a) Electrode
b) Orifice gas
c) Shielding gas
d) Constructing nozzle
- 27 In which of the following welding process, the deposit rate and speed is high?
a) Submerged arc welding
b) MIG welding
c) MAG welding
d) TIG welding
- 28 Which welding process is limited to flat and horizontal position?
a) TIG welding
b) MIG welding
c) Submerged arc welding
d) Flux cored arc welding
- 29 Which type of thermit contains a mixture of finely divided aluminium and iron oxide?
a) Rail welding thermit
b) Forging thermit
c) Cast iron thermit
d) Plain thermit
- 30 In which of the following welding process, the plates of 25 mm or more can be joined in one pass?
a) Electro slag welding
b) Thermit welding
c) MAG welding
d) Submerged arc welding

Contd....6/-

31 What is the name of the part marked 'X' in the electro slag welding?



- | | |
|------------------|---------------|
| a) Finished weld | b) Base metal |
| c) Molten slag | d) Electrode |

32 What is the limitation of electro slag welding?

- | | |
|---------------------------------|---------------------------|
| a) Welding of very heavy plates | b) Welding of thin plates |
| c) Welding of round rods | d) Welding of pipes |

33 Which welding process converts light energy into heat energy?

- | | |
|-------------------------|--------------------------|
| a) Electro slag welding | b) Thermit welding |
| c) Laser beam welding | d) Submerged Arc welding |

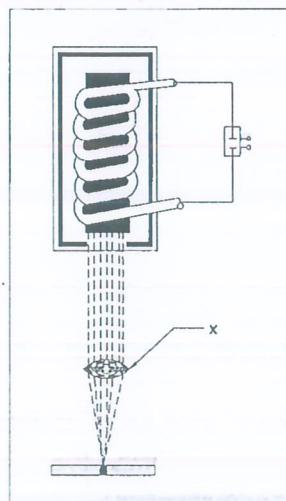
34 Which welding process is used for butt joint of large round rods?

- | | |
|------------------------|-------------------------|
| a) Electro gas welding | b) Thermit welding |
| c) Friction welding | d) Electro slag welding |

35 Which welding process is used to weld aeronautic components?

- | | |
|-----------------------|--------------------------|
| a) Friction welding | b) Thermit welding |
| c) Laser beam welding | d) Submerged arc welding |

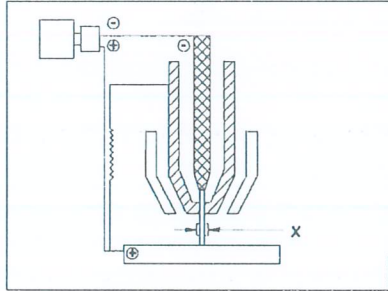
36 What is the name of the part marked 'X' in laser beam?



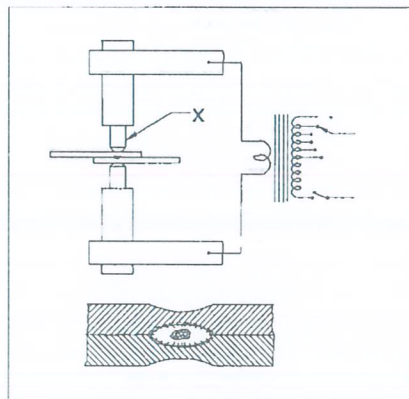
- | | |
|-------------------|----------------------|
| a) Focussing lens | b) Flash lamp |
| c) Ruby rod | d) Reflecting mirror |

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- 37 Which welding process converts the kinetic energy of the high speed electrons to heat?
 a) Electron beam welding b) Laser beam welding
 c) Plasma arc welding d) Submerged arc welding
- 38 Which welding process uses the key hole method to obtain full penetration?
 a) Laser beam welding b) Plasma arc welding
 c) Electron beam welding d) Submerged arc welding
- 39 What is the name of the part marked 'X' in the plasma arc welding?



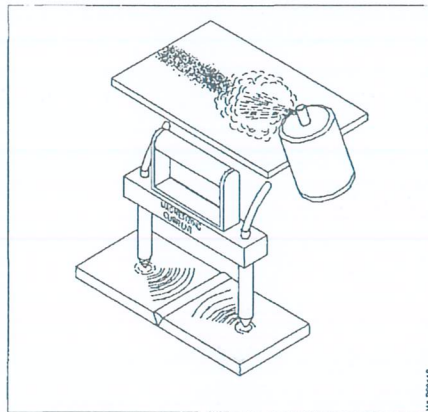
- a) Orifice dia b) Resistor
 c) Nozzle d) Plasma gas
- 40 Which gas is used for plasma welding of carbon steel, titanium and zirconium materials?
 a) CO_2 b) Hydrogen
 c) Helium d) Argon
- 41 In which type of the following resistance welding, the material to be joined is placed between two electrodes?
 a) Butt welding b) Seam welding
 c) Spot welding d) Projection welding
- 42 What is the name of the part marked 'X' in spot welding?



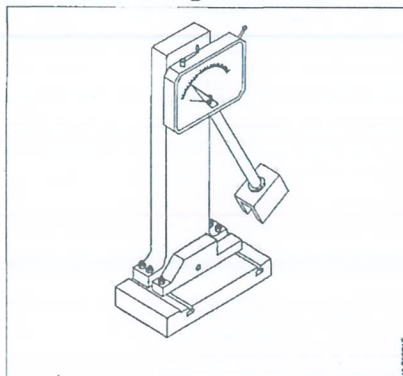
- a) Throat b) Electrode
 c) Work piece d) Moveable arm
- 43 Which surface deposit method is used for smooth, precious and high quality finish?
 a) TIG welding method b) MIG welding method
 c) Oxy-acetylene welding method d) Submerged arc welding method

Contd....8/-

- 44 What will be the defect if the welding area of carbon steel and cast iron is not post heated?
- Crack developed
 - Increase hardness
 - Reduce the stress
 - Reduce cracking tendency
- 45 Which non- destructive test is used to test welded pressure vessels, tanks and pipe lines?
- Visual test
 - Magnetic test
 - Leak or pressure test
 - Stethoscopic test
- 46 What is the name of the non-destructive test?



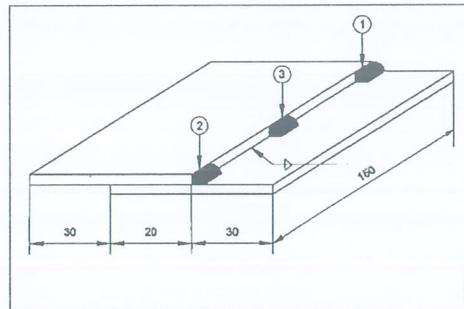
- 'X' ray test
 - Ultrasonic test
 - Magnetic particle test
 - Gamma-ray test
- 47 Which type of destructive test are useful for testing welded rotating parts?
- Impact test
 - Tensile test
 - Fatigue test
 - Guided bend test
- 48 What is the name of the destructive testing machine?



- Impact testing machine
 - Fatigue testing machine
 - Tensile testing machine
 - Guided bend testing machine
- 49 Which tool is used to clean the bed after removing the spatter?
- File
 - Chisel
 - Chipping hammer
 - Carbon steel wire brush

Contd....9/-

50 What is the name of the weld?



- a) Flat welding
- c) Corner welding

- b) Butt welding
- d) Tack welding
