

Student Name: _____ Roll No: _____

1. What is the name of the defect in which the weld metal did not melt with base metal in TIG process?

- A) Porosity
- B) Lack of penetration
- C) Under cut
- D) Lack of fusion

2. In which welding process the work pieces are melted and jointed by narrow beam of light source?

- A) Electron beam welding
- B) Micro plasma arc welding
- C) Laser beam welding
- D) Plasma arc welding

3. How much temperature GTAW process can produce?

- A) 4000 Degree F
- B) 3000 Degree F
- C) 3500 Degree F
- D) 4500 Degree F

4. Which type of tungsten electrode is suitable for welding of SS by TIG process with DC?

- A) Zirconium tungsten electrode
- B) Cerium tungsten electrode
- C) Thoriated tungsten electrode
- D) Pure tungsten electrode

5. Which type of cooling system is used in heavy duty welding operations?

- A) Air cooled
- B) Gas cooled
- C) Oil cooled
- D) Water cooled

6. Which part the equipment the electron beam is direct and controlled in an electron beam welding process?

- A) Electron gun
- B) Vacuum chamber
- C) Atmosphere
- D) Electron beam

7. What is principle of friction welding?

- A) One member is heated and another rotating
- B) One member stationary and another rotating type
- C) Both members rotates
- D) Both members are heated

8. Which gas is used as inert gas in GTAW for increased speed?

- A) Helium
- B) Acetylene
- C) Oxygen
- D) Hydrogen

9. Which welding process is effective for nickel and titanium?

- A) Gas welding
- B) TIG welding
- C) Arc welding
- D) MIG welding

10. Which is the welding process that maintains electric arc between non-consumable tungsten electrode and the base metal?

- A) TIG
- B) MMAW
- C) MIG
- D) SAW

11. How to avoid burning fast of tungsten in TIG welding process?

- A) By not using shielding
- B) By using DCEP
- C) Long arc length
- D) By using contaminated base metal

12. What is the device used to show the volume of the inert gas allowed to go to the welding torch in TIG welding?

- A) Argon regulator
- B) Flow meter
- C) Pressure meter
- D) CO2 regulator

13. How molten metal is shielded from the atmospheric contamination as a blanket in GTAW?

- A) By using inert gas
- B) By using fuel and supportable gas
- C) By using supportable gas
- D) By using fuel gas

14. What is the defect caused by high current in TIG welding?

- A) Lack of penetration
- B) Under cut
- C) Porosity
- D) Crack

15. How is the inert gas directed to flow over weld pool, in TIG welding?

- A) Through ceramic nozzle
- B) Through metal nozzle
- C) Through brass nozzle
- D) Through copper nozzle

16. What type of metal section can be welded by friction welding?

- A) Pipe and round rods
- B) Heavy sheet
- C) Thin sheet
- D) Flats and square roof

17. Which electrode is used in TIG welding process?

- A) Carbon electrode
- B) Tungsten
- C) Zinc electrode
- D) Magnesium electrode

18. Which will not be present on the weld bead due to use of shielding gas in TIG welding process?

- A) Under cut
- B) Penetration
- C) Over lap
- D) Slag

19. What is the approximate revolution of rotating member in friction welding process, to effect the weld joint?

- A) 2000 rpm
- B) 2500 rpm
- C) 3000 rpm
- D) 1500 rpm

20. What is the process of replacing the air in a pipe with argon gas that will not react with the root of the weld?

- A) Purging
- B) Pool weld
- C) Pouring
- D) Pre filling

21. What crystal (rod) is used in laser beam welding?

- A) Copper
- B) Stainless steel
- C) Ruby
- D) Iron

22. What is the use of a little hydrogen added to argon for welding of stainless steel in GTAW process?

- A) Improves metal property
- B) Improves heat transfer
- C) Improves process heat
- D) Improves good welding

23. What is the non-consumable electrode of high melting point used in TIG welding?

- A) Aluminium electrode
- B) Carbon electrode
- C) Tungsten electrode
- D) Copper electrode

24. What is the name of the part of TIG torch for holding tungsten electrode?

- A) Collet
- B) Adaptor
- C) Ceramic nozzle
- D) Electrode cap

25. Which process can easily weld thin metal?

- A) Submerged arc welding
- B) Manual metal arc welding
- C) Tungsten arc welding
- D) MIG welding

26. Which gas is chemically inactive with any metals in hot or cold condition in TIG welding?

- A) Nitrogen
- B) Oxygen
- C) Argon
- D) Hydrogen

27. What is the purpose of H.F. unit in TIG welding?

- A) To initiate the arc without touching the electrode on the base metal
- B) To produce power supply
- C) To produce the AC
- D) To change AC to DC

28. Which type of material friction welding is more suitable, for joining?

- A) Similar metal
- B) Non metal group
- C) Any metal flat type
- D) Dissimilar metals

29. How heat effected zone is covered and protected from atmospheric contaminations in GTAW?

- A) Active gas
- B) Argon gas
- C) Oxygen gas
- D) Fuel gas

30. Which of the following properties of metal will not allow the application of friction welding?

- A) Metals with low compressive strength
- B) Metals with high compressive strength
- C) Metals with high tensile strength
- D) Metals with low carbon content

31. Which gas is inactive or deficient is active chemical properties in TIG welding?

- A) Argon
- B) Oxygen
- C) Hydrogen
- D) Acetylene

32. What type of metals joined in friction welding?

- A) Similar metal
- B) Any metal flat type
- C) Dissimilar metal
- D) Non metal group

33. What stage of the metal the friction welding is completed by applying high pressure?

- A) Only heating stage
- B) Plastic stage
- C) Fusion stage
- D) Non fusion stage

34. What is the cause for poor weld bead colour in TIG welding process?

- A) Too much arc length
- B) Excessive heating in torch
- C) Tungsten melting into weld puddle
- D) Contaminated or improper filler metal

35. What is the defect while TIG welding if the current is too low?

- A) Porosity
- B) Under cut
- C) Crack
- D) Lack of fusion

36. What devices are provided to reflect the light coming to the ends of ruby rod in laser beam welding?

- A) Reflecting mirrors
- B) Shutter
- C) Flash lamps
- D) Laser tube

37. Which welding machine is to be used for welding of aluminium by TIG welding process?

- A) DC welding machine
- B) AC DC transformer
- C) AC welding machine
- D) DC transformer

38. Which welding process does not require the supply of external heat?

- A) Friction welding
- B) Seam welding
- C) Flash butt welding
- D) Spot welding

39. What is also referred as a GTAW?

- A) TIG welding
- B) MIG welding
- C) STUD welding
- D) GAS welding

40. What is the main source of heat to the workpiece in TIG welding?

- A) By tube
- B) By Torch
- C) By electrode
- D) Cable current

41. What are the types of joint in friction welding?

- A) Butt joint
- B) Lap joint
- C) T joint
- D) Corner joint

42. Which electrode is used to produce arc in GTAW process?

- A) Stainless steel electrode
- B) Tungsten electrode
- C) Cast iron electrode
- D) M.S electrode

43. Which gas is generally used in gas laser type welding?

- A) Argon gas
- B) Carbon - di - oxide
- C) Neon gas
- D) Oxygen

44. What is the bore dia of ceramic nozzle to avoid porosity while doing TIG, welding?

- A) Large sized
- B) Correct sized
- C) Too small sized
- D) Small sized

45. Why argon gas is used in welding of stainless steel

welding in TIG welding process?

- A) It helps in melting the electrode
- B) It is cheap
- C) Inert gas protects the weld
- D) It prevents porosity

46. What is the angle of electrode tip by setting DCEN for SS welding by TIG welding process?

- A) 50 Degree Centigrade
- B) 60 Degree Centigrade
- C) 45 Degree Centigrade
- D) 40 Degree Centigrade

47. Which is adjusted in Electron beam welding to eliminate the defect of porosity?

- A) Deflection
- B) Focal position / focus current
- C) Weld penetration
- D) Spot size

48. What is the source of heat in friction welding process?

- A) Mechanical friction
- B) Thread heating
- C) Electrical heating
- D) Chemical heating

49. What is the full form of GTAW?

- A) Groove tungsten arc welding
- B) Grip tungsten arc welding
- C) Galvanised tungsten arc welding
- D) Gas tungsten arc welding

50. What is the purpose of inert gas used in TIG welding?

- A) To stabilize the Arc
- B) Contamination in the weld metal
- C) To protect the molten metal from the atmospheric contamination
- D) To get more spatters

51. What is right about DCRP electrode TIG welding ?

- A) Improperly prepared tungsten
- B) Weld circuit polarity is incorrect
- C) Improper tungsten size
- D) Improper shielding gas flow