

**Duration: 30 Mins**

**Total Marks: 109**

**Q.ID: ITISKILL7898DV**

**1. What flux is used in welding brass?**

- A) Cryolite and berium chloride
- B) Zinc chloride and potassium dichromate
- C) Anti - borax
- D) Borax paste

**Answer: D) Borax paste**

**2. What method is followed to make a circular gas cutting?**

- A) Using a guide clamp fitted to torch body
- B) Manual rotation on the circumference of the circle
- C) Step by step cutting circular segments
- D) Using hand as a guide

**Answer: A) Using a guide clamp fitted to torch body**

**3. How is the scale and oxide removed from stainless steel weld?**

- A) Cooling in oil
- B) Cooling in sand
- C) Heating up to 9500 to 11000C and quenched in water
- D) Peening

**Answer: C) Heating up to 9500 to 11000C and quenched in water**

**4. Which one of the defect is caused by low current in arc welding?**

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

**Answer: D) Lack of fusion**

**5. What benefit we get out of a carburising flame?**

- A) Suitable for stellite, flame cleaning
- B) Suitable for pure aluminium, cast iron & brass welding
- C) Suitable for brass, copper welding
- D) Suitable for mildsteel, stainless steel

**Answer: A) Suitable for stellite, flame cleaning**

**6. What is the defect due to non cleaning the surfaces before welding?**

- A) Over lap
- B) Lack of fusion
- C) Small cracks in bead
- D) Surface porosity

**Answer: D) Surface porosity**

**7. What are the standard electrode lengths available?**

- A) 250 mm and 350 mm
- B) 350 mm and 450 mm
- C) 500mm and 600mm
- D) 400 mm and 500 mm

**Answer: B) 350 mm and 450 mm**

**8. What defect will occur due to incorrect tilt of blow pipe?**

- A) Weld porosity
- B) Lack of root penetration
- C) Under cut in weld joints
- D) Crater at end

**Answer: C) Under cut in weld joints**

**9. What is the reason for the defect of more spatter during arc welding?**

- A) Wrong angle of electrode
- B) Insufficient root gap
- C) Welding current too high
- D) Use of a very short arc length

**Answer: C) Welding current too high**

**10. What method of heating is done to remove bending distortion of weld joint with wedge shaped area?**

- A) Pipe - needle heating
- B) Spot heating
- C) Triangular heating
- D) Checker - board heating

**Answer: C) Triangular heating**

**11. What is the purpose of cleaning of sheets before doing gas welding?**

- A) To Control distortion
- B) To avoid porosity
- C) To avoid over lap
- D) To avoid under cut

**Answer: B) To avoid porosity**

**12. Which gauging nozzle is selected for rivet head cutting?**

- A) Straight nozzle with six pre-heating holes
- B) Bent nozzle with three pre-heating holes
- C) Flute cutting straight with six holes
- D) Bent nozzle with six holes

**Answer: B) Bent nozzle with three pre-heating holes**

**13. Which filler rod is used for bronze welding of cast iron, malleable iron and copper?**

- A) Manganese, Bronze, filler rod
- B) Copper, Zinc, Nickel filler rod
- C) Copper, Phosperous alloy filler rod
- D) Copper, Phosperous, filler rod

**Answer: B) Copper, Zinc, Nickel filler rod**

**14. What is the base for selecting the nozzle size for gas welding of a pipe?**

- A) Groove angle
- B) Welding position
- C) Pipe wall thickness
- D) Diameter of pipe

**Answer: C) Pipe wall thickness**

15. What is the name of short weld made prior to the welding to hold the plates in perfect alignment?

- A) String bead
- B) Bead weld
- C) Tack weld
- D) Strong weld

**Answer: C) Tack weld**

16. What are the four clock positions, in pipe welding?

- A) 10,4, 1, 7'o clock points
- B) 11, 5, 8, 2'o clock points
- C) 9,3, 12, 6'o clock points
- D) 6, 12, 3, 9'o clock points

**Answer: D) 6, 12, 3, 9'o clock points**

17. What is the base for selecting the nozzle size for gas welding of a pipe?

- A) Pipe wall thickness
- B) Groove angle
- C) Diameter of pipe
- D) Welding position

**Answer: A) Pipe wall thickness**

18. Which size of filler rod should be used to weld 2mm thick MS sheet?

- A) 1.6 mm
- B) 2.0 mm
- C) 2.5 mm
- D) 3.15 mm

**Answer: A) 1.6 mm**

19. What procedure is followed in welding pipe in 5 G position?

- A) Pipe not rotated and pipe axis 450
- B) Pipe welded 12'o clock to 6'o clock downhill
- C) Rotate pipe and weld vertically
- D) Pipe not rotated weld verticality

**Answer: B) Pipe welded 12'o clock to 6'o clock downhill**

20. Which type of arc length produces poor penetration?

- A) Short arc length
- B) Normal arc length
- C) Too long arc length
- D) Long arc length

**Answer: D) Long arc length**

21. Which of the following metals have high thermal conductivity?

- A) Aluminium
- B) Brass
- C) Bronze
- D) Copper

**Answer: D) Copper**

22. What is the main purpose of 'Normalising' steel?

- A) To prevent cracking
- B) To make welding operation easier
- C) To control hardness
- D) To produce fine grain of uniform structure

**Answer: D) To produce fine grain of uniform structure**

23. What is the welding defect, with no fusion of base metal

on root face, side face or between the weld run?

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

**Answer: A) Lack of fusion**

24. What is the welding position as per ASME for a pipe joint held vertically, welding in a horizontal line?

- A) 5G
- B) 1G
- C) 6G
- D) 2G

**Answer: D) 2G**

25. What is the name of small metal particles which are thrown out of the arc during welding?

- A) Slag
- B) Spatters
- C) Weld metal
- D) Stub end

**Answer: B) Spatters**

26. What is the rule for deciding the length of intermediate tacks?

- A) 50mm irrespective of plate thickness
- B) 5 times the plate thickness
- C) 2 to 3 times plate thickness
- D) 3 to 4 times plate thickness

**Answer: D) 3 to 4 times plate thickness**

27. What is the cause of porosity in arc welding?

- A) Low hydrogen electrodes
- B) Carbon electrodes
- C) Damp electrodes
- D) Over size electrodes

**Answer: C) Damp electrodes**

28. Which type welding uses a non - ferrous filler with melting point above 450 Degree, than base metal?

- A) Arc welding
- B) Soldering
- C) Gas welding
- D) Brazing

**Answer: D) Brazing**

29. What is the name of last bit of an discarded electrode?

- A) Dead end
- B) Stub end
- C) Waste end
- D) Red end

**Answer: B) Stub end**

30. How the construction of a nozzle for gouging is identified?

- A) Slightly bent nozzle with circular preheating six holes
- B) Bent nozzle with sectorial preheating holes
- C) Fully bent nozzle with circular preheating holes
- D) Straight nozzle with single preheating hole

**Answer: A) Slightly bent nozzle with circular preheating six holes**

31. What is the purpose of copper coating on mild steel filler rod used in gas welding?



- C) Under cut                      D) Lack of penetration

**Answer: A) Over lap**

49. Which system of welding is free from 'Arc blow'?

- A) Welding with long arc      B) DC straight polarity  
C) AC welding                      D) DC Reverse polarity

**Answer: C) AC welding**

50. What is the reason for lack of fluidity in molten metal in braze welding?

- A) Over heating                      B) Inadequate preheating  
C) Improper cleaning and less use of flux      D) Improper flame

**Answer: B) Inadequate preheating**

51. What type of gas flame is used to weld 2mm mild steel by brazing method?

- A) Neutral flame                      B) Oxidising flame  
C) Carburising flame              D) Oxy-hydrogen flame

**Answer: B) Oxidising flame**

52. Which type of cast iron is soft?

- A) White cast iron                      B) Nodular cast iron  
C) Malleable cast iron              D) Grey cast iron

**Answer: D) Grey cast iron**

53. What type of preheating is done only at the portions to be welded?

- A) Full preheating                      B) Indirect preheating  
C) Local preheating                      D) Direct preheating

**Answer: C) Local preheating**

54. What do you call the non - coated electrodes?

- A) Bare electrode                      B) Deep penetration electrode  
C) Base electrode                      D) Row electrode

**Answer: A) Bare electrode**

55. Why deposited bead is not in uniform size?

- A) Wrong angle of blow pipe      B) Wrong angle of filler rod  
C) Variation in speed of travel and angle      D) Incorrect flame setting

**Answer: C) Variation in speed of travel and angle**

56. What is the 6'o clock position in CW pipe welding refers to in 5G position?

- A) Horizontal position                      B) Over head position  
C) Down hand position                      D) Vertical up hill position

**Answer: B) Over head position**

57. What type of defect will occur due to evaporation of the

trapped gas from the liquid metal?

- A) Arc blow                              B) Crack  
C) Over lap                              D) Porosity

**Answer: D) Porosity**

58. What makes for the buckling of weld joint, in stainless steel during cooling?

- A) Low thermal conductivity      B) Chromium contamination  
C) High thermal conductivity      D) Over heated zone

**Answer: A) Low thermal conductivity**

59. What is the composition of acetylene gas?

- A) C - 82.3% H - 17.7%              B) C - 92.3% H - 7.7%  
C) C - 72.3% H - 27.7%              D) C - 90% H - 10%

**Answer: B) C - 92.3% H - 7.7%**

60. How the repairs of cracks in cast iron component carried out?

- A) Local preheating, leftward welding technique flame heating each layer      B) Similar to arc welding mild steel plate  
C) Cracks repaired using appropriate electrode              D) By using clamps during welding process

**Answer: A) Local preheating, leftward welding technique flame heating each layer**

61. Which type of filler rod shall contain higher percentage of iron?

- A) Alloy type of non - ferrous metals      B) Alloy type of ferrous metals  
C) Non - ferrous                              D) Ferrous

**Answer: D) Ferrous**

62. What is the main reason, that aluminium is difficult to weld?

- A) Better strength weight ratio              B) Less weight  
C) High thermal conductivity      D) Oxide formation

**Answer: D) Oxide formation**

63. What is the root run?

- A) Backing run                              B) The second run is root run  
C) The first run is root run              D) The third run is root run

**Answer: C) The first run is root run**

64. What thickness of plate, gas welding by forehand technique can be used without edge preparation?

- A) Up to 3.15 mm                              B) Up to 5 mm  
C) Up to 2.5 mm                              D) Up to 4 mm

**Answer: A) Up to 3.15 mm**

65. What should be the bevel angle for edge preparation of

6mm thick pipe welding?

- A) 70 Degree - 75 Degree    B) 60 Degree - 65 Degree  
C) 40 Degree - 45 Degree    D) 30 Degree - 35 Degree

**Answer: D) 30 Degree - 35 Degree**

**66.** Which metal in welding process is subjected to ?Weld decay? defect?

- A) Stainless steel                      B) Mild steel  
C) Copper                                D) Brass

**Answer: A) Stainless steel**

**67.** What is the name of the steel material which are not weldable?

- A) Ferrite and martensitic stainless steel    B) Austenitic stainless steel  
C) Medium carbon steel                      D) High carbon steel

**Answer: A) Ferrite and martensitic stainless steel**

**68.** Which size of filler rod should be used to weld 2.5mm thick plates, using nozzle 5 by leftward technique?

- A) 2.50 mm                                B) 1.60 mm  
C) 3.15 mm                                D) 2.00 mm

**Answer: D) 2.00 mm**

**69.** How many segments are to be selected for welding 50 mm j pipe?

- A) 4 segments                              B) 8 segments  
C) 6 segments                              D) 3 segments

**Answer: A) 4 segments**

**70.** Which are the common alloying element of brass?

- A) Bismuth and tin                      B) Copper & zinc  
C) Copper and tin                        D) Antimony and tin

**Answer: B) Copper & zinc**

**71.** Which one of the below is to control distortion?

- A) Use few passes with large dia electrode    B) Use more passes with small electrode  
C) Use small size electrode                      D) Use large size electrode

**Answer: A) Use few passes with large dia electrode**

**72.** What is the welding defect in base metal gets melted and a groove formed along the toe of the weld?

- A) Reinforcement                        B) Blow holes  
C) Lack of penetration                      D) Undercut

**Answer: D) Undercut**

**73.** What should be the pre - heating temperature of aluminium job for gas welding?

- A) 350 Degree Centigrade - 400 Degree Centigrade    B) 200 Degree Centigrade - 400 Degree Centigrade

- C) 250 Degree Centigrade - 400 Degree Centigrade    D) 300 Degree Centigrade - 400 Degree Centigrade

**Answer: C) 250 Degree Centigrade - 400 Degree Centigrade**

**74.** Which type of cast iron offers greater resistance to shock?

- A) White cast iron                        B) Nodular cast iron  
C) Grey cast iron                        D) Malleable cast iron

**Answer: D) Malleable cast iron**

**75.** How many groups of mild steel pipes are there?

- A) Two groups                              B) Three groups  
C) Four groups                              D) Five groups

**Answer: A) Two groups**

**76.** Which is used to cut thin pipes of smaller sizes?

- A) Hack sawing                              B) Chisel  
C) Pipe cutter                              D) Lathe parting tool

**Answer: C) Pipe cutter**

**77.** What is the bevel angle for pipe welding butt joint if wall thickness is more than 5mm?

- A) 80 Degree                                B) 90 Degree  
C) 75 Degree                                D) 60 Degree

**Answer: C) 75 Degree**

**78.** What is the effect of expansion and contraction due to heat in welding?

- A) Metal force                              B) Distortion  
C) Peening                                D) Arc blow

**Answer: B) Distortion**

**79.** How many equal divisions should be made while developing a 'T' pipe joint?

- A) 6 equal divisions                        B) 9 equal divisions  
C) 12 equal divisions                        D) 4 equal divisions

**Answer: C) 12 equal divisions**

**80.** Which welding the slag inclusion defect will occur?

- A) Tungsten inert gas welding                      B) Manual metal arc welding  
C) Malattic inert gas welding                      D) Oxy - acetylene gas welding

**Answer: B) Manual metal arc welding**

**81.** Which size of CCMS filler rod is to be used for welding plate of 8mm thick with ?V? edge preparation?

- A) Dia 6.3 mm                              B) Dia 3.15 mm  
C) Dia 5.0 mm                              D) Dia 4.0 mm

**Answer: C) Dia 5.0 mm**

**82.** Which type of cast iron possess higher compressive

strength?

- A) Malleable cast iron
- B) Grey cast iron
- C) Nodular cast iron
- D) White cast iron

**Answer: B) Grey cast iron**

**83.** Which one of the following methods of welding is not a method used to control distortion?

- A) Intermittent welding
- B) Back step welding
- C) Skip welding
- D) Right hand welding

**Answer: D) Right hand welding**

**84.** What is the cause of hair line separation in the bead in arc welding?

- A) Wrong selection of electrode
- B) Slow cooling
- C) Fast cooling
- D) Long arc length

**Answer: C) Fast cooling**

**85.** Which of the following aluminium alloys consists of 1% iron & silicon?

- A) Duralumin
- B) Wrought alloy
- C) Commercially pure aluminium
- D) Aluminium cast alloy

**Answer: C) Commercially pure aluminium**

**86.** What is the pre-heating temperature of cast iron?

- A) 300 to 350 Degree Centigrade
- B) 250 to 350 Degree Centigrade
- C) 200 to 310 Degree Centigrade
- D) 350 to 450 Degree Centigrade

**Answer: C) 200 to 310 Degree Centigrade**

**87.** What is the purpose of oxygen lever in gas cutting?

- A) Pre heat the base metal
- B) Push the molten metal
- C) Remove the excess metal
- D) Release excess oxygen and to push the molten metal

**Answer: D) Release excess oxygen and to push the molten metal**

**88.** What procedure is to be followed for welding pipes under 6G position?

- A) Pipe not rotated and pipe axis 45 Degree angle deposit weld flat, vertical
- B) Pipe not rotated weld deposit horizontal
- C) Pipe not rotated weld vertical
- D) Rotate pipe and deposit weld vertical

**Answer: A) Pipe not rotated and pipe axis 45 Degree angle deposit weld flat, vertical**

**89.** What is the grade of hacksaw blades with pitch 0.8mm?

- A) Medium
- B) Fine
- C) Course
- D) Rough

**Answer: B) Fine**

**90.** What is the purpose of setting root gap?

- A) To get good penetration
- B) To over some under cut
- C) To control distortion
- D) Gap get closed due to expansion

**Answer: A) To get good penetration**

**91.** Which type of polarity is used in welding non ferrous metals?

- A) Straight polarity
- B) Reverse polarity
- C) AC Transformer
- D) DC Motor generator

**Answer: B) Reverse polarity**

**92.** Which type of cast iron possess higher hardness?

- A) Grey cast iron
- B) Nodular cast iron
- C) Malleable cast iron
- D) White cast iron

**Answer: D) White cast iron**

**93.** What does the third digit of AWS codification in EB 5426HJX represent?

- A) Type of tensile strength
- B) Type of covering
- C) Type of current
- D) Type of welding position

**Answer: D) Type of welding position**

**94.** What is the use of intermediate tacks on a weld setting of plates?

- A) Align and to maintain the position of joint
- B) To control defects in weld joint
- C) To reduce the welding run
- D) To speed up the welding joint

**Answer: A) Align and to maintain the position of joint**

**95.** Which accessory is used to protect the eyes during gas welding?

- A) Colour goggles
- B) Helmet
- C) Grinding goggles
- D) Hand screen

**Answer: A) Colour goggles**

**96.** What does the letter ?X? indicate in the electrode classification of EB5426 H1 J X?

- A) Covered electrode
- B) Radio graphic quality electrode
- C) Hydrogen controlled electrode
- D) Increase metal recovery

**Answer: B) Radio graphic quality electrode**

**97.** What size of CCMS filler rod is used for finish run of Dia 50mm pipe root welded using Dia 1.65 filler?

- A) Dia 3.0 mm
- B) Dia 4.0 mm
- C) Dia 1.6 mm
- D) Dia 3.5 mm

**Answer: A) Dia 3.0 mm**

98. What is the current range required for 3.15mm dia MS electrode in arc welding?

- A) 50 - 60 A                      B) 100 - 110 A  
C) 70 - 80 A                      D) 40 - 50 A

**Answer: B) 100 - 110 A**

99. What flux is to be used for gas welding stainless steel plates?

- A) Zinc chloride and potassium dichromate paste    B) Anti - Borox  
C) Cryolite and berium chloride                      D) Borox flux

**Answer: A) Zinc chloride and potassium dichromate paste**

100. Which welding process enables to weld dissimilar metals?

- A) Brazing                              B) Fusion welding  
C) Spot welding                      D) Seam welding

**Answer: A) Brazing**

101. What is the main function of the flux coating in electrodes?

- A) To prevent rusting                      B) To increase welding current  
C) To control arc temperature                      D) To stabilize the arc

**Answer: D) To stabilize the arc**

102. Which heat treatment process causes the reduction of brittleness in the steel?

- A) By normalising                      B) By annealing  
C) By tempering                      D) By hardening

**Answer: C) By tempering**

103. Which type of stainless steel is weldable?

- A) Stabilized type                      B) Ferrite type  
C) Chromium type                      D) Nickel type

**Answer: B) Ferrite type**

104. What are the defects in generated acetylene gas?

- A) Carbon monoxide unburit    B) Hydrogen, lime dust, ammonia & water vapour  
ash  
C) Hydrogen, dust particles,    D) Oxygen, hydrogen & ash  
carbon

**Answer: B) Hydrogen, lime dust, ammonia & water vapour**

105. What is the range of pressure used in an oxygen cylinder used in gas welding?

- A) 110 to 150 Kg/cm<sup>2</sup>                      B) 120 to 150 Kg/cm<sup>2</sup>  
C) 90 to 150 Kg/cm<sup>2</sup>                      D) 100 to 150 Kg/cm<sup>2</sup>

**Answer: B) 120 to 150 Kg/cm<sup>2</sup>**

106. What type of edge preparation is needed, for gas welding a pipe, with wall thickness 6mm?

- A) Single bevel                      B) Single -V  
C) Square edge with root    D) Square edge without root gap

**Answer: B) Single -V**

107. What is the angle of pipe axis with the base for making an elbow joint?

- A) 75 Degree                      B) 90 Degree  
C) 30 Degree                      D) 45 Degree

**Answer: B) 90 Degree**

108. What is the result of inner cone of flame touching the molten metal while welding?

- A) Cause to over lap                      B) Cause to back fire  
C) Cause to flame snape out    D) Cause to porosity

**Answer: B) Cause to back fire**

109. Which element filler rod is used to weld stainless steel plates?

- A) Molybdenum, columbiam    B) Punodium  
C) Osmium                      D) Argentinum

**Answer: A) Molybdenum, columbiam**