

Duration: 30 Mins

Total Marks: 109

Q.ID: ITISKILL7898DV

1. Which type of cast iron possess higher hardness?

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

Answer: B) White cast iron

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

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

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

3. Which type of arc length produces poor penetration?

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

Answer: C) Long arc length

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

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

Answer: C) 4 segments

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

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

Answer: B) Type of welding position

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

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

Answer: D) Lack of fusion

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

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

Answer: D) Reverse polarity

8. What is the process of hot weld joint rapidly hammered to

relieve internal stresses?

- A) Annealing B) Peening
- C) Straightening D) Heat treatment

Answer: B) Peening

9. Which of the following produces unstable arc?

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

Answer: B) Long arc length

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

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

Answer: B) Surface porosity

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

- A) 90 to 150 Kg/cm² B) 120 to 150 Kg/cm²
- C) 110 to 150 Kg/cm² D) 100 to 150 Kg/cm²

Answer: B) 120 to 150 Kg/cm²

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

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

Answer: B) 75 Degree

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

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

Answer: C) Distortion

14. What is the percentage of carbon in medium carbon steel?

- A) 0.05% to 0.30% B) 0.6% to 1.2%
- C) 0.05% to 0.8% D) 0.30% to 0.6%

Answer: D) 0.30% to 0.6%

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

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

Answer: C) Copper

16. What should be the bevel angle for edge preparation of 6mm thick pipe welding?

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

Answer: A) 30 Degree - 35 Degree

17. Which type of stainless steel is weldable?

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

Answer: A) Ferrite type

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

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

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

19. What are the defects in generated acetylene gas?

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

Answer: A) Hydrogen, lime dust, ammonia & water vapour

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

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

Answer: D) Commercially pure aluminium

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

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

Answer: B) Under cut in weld joints

22. Which type of cast iron is soft?

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

Answer: C) Grey cast iron

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

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

Answer: B) Molybdenum, columbiam

24. Which welding process enables to weld dissimilar metals?

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

Answer: C) Brazing

25. How a pipe is specified?

- A) Outer dia only
C) Outer dia x inner dia x length
- B) Dia only
D) Length only

Answer: C) Outer dia x inner dia x length

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

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

Answer: B) Fine

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

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

Answer: D) To stabilize the arc

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

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

Answer: C) Welding current too high

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

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

Answer: C) 90 Degree

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

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

Answer: D) Stub end

31. Which process causes the increase in the strength of part after fabrication?

- A) Quenching
C) Normalising
- B) Hardening
D) Tempering

Answer: B) Hardening

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

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

Answer: D) Damp electrodes

33. What will happen if the current is low while arc welding?

- A) Base metal edges not melt properly
- B) Electrode fused speedily
- C) Spatters are more
- D) Formed over lap

Answer: A) Base metal edges not melt properly

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

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

Answer: A) 3 to 4 times plate thickness

35. Why deposited bead is not in uniform size?

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

Answer: D) Variation in speed of travel and angle

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

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

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

37. What should be the angle of filler rod, by rightward welding?

- A) 40 Degree - 50 Degree
- B) 60 Degree - 70 Degree
- C) 30 Degree - 40 Degree
- D) 50 Degree - 60 Degree

Answer: C) 30 Degree - 40 Degree

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

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

Answer: C) Low thermal conductivity

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

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

Answer: C) Dia 3.0 mm

40. How many groups of mild steel pipes are there?

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

Answer: B) Two groups

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

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

Answer: A) Inadequate preheating

42. Which type of arc does not have control on the molten pool?

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

Answer: A) Long arc length

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

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

Answer: A) Oxidising flame

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

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

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

45. Which filler rod to be used for gas welding aluminium?

- A) Silicon - brass
- B) Copper - Silver alloy
- C) Silicon - manganese
- D) Pure aluminium, 5% silicon aluminium alloy

Answer: D) Pure aluminium, 5% silicon aluminium alloy

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

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

Answer: A) 100 - 110 A

47. Which gauging nozzle is selected for rivet head cutting?

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

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

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

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

Answer: B) Ferrite and martensitic stainless steel

49. Which element is present in contact electrodes in large proportion?

- A) Carbon
- B) Manganese
- C) Iron powder
- D) Silicon

Answer: C) Iron powder

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

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

Answer: B) Zinc chloride and potassium dichromate paste

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

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

Answer: C) Radio graphic quality electrode

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

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

Answer: A) 1.6 mm

53. What size of electrode is used to weld 5 mm wall thickness pipe?

- A) Dia 4.00 mm
- B) Dia 5.00 mm
- C) Dia 3.15 mm
- D) Dia 2.5 mm

Answer: C) Dia 3.15 mm

54. 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

55. What benefit we get out of a carburising flame?

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

Answer: C) Suitable for stellite, flame cleaning

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

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

Answer: A) Tack weld

57. What is the root run?

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

Answer: B) The first run is root run

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

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

Answer: D) Pipe wall thickness

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

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

Answer: C) Copper, Zinc, Nickel filler rod

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

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

Answer: D) By tempering

61. Which test indicates the hardness of a metal?

- A) Tensile test
- B) Charpy izod test
- C) Brinell test
- D) Ultrasonic inspection

Answer: C) Brinell test

62. 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

63. 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 gap
- D) Square edge without root gap

Answer: B) Single -V

64. Which are the common alloying element of brass?

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

Answer: B) Copper & zinc

65. What is the name of small metal particles which are

thrown out of the arc during welding?

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

Answer: C) Spatters

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

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

Answer: C) Up to 3.15 mm

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

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

Answer: D) Brazing

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

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

Answer: B) Pipe wall thickness

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

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

Answer: A) To avoid porosity

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

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

Answer: C) 12 equal divisions

71. What is the name of the steel material that is not weldable?

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

Answer: B) Ferrite and martensitic stainless steel

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

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

Answer: B) Pipe cutter

73. What is the composition of acetylene gas?

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

Answer: D) C - 92.3% H - 7.7%

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

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

Answer: B) Oxide formation

75. 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 5.0 mm
- C) Dia 3.15 mm
- D) Dia 4.0 mm

Answer: B) Dia 5.0 mm

76. Which type of cast iron possess higher compressive strength?

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

Answer: B) Grey cast iron

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

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

Answer: D) Local preheating

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

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

Answer: B) Over head position

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

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

Answer: A) Bare electrode

80. What are the standard electrode lengths available?

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

Answer: B) 350 mm and 450 mm

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

- A) Rust proof
- B) Water proof
- C) Moisture proof
- D) Increased filler dia

Answer: A) Rust proof

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

- A) 5G
- B) 1G

C) 2G D) 6G

Answer: C) 2G

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

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

Answer: C) Ferrous

84. What type of defect will occur due to evaporation of the trapped gas from the liquid metal?

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

Answer: D) Porosity

85. What does the fourth digit indicate as per AWS electrode coding?

- A) Welding current
B) Welding position
C) Type of flux coating
D) Tensile strength

Answer: C) Type of flux coating

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

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

Answer: B) 200 to 310 Degree Centigrade

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

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

Answer: A) To produce fine grain of uniform structure

88. What is the purpose of setting root gap?

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

Answer: A) To get good penetration

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

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

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

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

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

Answer: C) AC welding

91. 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

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

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

Answer: D) Undercut

93. How is the electrode size identified?

- A) Diameter of inner core wire
B) Thickness of flux coated wire
C) Length of electrode
D) Diameter (over all) of electrode

Answer: A) Diameter of inner core wire

94. Which welding the slag inclusion defect will occur?

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

Answer: A) Manual metal arc welding

95. What is the welding defect, with no fusion of base metal on root face, side face or between the weld run?

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

Answer: C) Lack of fusion

96. What flux is used in welding brass?

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

Answer: A) Borax paste

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

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

Answer: A) Malleable cast iron

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

- A) Pipe welded 12'o clock to 6'o clock downhill
B) Pipe not rotated and pipe axis 450

- C) Pipe not rotated weld vertically
D) Rotate pipe and weld vertically

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

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

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

Answer: D) Right hand welding

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

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

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

101. What is the defect of metal flowing into the surface of base metal without fusing it?

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

Answer: A) Over lap

102. Which one of the below is to control distortion?

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

Answer: A) Use few passes with large dia electrode

103. What is the process of heating steel to specific temperature and cooling suddenly?

- A) Annealing
B) Quenching
C) Tempering
D) Hardening

Answer: B) Quenching

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

- A) Step by step cutting circular segments
B) Using a guide clamp fitted to torch body

- C) Manual rotation on the circumference of the circle
D) Using hand as a guide

Answer: B) Using a guide clamp fitted to torch body

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

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

Answer: B) Stainless steel

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

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

Answer: C) Colour goggles

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

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

Answer: C) Cause to back fire

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

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

Answer: C) Triangular heating

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

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

Answer: B) Slightly bent nozzle with circular preheating six holes