

147/2014

1. Which non-ferrous metal is reddish in colour ?  
(A) Aluminium      (B) Gold      (C) Mild Steel      (D) Copper
2. Argon gas cylinder is painted with \_\_\_\_\_.  
(A) Blue colour      (B) Grey colour      (C) Black colour      (D) Maroon colour
3. Which metal has highest melting point ?  
(A) Tungsten      (B) Aluminium      (C) Bronze      (D) Cast Iron
4. Which one of the welding machines given below can be used for both AC and DC welding ?  
(A) Engine driven welding generator      (B) Motor driven welding generator  
(C) Welding transformer      (D) Welding rectifier
5. Which one is suitable for resistance welding ?  
(A) Manual Metal Arc Welding      (B) TIG Welding  
(C) MIG Welding      (D) Spot Welding
6. It is the distance between Electrode and base metal while welding is called :  
(A) Arc Distortion      (B) Blow Hole      (C) Arc Length      (D) Arc Blow
7. The energy source of Thermit Welding is :  
(A) Mechanical Energy      (B) Chemical Energy  
(C) Electrical Energy      (D) None of these
8. State the nozzle size you will select to weld a 3.15 mm thick mild steel sheet :  
(A) 3      (B) 5      (C) 7      (D) 10
9. The measuring instrument used in resistance :  
(A) Ammeter      (B) Voltmeter      (C) Lactometer      (D) Ohm meter

10. Which are the two metals contained in a solder ?  
 (A) Tin and Lead (B) Copper and Lead  
 (C) Copper and Tin (D) Iron and Chromium
11. Rectifier is used for converting \_\_\_\_\_.  
 (A) DC to AC (B) DC to DC (C) AC to AC (D) AC to DC
12. To which terminal of the D.C machine the electrode cable is connected in straight polarity ?  
 (A) Positive (B) Negative (C) Neutral (D) None of these
13. All oxygen regulator connection has \_\_\_\_\_ threaded.  
 (A) Left hand (B) Right hand (C) V type (D) None of these
14. How much current you will set for 4 MMØ medium coated mild steel electrode ?  
 (A) 90 to 110 amp (B) 180 to 200 amp (C) 150 to 170 amp (D) 70 to 90 amp
15. What is the percentage carbon present in mild steel ?  
 (A) 0.15 to 0.3% (B) 0.05 to 0.1% (C) 0.5 to 0.8% (D) 0.8 to 1.4%
16. A \_\_\_\_\_ Flame is recommended when preheating of oxy-acetylene cutting method.  
 (A) Oxidizing (B) Neutral (C) Carburizing (D) CO<sub>2</sub>
17. Boiling point of Oxygen \_\_\_\_\_.  
 (A) -195.8°C (B) -188.7°C (C) -182.9°C (D) -172.8°C
18. The frequency of AC is \_\_\_\_\_ Cycle/second.  
 (A) 40 (B) 50 (C) 60 (D) 70
19. Name the heat treatment process used to improve softness and ductility in mild steel :  
 (A) Annealing (B) Normalizing (C) Tempering (D) Hardening
20. What should be the distance between the tip of the cutting nozzle from the top surface of the plate to be cut ?  
 (A) 5 mm (B) 3 mm (C) 2 mm (D) 7 mm

21. The substances through which electricity does not pass are called \_\_\_\_\_.
- (A) Conductors (B) Insulators (C) Bad Conductors (D) Bad Insulators
22. The function of a gas regulator is to \_\_\_\_\_.
- (A) get different types of flames  
(B) mix the gases in the required proportion  
(C) change the volume of gas flowing to the blow pipe  
(D) set the working pressure
23. Which weld defect occurs on a lap fillet joint due to improper weaving of the electrode in the covering run ?
- (A) Crack (B) Undercut  
(C) Edge of plate melted off (D) Lack of fusion
24. \_\_\_\_\_ is the distance between the end of this contact tube and the tip of the electrode in MIG/MAG Welding.
- (A) Arc Length (B) Long Arc (C) Arc Blow (D) Stick Out
25. A chemical powder or paste used to dissolve oxide is called :
- (A) Slag (B) Aluminium Powder  
(C) Flux (D) Iron Oxide
26. The coating factor used to make medium coated electrode is \_\_\_\_\_.
- (A) 1.4 to 1.5 (B) 1.25 to 3 (C) 1.6 to 2.2 (D) Above 2.2
27. Which type of flame is used for welding aluminium ?
- (A) Strictly neutral flame (B) Oxidizing flame  
(C) Carburizing flame (D) Slight Carburizing flame
28. What is the maximum length of a stub end as per standard ?
- (A) 20 to 30 mm (B) 30 to 40 mm (C) 40 to 50 mm (D) 60 to 70 mm

29. The percentage of carbon in acetylene gas is \_\_\_\_\_.
- (A) 99%                      (B) 92%                      (C) 89%                      (D) 85%
30. The size of the nozzle to be selected for gas welding process varies according to the \_\_\_\_\_.
- (A) thickness of metal                      (B) welding position  
(C) size of filler rod                      (D) pressure of Gas
31. What defect is caused by gas entrapment in arc welding process ?
- (A) Crack                      (B) Slag                      (C) Lack of fusion                      (D) Porosity
32. The angle of blow pipe to the line of weld in leftward welding technique is :
- (A) 40 to 50°                      (B) 50 to 60°                      (C) 60 to 70°                      (D) 70 to 80°
33. What is the name of the unit of a TIG welding machine which helps to strike the arc without touching the electrode with the base metal ?
- (A) Wire feeder                      (B) High frequency unit  
(C) Shielding gas                      (D) DC suppressor unit
34. Standard size of flux coated electrode length is :
- (A) 350 mm, 450 mm                      (B) 450 mm, 550 mm  
(C) 250 mm, 350 mm                      (D) 150 mm, 250 mm
35. What is the melting point of aluminium ?
- (A) 1530°C                      (B) 850°C                      (C) 659°C                      (D) 250°C
36. The colour of Oxygen cylinder is \_\_\_\_\_.
- (A) Blue                      (B) Black                      (C) Red                      (D) Yellow
37. A groove or channel formed in the parent metal at the toe of the weld is called :
- (A) Undercut                      (B) Distortion                      (C) Arc Blow                      (D) Porosity
38. Name the power source suitable for welding aluminium in TIG welding :
- (A) AC welding machine                      (B) DC welding machine  
(C) Welding generator                      (D) None of these

39. \_\_\_\_\_ in this joint the edges of thin sheets to be joined are folded, hooked together and then pressed to form a joint.  
(A) Revetting (B) Bolting (C) Soldering (D) Seaming
40. The process of hammering of the weld metal immediately after it is deposited is called :  
(A) Pressing (B) Dressing (C) Peening (D) Tinning
41. What is the temperature range of oxy-acetylene flames ?  
(A) 3100 to 3300°C (B) 2600 to 2800°C (C) 3400 to 3600°C (D) 3600 to 3800°C
42. When the arc and molten metal deviate from their regular path due to magnetic disturbances, it is called as \_\_\_\_\_.  
(A) Arc blow (B) Blowhole (C) Distortion (D) Porosity
43. For removing water vapour from acetylene gas the material used is :  
(A) Filter wool (B) Steel wool (C) Paper filters (D) Pumic stone
44. Which flux is suitable for welding brass by gas welding ?  
(A) Alotectic flux (B) Zinc oxide and potassium dichromate flux  
(C) Borax flux (D) None of these
45. What is the purpose of copper coating on the mild steel filler rods ?  
(A) To conduct the heat faster  
(B) To avoid rusting of mild steel filler rod during long storage  
(C) To increase the strength of the joint  
(D) To give good appearance to the filler rod
46. The welding position of weld is defined by two parameters :  
(A) Weld slope and weld angle (B) Weld angle and weld rotation  
(C) Weld slope and weld cut (D) Weld slope and weld rotation
47. The type of electrode used for welding aluminium by TIG welding process is \_\_\_\_\_.  
(A) Pure tungsten electrode (B) Zirconiaded tungsten electrode  
(C) Thoriated tungsten electrode (D) Ceriated tungsten electrode

48. What step will eliminate the undercut defect in arc welding ?  
(A) Use buttering run (B) Pre-heat the plates to be welded  
(C) Decrease the speed of welding (D) Increase the speed of welding
49. In manual metal arc welding the flux coating is to give deep penetration characteristics would contain :  
(A) Cellulose (B) Manganese  
(C) Iron Oxide (D) Calcium Carbonate
50. What is the melting temperature of copper ?  
(A) 659°C (B) 850°C (C) 1930°C (D) 1083°C
51. Oxygen is \_\_\_\_\_.  
(A) Fuel Gas (B) Supporter of Combustion  
(C) An inert gas (D) None of these
52. \_\_\_\_\_ Flame is used in Oxy-acetylene gas welding of brass.  
(A) Neutral (B) Carbonizing  
(C) Oxidizing (D) None of these
53. Purpose of using Jigs and Fixtures of clamps for holding work in welding is to prevent :  
(A) Arc Blow (B) Distortion (C) Oxidation (D) Undercut
54. \_\_\_\_\_ Gas is generated by the reaction of water and calcium carbide.  
(A) Hydrogen (B) Acetylene (C) Argon (D) Oxygen
55. Which one of the following metals has highest thermal conductivity ?  
(A) Zinc (B) Aluminium (C) Mild steel (D) Copper
56. Some metal particles which are thrown out of the arc during welding along with the weld are called :  
(A) Porosity (B) Overlap (C) Spatters (D) Undercut

57. Name the non-destructive test in which sound waves of high frequency are used :
- (A) X-ray test      (B) Ultrasonic test      (C) Gama ray test      (D) Fatigue test
58. The angle of filler rod to the work in rightward welding technique in gas welding is :
- (A) 50 - 60°      (B) 20 - 30°      (C) 40 - 50°      (D) 30 - 40°
59. The root opening on square butt welding is given :
- (A) To obtain penetration      (B) To control the distortion  
(C) To keep the job alignment      (D) To maintain correct dimension
60. There are two methods by which flux coating is applied on the electrode core wire which are they ?
- (A) Dipping and Sucking      (B) Dipping and Extrusion  
(C) Sucking and Blowing      (D) Blowing and Extrusion
61. In an acetylene cylinder the acetylene is dissolved in :
- (A) Water      (B) Carbon Dioxide  
(C) Acetone      (D) Mercury
62. Depression formed at the end of weld bead is called :
- (A) Blow hole      (B) Crater      (C) Spatter      (D) Reinforcement
63. Which one of the following is a radiographic test ?
- (A) X-ray test      (B) Ultrasonic test  
(C) Magnetic Particle test      (D) Fatigue test
64. Oxy - Acetylene flame cutting process is :
- (A) Physical      (B) Chemical      (C) Thermal      (D) None of these
65. For complete combustion one volume of acetylene requires :
- (A) 1.5 Volume of oxygen      (B) 2.5 Volume of oxygen  
(C) 3.5 Volume of oxygen      (D) 4.5 Volume of oxygen

66. The purpose of central hole in the tip of the cutting blowpipe is :
- (A) Supply of oxygen gas for pre-heating
  - (B) Supply of acetylene for pre - heating
  - (C) Supply of oxygen for cutting
  - (D) Supply of acetylene for cutting
67. On which of the following welding processes the arc is not visible to welder :
- (A) MIG
  - (B) GAS Welding
  - (C) SAW
  - (D) SMAW
68. Columbium added electrode is used for welding stainless steel to prevent :
- (A) Distortion
  - (B) Excess Penetration
  - (C) Spatter
  - (D) Weld Decay
69. The raw materials of Calcium Carbide are lime stone and \_\_\_\_\_.
- (A) Quick Lime
  - (B) Coke
  - (C) Calcium Oxide
  - (D) Carbon monoxide
70. Depth of fusion from the surface of the weld metal is known as :
- (A) Penetration
  - (B) Distortion
  - (C) Fusion Zone
  - (D) Reinforcement
71. Stainless steel contains as alloying elements of :
- (A) Copper and Zinc
  - (B) Copper and Tin
  - (C) Chromium and Nickel
  - (D) Iron and Carbon
72. In TIG Welding, the shielding gas used is :
- (A) Argon
  - (B) Carbon Dioxide
  - (C) Oxygen
  - (D) Hydrogen
73. In Oxy-Acetylene process supply of acetylene generator is called :
- (A) High pressure system
  - (B) Medium pressure system
  - (C) Low pressure system
  - (D) None of these



74. Flux is not required for gas welding of \_\_\_\_\_.
- (A) Copper            (B) Brass            (C) Mild Steel            (D) Aluminium
75. Which two gases from the atmosphere must be prevented from entering the weld metal ?
- (A) Oxygen and Nitrogen            (B) Nitrogen and Argon  
(C) Oxygen and Argon            (D) Argon and Helium
76. Duty cycle of welding machine is :
- (A) 60%            (B) 50%            (C) 40%            (D) 70%
77. The distance between the toe and root of the weld is called :
- (A) Root run            (B) Leg length            (C) Arc length            (D) Reinforcement
78. Lack of penetration in Arc welding due to :
- (A) High Current            (B) Low Current  
(C) Short Arc Length            (D) Too Low Welding Speed
79. What is the Chemical symbol of Acetylene ?
- (A)  $C_2H_2$             (B)  $H_2O$             (C)  $CaC_2$             (D)  $CaO_2$
80. Which type of energy is used in Laser beam welding ?
- (A) Light energy            (B) Electrical energy            (C) Heat energy            (D) None of these
81. Where the Jawaharlal Nehru Tropical Botanic Garden (JNTBGRI) situated ?
- (A) Mannuthy            (B) Peechi            (C) Aluva            (D) Palode
82. Who among the following resorted to guerilla warfare in the revolt of 1857 ?
- (A) Tantia Topi            (B) Kanwar Singh            (C) Bhakt Khan            (D) Nanassaheb

83. The next ICC World Cup Cricket will be held at :  
(A) England and Ireland (B) South Africa  
(C) Australia and Newzealand (D) West Indies
84. Who was popularly known as 'Kerala Mopasang' ?  
(A) C.V. Raman Pillai (B) Thakazhi Sivasankara Pillai  
(C) Changanpuzha Krishna Pillai (D) S.K. Pottakkad
85. Who started 'Pan thibhojanam' (inter-dining) in Kerala ?  
(A) Sree Narayana Guru (B) Brahmananda Sivayogi  
(C) Vagbhatananda (D) Thycaud Ayya
86. Which city is popularly known as 'Steel City' ?  
(A) Jamshadpur (B) Ranchi  
(C) Jaipur (D) Visakhapattanam
87. The apex level agency of 'Kudumba Sree' project in Kerala :  
(A) SHG (B) A D S (C) C D S (D) S S A
88. Which was the journal that functioned as the mouthpiece of S N D P ?  
(A) Yoganadam (B) Service  
(C) Kaumudi (D) Unni Nambuthiri
89. Who is the present Chief Minister of Telangana ?  
(A) Chandra Babu Naidu (B) Naveen Patnaik  
(C) Nabam Tuki (D) K. Chandrasekhara Rao
90. The founder of 'Athma Vidhya Sangham' :  
(A) Swamy Agamananda (B) Vagbhadanandan  
(C) Chattambi Swamikal (D) V.T. Bhattathirippad

91. Where did the sepoys break out in open revolt on May 10<sup>th</sup> 1857 ?  
(A) Kanpur (B) Barrakpore (C) Berhampore (D) Meerut
92. The first president of Indian National Congress was :  
(A) A.O. Hume (B) Dadabhai Naoroji  
(C) W.C. Banerjee (D) Gopalakrishna Gokhale
93. Who discovered the south-western monsoon ?  
(A) Pliny (B) Hippalus (C) Ptolomy (D) Erathosthenese
94. The Arabean Sea and Persian Gulf are connected by the :  
(A) Hormuz Strait (B) Palk Strait  
(C) Strait of Messina (D) Strait of Bab-el-Mandeb
95. Who has been chosen for the Jnanpeeth Award 2013 ?  
(A) Mahaswetha devi (B) Sugathakumari  
(C) Ravuri Bharadwaj (D) Kedarnath Singh
96. Which Central Ministry conducts the census every 10 year ?  
(A) Foreign Ministry (B) Defence Ministry  
(C) Home Ministry (D) H R D Ministry
97. Article 360 explains :  
(A) Special status for Jammu and Kashmir  
(B) Financial Emergency  
(C) Internal Emergency  
(D) Declaration of President Rule

98. Name the type of mosquito which spread Malaria :

- (A) Anopheles Mosquito                      (B) Aedes Aegypti  
(C) Ochierotatus                              (D) Culex

99. When the Second Round Table Conference held ?

- (A) 1930                      (B) 1931                      (C) 1929                      (D) 1932

100. In India the standard time is fixed on the basis of standard meridian which passes through :

- (A) Dwaraka                      (B) Kovalam                      (C) Puri                      (D) Allahabad

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