

PSC Tradesman - Smithy - Forging And Heat Treating - Technical Education Examination Previous Year Question Paper

***Exam Name: Tradesman - Smithy - Forging
And Heat Treating - Technical Education***

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Medium of Questions: English



185/2015

1. Smithy shope is the place where metals are :
(A) Selling (B) Packing (C) Cooling (D) Heating
2. A ferrous metal is one which :
(A) Contains aluminium (B) Does not contain iron
(C) Contains iron (D) Mixture of copper and brass
3. Tongs is a tool for :
(A) Drilling (B) Cleaning (C) Holding (D) Placing
4. Mild steel belongs to the category of :
(A) Low-carbon steel (B) Tool steel
(C) High carbon steel (D) Medium-carbon steel
5. Anvil is used in :
(A) Foundry (B) Smithy (C) Store (D) Office
6. Mild steel has got the following metallic structure :
(A) Close packed hexagonal (B) Face centered cubic structure
(C) Orthorhombic crystalline (D) Body centered cubic structure
7. Hammer is a :
(A) Striking tool (B) Holding tool (C) Cleaning tool (D) Painting tool
8. An important product manufactured by the rolling process is :
(A) Rollers (B) I-section (C) Discs (D) Metal cans
9. In smithy metals are heated up to :
(A) Red hot (B) White hot (C) Melting point (D) Freezing point
10. In malleable iron, the carbon is present in the _____ form.
(A) Flakes (B) Spikes (C) Nodular (D) Cementite

30. Machines which work on forgings by pressure is called _____.
(A) Power presses (B) Power toys (C) Power fluids (D) Power lines
31. A punch is used for making _____ in metal part when it is at forging heat.
(A) Threads (B) Grooves (C) Holes (D) Corners
32. Machines which work on forgings by blow are called _____.
(A) Power tillers (B) Power packs (C) Power plants (D) Power hammers
33. Fullers are used for _____.
(A) Necking Down (B) Flatten
(C) Making Hole (D) Increasing Thickness
34. Forge chamfer on bolt head by a :
(A) Swaging tool (B) Grinding tool (C) Cupping tool (D) Cutting tool
35. Scarfing is the method of shaping the ends of rods for :
(A) Arc welding (B) Forge welding (C) Gas welding (D) Thermit welding
36. Forging operation _____ the structure of metal.
(A) Loosen (B) Enlarge (C) Entangle (D) Refines
37. Upset Forging is the operation of making :
(A) Head of the bolt (B) Key way on shaft
(C) Thread on bolt (D) Hole on washer
38. When large quantities of identical forgings are required in mass production :
(A) Hand forging is used (B) Press forging is used
(C) Die forging is used (D) Hammer forging is used

39. The temperature of furnace used for heat-treating steel is measured and controlled by an instrument called :
(A) Thermometer (B) Pyrometer (C) Hydrometer (D) Speedometer
40. If steel is galvanized, it is coated with :
(A) Lead (B) Copper (C) Tin (D) Zinc
41. For holding work of rectangular section _____ is used.
(A) Flat tong (B) Ring tong
(C) Stright-lip fluted tong (D) Rivet tong
42. The peen of a straight peen hammer is _____ to its handle.
(A) Inclined (B) Skew
(C) Parallel (D) Perpendicular
43. Of the following types of pipes of the same diameter, the one that is least corrosion resistant is :
(A) Brass (B) Copper (C) Wrought iron (D) Steel
44. The most important element which controls the physical properties of steel is :
(A) Tungsten (B) Carbon (C) Silicon (D) Manganese
45. The peen of a cross peen hammer is _____ to its handle.
(A) Inclined (B) Skew (C) Parallel (D) Perpendicular
46. Large amounts of Silicon when added to steel will increase the _____ properties of the steel.
(A) Refractory (B) Mechanical (C) Magnetic (D) Corrosive
47. The alloy steel used for Hot working having a relatively :
(A) High carbon content (B) Low carbon content
(C) Low sulphur content (D) High oxygen content

48. The steel for drop forging is heated to a _____
(A) Light heat (B) Highly plastic state
(C) Red hot (D) Liquid state
49. The hardened parts must be _____ to relieve the hardening strains and to increase the toughness of the parts.
(A) Tempered (B) Annealed (C) Carburized (D) Anodized
50. To anneal hard steel, the steel must be heated above its critical temperature and then :
(A) Cooled rapidly (B) Quenched in oil
(C) Cooled slowly (D) Quenched in water
51. The ability to heat metal most rapidly in :
(A) Molten bath (B) Pit furnace (C) Smith forge (D) Electric furnace
52. For nitriding steel components, the following atmosphere is generally used in the furnace :
(A) Ammonia (B) Nascent nitrogen
(C) Liquid nitrogen (D) Inert gas
53. When a piece of high-carbon steel is heated to red hot, then plunged into cold water it will be :
(A) Case-hardened (B) Hardened (C) Tempered (D) Normalized
54. The steel must be heated upto the _____ temperature and quenched for hardening.
(A) Eutectoid (B) Eutectic (C) Critical (D) Melting
55. The operation of removing the burr of the drop forged parts is known as :
(A) Trimming (B) Blanking (C) Polishing (D) Piercing

56. It is necessary to temper all parts after hardening :
(A) To increase the hardness (B) To reduce the hardening strain
(C) To reduce the scale formation (D) To increase the brittleness
57. When hardening steel by the carburizing process, after the steel has been heated to the correct temperature and for the correct amount of time, furnace is shut off and the steel is :
(A) Retained in the furnace to cool (B) Removed and quenched in air
(C) Removed and quenched in water (D) Removed and quenched in oil
58. Proper control of the _____ in a heat-treating furnace is necessary to prevent excessive scaling of parts being hardened.
(A) Atmosphere (B) Fuel (C) Draft (D) Temperature
59. An important scooter part produced by drop forging is :
(A) Piston (B) Kick-start pedal (C) Cylinder (D) Brake drum
60. The process of softening a metal piece and removal of internal stress is called :
(A) Annealing (B) Planishing (C) Burnishing (D) Sheardizing
61. Connecting rods and Double ended spanners are manufactured in large quantities by _____ process.
(A) Spinning (B) Forging (C) Punching (D) Casting
62. The product which results from annealing white cast iron is called :
(A) Nodular iron (B) Spheroidal iron (C) Gray cast iron (D) Malleable iron
63. In hot working of metals, the temperature of material is :
(A) Above melting point of the material
(B) 100°C
(C) Above recrystallisation temperature
(D) Above room temperature

64. Which test is used to check the evenness of the coating on galvanized wire ?
(A) Hydrochloric acid dip (B) Warping test
(C) Reverse bend test (D) Copper sulphate dip
65. The deformation of material in cold working and hot working is :
(A) Viscous deformation (B) Plastic deformation
(C) Elastic deformation (D) Isotropic deformation
66. What mechanical property is desired so that it can be forged ?
(A) Ductility (B) Elasticity (C) Malleability (D) Brittleness
67. In which metal forming process the material is shaped by means of intermittent blows on it :
(A) Forging process (B) Rolling process
(C) Wire drawing process (D) Extrusion process
68. _____ can be used to scribe lines parallel to the edges of the work.
(A) Vernier caliper (B) Divider
(C) Combination set (D) Hermaphrodite caliper
69. Good quality scales for use in smithy shop measurements are usually made of :
(A) Wood (B) Brass (C) Plastic (D) Glass
70. In cold working of metals, the temperature of material is :
(A) Room temperature
(B) Above room temperature
(C) Below recrystallisation temperature
(D) Below room temperature

71. In an open hearth, the work makes _____ contact with fuel.
(A) Direct (B) Indirect (C) No (D) Partly
72. The best fuel is for blacksmith's hearths is Charcoal, because it contains no :
(A) Carbon (B) Phosphorus (C) Sulphur (D) Potassium
73. In a heating furnace the work piece does not come into direct contact with the :
(A) Air (B) Fuel (C) Heat (D) Water
74. The blower is an attachment to the hearth for supplying :
(A) Fuel (B) Fire brick (C) Work piece (D) Air
75. With excessive heating the forgings suffer from :
(A) Swelling (B) Carburation (C) Oxidation (D) Shrinkage
76. If the forging operation is finished at a lower temperature, this leads to :
(A) Time saving (B) Colour change
(C) Better surface finish (D) Cold hardening and cracks
77. The two faces of a sledge hammer are :
(A) Different (B) Identical (C) Pointed (D) Grooved
78. The body of the anvil is made of :
(A) Cast iron (B) Brass (C) Mild steel (D) Tool steel
79. The hand hammers are made of :
(A) Mild steel (B) High carbon steel
(C) Cast iron (D) Cast steel

80. Scarf weld is belongs to :
(A) Resistance welding (B) Arc welding
(C) Gas welding (D) Forge welding
81. The 'Payyambalam Beach' is in :
(A) Ernakulam (B) Kannur (C) Kozhikode (D) Kasargod
82. The geographical area that lies between Northern Mountain Ranges and Peninsular Plateau is :
(A) Indo-Gangetic Plain (B) Western Ghat
(C) Konkan Coast (D) Wynad
83. 'The National Museum' is situated in :
(A) Delhi (B) Bangalore
(C) Hyderabad (D) Vishakapattanam
84. 'Mangalyan', the satellite intended to study about Mars is launched by :
(A) PSLV-125 (B) PCLV-D-10 (C) ISRO-18 (D) PSLV-C-25
85. The renowned world leader who popularly known 'Madiba' :
(A) Martin Luther King (B) Gandhiji
(C) Nelson Mandela (D) Barrack Obama
86. The World Chess Champion of 2013 Magnus Karlson is from :
(A) Poland (B) Russia (C) U.S.A. (D) Norway
87. The port which is known 'Queen of Arabian sea' :
(A) Kochi (B) Mumbai (C) Chennai (D) Azhikkal

88. The progressive movement of V. T. Bhattatirippad to uplift the Brahmins of Kerala :
(A) Namboodiri Sabha (B) Yogakshema Sabha
(C) NSS (D) Marar Sabha
89. The Indian writer who won the honour 'Companion of the Indian Empire' by the British :
(A) Ravindranath Tagore (B) Muhammed Iqbal
(C) Bankim Chandra Chatterji (D) Amarthya Sen
90. 'Bharathapuzha' originates from :
(A) Vadasserimala (B) Kudiyanmala (C) Karadimala (D) Anamala
91. The pride of Indian Navy 'INS Sindhu Rashak' drowned 2013 August in :
(A) Vishakapattnam (B) Mumbai
(C) Karachi (D) Kolkatta
92. The Bengali writer assassinated by Talibanists in Afghanistan is :
(A) Sushmitha Banerji (B) Devayani Vora
(C) Deepak Sandhu (D) J. P. Sen
93. The Great Karnatik musician 'Dhakshinamoorthy' was born in :
(A) Chennai (B) Trissur (C) Kannur (D) Alapuzha
94. The 'Atma Vidya Sangham' is a social - reform movement founded by :
(A) Brahmananda Sivayogi (B) Kumara Guru
(C) Vagbhatananda (D) Annie Beasant
95. The South-West monsoon starts from the month of :
(A) October (B) June (C) March (D) December
96. Gandhi's first experiment of Satyagraha in India was in :
(A) Sabarmathi (B) Dandi (C) Chambaran (D) Bombay

97. The 'Panmana Ashramam' is connected with :
- (A) Sree Narayana Guru (B) Kumaranasan
(C) Sister Alphon Samma (D) Chattambi Swamikal
98. The political party formed by Dr. Ambedkar is _____.
- (A) Independent Labour Party (B) Indian Backward Party
(C) Forward Block (D) Swarajist Party
99. The Malayali Physical Trainer who awarded 'Dronacharya' in 2013 :
- (A) P.T. Usha (B) Dr. Sebastian Paul
(C) K.P. Thomas (D) Tinu Yohannan
100. The first public sector bank introduced 'credit card' in India :
- (A) State Bank of India (B) Central Bank of India
(C) HDFC (D) Federal Bank

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