

**PSC Trades Instructor - Grade II -
Smithy - Technical Education
Examination
Previous Year Question Paper**

***Exam Name: Trades Instructor - Grade II -
Smithy - Technical Education***

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Medium of Questions: English





1. The forging temperature of gun metal alloy
A) 280°C
B) 950°C
C) 1200°C
D) 600°C
2. The instrument using to take direct measurement from job in hot condition
A) Parallel ruller
B) Outside caliper
C) Brass rule
D) Steel rule
3. The accuracy of depth micrometer
A) 0.02 mm
B) 0.001 mm
C) 0.01 mm
D) 0.01 inch
4. The square hole on the Anvil known as
A) Hardie hole
B) Horn
C) Beak
D) Punch hole
5. The cutting angle of a cold chisel
A) 90°
B) 30°
C) 60°
D) 45°
6. Name the tool used to enlarge and finish punched holes in a hot metal.
A) Centre punch
B) Drift
C) Fuller
D) Cold chisel
7. The hammer used for Riveting purpose in Industrial work
A) Claw hammer
B) Sledge hammer
C) Set hammer
D) Ball pen hammer
8. Flux used during the forge welding of cast steel
A) Clay
B) Dry sand
C) Glass powder
D) Sal Ammonia
9. The cutting angle of a twist drill
A) 110°
B) 59°
C) 90°
D) 118°



10. The property which metal enable to draw out in thin wires
A) Ductility
B) Malliability
C) Hardness
D) Toughness
11. Mass per unit area
A) Thermal expansion
B) Corrosion resistance
C) Density
D) Structure
12. The percentage of carbon contains in a low carbon steel
A) .7% to 1.5%
B) .05% to .25%
C) 15% to 20%
D) 1.5% to 2%
13. Name the tool used to enlarge a drilled hole
A) Tap
B) Reamer
C) Die
D) Scriber
14. The alloy of copper and tin
A) Bronze
B) Brass
C) Gun metal
D) White metal
15. The melting point of aluminium
A) 860°C
B) 1300°C
C) 660°C
D) 320°C
16. The most heaviest metal
A) cast iron
B) silver
C) white metal
D) lead
17. Specify the softening process of metal from the following
A) Case hardening
B) Tempering
C) Annealing
D) Nitriding
18. Slow and progressive deformation of material with time at constant stress
A) Creep
B) Brittleness
C) Toughness
D) Hardness



19. The equipment used for turning heavy forgings from furnaces
A) Round Tong
B) Craw Bar
C) Hot Set
D) Portabar
20. Tool used to rounding and smoothening forgings to required size and shape
A) Fullers
B) Saddle
C) Swages
D) Setting tool
21. The final operation done during drop forging
A) Caulking
B) Scarfing
C) Trimming
D) Drawing out
22. Tool used to cut threads on a round bar of metal
A) Dies
B) Reamers
C) Taps
D) Tapper Drill
23. Find Ferrous metal from the following
A) Gun metal
B) Gray cast iron
C) Phosphor bronze
D) Brass
24. Internal resistance against the applied load is known as
A) Power
B) Strain
C) Load
D) Stress
25. During forging operation the process in which the cross sectional area increased of metal
A) Fullering
B) Punching
C) Jumping
D) Twisting
26. The temperature range for finished forging of low carbon steel
A) 800°C to 850°C
B) 600°C to 650°C
C) 1250°C to 1300°C
D) 350°C to 400°C
27. Name the operation to make holes in a heated metal
A) Fullering
B) Punching
C) Scarfing
D) Drifting

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28. The tool used for cutting operation
- A) Chisel
B) Reamer
C) Swages
D) Punch
29. The operation of preparing the pieces of metal for forge welding
- A) Hardening
B) Bending
C) Scarfing
D) Tempering
30. The gas used in general welding work
- A) Nitrogen
B) Oxygen
C) Oxy-acetylene
D) Ammonia
31. Example for highly refined iron
- A) Gray cast iron
B) Pig iron
C) White cast iron
D) Wrought iron
32. The melting point of Beryllium
- A) 1280°C
B) 950°C
C) 1320°C
D) 1100°C
33. Name the ore of lead
- A) Solder
B) Lead acid
C) Galena
D) Bauxite
34. The Instrument used to find the centre of a cylindrical job
- A) Inside caliper
B) Wing compass
C) Steel rule
D) Odd leg caliper
35. Applying metal coating using zinc in an iron material is known as
- A) Nitriding
B) Carburising
C) Galvanising
D) Cyaniding



36. The alloy used as nuclear fuel
- A) German silver
B) Nichrome
C) Vanadium
D) Uranium
37. The cutting angle of flutes in a single cut file
- A) 80°
B) 35°
C) 90°
D) 60°
38. The equipment used for measuring hole diameters
- A) Outside caliper
B) Inside caliper
C) Wing compass
D) Scriber
39. The I.S. Code for high speed tool steel
- A) I.S. 3749 – 1966
B) I.S. 7291 – 1974
C) I.S. 1089 – 1968
D) I.S. 2086 – 1970
40. Flat die forgings are known as
- A) Open die forging
B) Press forging
C) Closed die forging
D) Hand forging
41. The waste that occurs while cutting an iron rod
- A) Chips
B) Shear waste
C) Forging waste
D) Burr
42. Hardness of the forging die blocks vary from
- A) 680 – 820 BHN
B) 120 – 230 BHN
C) 60 – 130 BHN
D) 269 – 470 BHN
43. Choose direct measuring instrument from the following
- A) Divider
B) Vernier caliper
C) Sinebar
D) Outside caliper



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44. Hardening temperature of carbon steel
 - A) 810 – 830°C
 - B) 1060 – 1300°C
 - C) 280 – 320°C
 - D) 660 – 720°C
45. The metal used to manufacture a reamer
 - A) Low carbon steel
 - B) Cast iron
 - C) Brass
 - D) High speed steel
46. The melting point of silver
 - A) 232°C
 - B) 419°C
 - C) 961°C
 - D) 1530°C
47. The cast iron is derived from pig iron in which furnace ?
 - A) Puddling furnace
 - B) Cupola furnace
 - C) Blast furnace
 - D) Open hearth furnace
48. The percentage of iron content in a magnetite ore
 - A) 73%
 - B) 48%
 - C) 62%
 - D) 98%
49. The range of temperature between two critical points are known as
 - A) Upper critical range
 - B) Lower critical range
 - C) Normalising range
 - D) Thermal critical range
50. The angle of a Prick punch
 - A) 40°
 - B) 90°
 - C) 75°
 - D) 180°
51. Temperature between upper critical point and the lower critical point
 - A) Tempering range
 - B) Annealing range
 - C) Critical range
 - D) Cyaniding range



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60. For tempering steel if heated a temperature
- A) Below the lower critical temperature
 - B) In between the lower and upper critical temperature
 - C) Higher than the lower critical temperature
 - D) Higher than the critical point
61. The iron abstract through puddling furnace
- A) Pig iron
 - B) Cast iron
 - C) Gray cast iron
 - D) Wrought iron
62. The magnetic property of an iron loses when it is heated to a temperature of
- A) 100°C
 - B) 220°C
 - C) 510°C
 - D) 770°C
63. The process of heating the steel above the upper critical temperature and then allow to cool in air
- A) Hardening
 - B) Nitriding
 - C) Normalising
 - D) Carburising
64. Steam condenser tubes are made of
- A) Alnico
 - B) Admiralty brass
 - C) Bell metal
 - D) Duralumin
65. Drawing of a machine part it is seen that the plan is below the elevation and left side view is in right side of the elevation, so this is a projection at
- A) Third quadrant
 - B) Second quadrant
 - C) First quadrant
 - D) Fourth quadrant
66. The basic material used for ceramic tool
- A) Aluminium oxide
 - B) Bell metal
 - C) Duralumin
 - D) Cobalt



67. The alloying metal used in stainless steel
- A) Tungsten and molybdenum B) Silicon and manganese
C) Tin and cobalt D) Nickel and chromium
68. The actual size of the pictorial view is for shortening upto 82% in the case of
- A) Oblic projection B) Isometric projection
C) Caralier projection D) Orthographic projection
69. By the heat treatment process the magnitude of hardness and strength increase with
- A) Increased rate of cooling
B) Hardness and strength are effected by the rate of cooling
C) Slow rate of cooling
D) Moderate rate of cooling
70. The most economical mild steel section
- A) Circular section B) Channel section
C) I section D) Rectangular section
71. The property of metal which allows it to deform fracture is
- A) Toughness B) Elasticity
C) Plasticity D) Brittleness
72. The electrodes of resistance welding machine
- A) Copper beryllium alloy B) Lead tin alloy
C) Copper uranium alloy D) Copper silicon alloy



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73. The melting point of pure iron
A) 1100°C
B) 950°C
C) 1535°C
D) 660°C
74. The composition of gun metal
A) 90% copper and 10% silver
B) 90% copper and 10% zinc
C) 10% zinc and 90% copper
D) 80% copper and 20% tin
75. The cooling rate in Annealing process
A) 30°C to 60°C per hour
B) 15°C to 30°C per hour
C) 60°C to 90°C per hour
D) 90°C to 100°C per hour
76. The value of 1 kilogram in Pound
A) 2.205
B) 4.532
C) 1.328
D) 6.421
77. The fuel used in stock fire
A) Liquid Petroleum Gas
B) Coal
C) Induction Flame
D) Blow Torch
78. The tool used for making circular rings in hand forging
A) Set hammer
B) Swoop
C) Gauge
D) Smithy mandral
79. The melting point of zinc
A) 680°C
B) 950°C
C) 419°C
D) 360°C
80. For what purpose carburising is done in steel ?
A) Hardening the outer surface
B) Softening the metal
C) To refine the grains
D) Hardening the core of steel

81. The revolutionary youth organisation formed by Bhagat Singh
A) Anushilal Samithi B) Abhinav Bharath
C) Navjawan Bharat Sabha D) Indian Independence League
82. Which among the following is an example for Rabi crop ?
A) Paddy B) Wheat
C) Cotton D) Jute
83. Jim Corbett National Park is in which of the following States ?
A) Assam B) Bihar
C) Uttarakhand D) Madhya Pradesh
84. Which among the following is the most wide spoken Dravidian Language in India ?
A) Telugu B) Tamil
C) Kannada D) Malayalam
85. Father of White Revolution in India
A) Dr. V. Kurien B) Dr. M.S. Swaminadhan
C) D.K. Karve D) Athidhi Mukherjee
86. The Poorna Swaraj Resolution was passed by the Indian National Congress in 1929 at
A) Nagpur B) Bombay
C) Calcutta D) Lahore
87. First Hydroelectric Project in Kerala
A) Idukki B) Kutyadi
C) Pallivasal D) Neryamangalam
88. The district of Kerala which has longest sea coast
A) Kozhikode B) Kannur
C) Kollam D) Alappuzha
89. The Constitutional Amendment which reduced the age of voting right in India from 21 to 18
A) 21st B) 61st C) 73rd D) 86th
90. Who among the following organised the renaissance organisation 'Samatva Samajam' in Kerala ?
A) Chattampiswamikal B) Ayyankali
C) Pandit K.P. Karuppan D) Vaikunda Swamikal



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91. 'Ente Gurunadhan' was the poem written about Mahatma Gandhi by
A) Sugadhakumari B) Vallathol
C) O.N.V. Kurup D) Kumaranasan
92. The President of Indian National Congress in the year of Indian Independence
A) J.B. Kripalini B) Moulana Azad
C) Sardar Vallabhai Patel D) C. Sankaran Nair
93. Hirakkud, the longest dam in India is constructed in which of the following rivers ?
A) Narmada B) Yamuna
C) Mahanadi D) Hoogli
94. Which of the following won the National Award for best film for 2014 ?
A) Ottal B) Mary Kom
C) Asha Jaor Majhe D) Count
95. Chairman of the 14th Finance Commission of India
A) Dr. Vijay Kelkar B) C. Rangarajan
C) Y.V. Reddy D) Mahavir Tyagi
96. 'Jeevithasamaram' is the autobiography of which of the following renaissance leaders ?
A) C. Kesavan B) Vakkom Moulavi
C) V.T. Bhattathirippad D) Dr. Palpu
97. The famous 'Pattini Jatha' is associated with
A) Muhammed Abdu Rahiman B) K. Kelappan
C) E. Moidu Moulavi D) A.K. Gopalan
98. Winner of 100 meters race for women in the World Athletic Championship in 2015.
A) Dafne Shippers B) Shelly Ann Fracer
C) Torri Bovi D) Lalitha Babar
99. The U.N. Secretary General Ban Ki-moon belongs to which of the following countries ?
A) South Korea B) Ghana
C) Peru D) France
100. Which of the following cities hoists the 2016 Olympics ?
A) Tokyo B) Rio de Janero
C) Paris D) Madrid