



दक्षिण मध्य रेलवे-

South Central Railway

O/o. The Divisional Railway Manager/P, Personnel Department
Secunderabad Division

No.SCR/P-SC/210(a)/EE/Tech-III/LDCE

Date:14.03.2022

ALL ADENS

Sub: Formation of panel for filling up the post of Technician Gr.III in Level-2/GP 1900, against 25% LDCE quota in Civil Engineering Department of Secunderabad Division - Uploading of Sample questions-Reg.

Ref: This office letters dated 27.09.2021 & 14.03.2022.

1. Further to this office letters under reference, The Sample questions for the examination in subject selection to the post of Technician Gr.III against 25% LDCE quota (P.Way, Works & Bridges) are available on. South Central Railway official website www.scr.indianrailways.gov.in
The applicants of LDCE Notification may be advised to go through the below given link and open the Question Bank to refer the sample questions in respective categories.

scr.indianrailways.gov.in/view_section.jsp?lang=0&id=0,1,291,357,813

2. Sample questions are only indicative in nature but not exhaustive. The examinees are advised to update their knowledge keeping in accordance with the change in technology and job requirement with latest Rules/circulars/policies. Questions may be expected from the entire given syllabus.
3. The controlling officer/supervisor has to ensure that the sample questions are circulated to all the eligible staff and holding of selections will not be postponed/delayed due to non-circulation of question banks.

All the employees may be notified accordingly.

(B.VENKATA SUBBALAH)
APO/Engg

for Sr.Divisional Personnel Officer /SC

Copy to:

- 1) Sr.DEN/Co-ord/SC
- 2) SPO/Con/SC
- 4) SDGM/Vig./SC (kind attention of Sr. VO/P/SC)
- 5) OS/Selection Cell
- 6) OS/IT Cell: for uploading in website.
- 7) All SSE's
- 8) DSs/SCRES/SCRMU/AISCSTREA/SCROBCREA/SC division.

SOUTH CENTRAL RAILWAY

Office of the DRM/Works/SC
2nd floor, Sanchalan Bhavan
SECUNDERABAD

No. CW/452/W.IV/Artisan/Corresp/21

Dt. 23.11.2021

Sr.DPO/SC

Sub: Filling up of vacancies of Tech Gr.III in Level 2 pay matrix of
7th CPC against LDCE Quota in Civil Engg Department of SC divn- reg.
Ref: Your office Letter No. SCR/P-SC/210(a)/EE/W-3/Engg/Tech-III
dt.08.11.2021

With reference to the above, herewith submitting the Question Bank prepared for LDCE Examination for filling up of vacancies of Tech.Gr.III in Level 2 pay matrix of 7th CPC against LDCE Quota in civil engineering department of P.Way category posts (i.e for blacksmith, welder and SMG) and Works category posts (i.e Mason, Pipeline Fitter, Painter & Carpenter), prepared and submitted by ZCETI/KCG to upload in the official website and for further action, please.

by
23/11



Sr.DEN/Co-ord/SC

Syllabus

1. Tools of mason
2. Properties of building materials
3. Brick masonry
4. Stone masonry
5. Plastering and pointing works
6. Pavind & dado works
7. Concreting works
8. Measurements & simple estimation
9. Safety precautions

Knowledge of tools of mason

1. The tool shown here is called

a. Wooden float

b. Trowel



c. Metal float

d. Chisel

(Ans: b)

2. The tool shown here is called

a. Wooden float

b. Trowel



c. Plumb bob

d. Chisel

(Ans: c)

3. The tool shown here is called

a. Wooden float

b. Trowel



c. Plumb bob

d. Chisel

(Ans: c)

4. The tool shown here is called

a. Right angled scale

b. Trowel



c. Plumb bob

d. Chisel

(Ans: a)

5. The tool shown here is called

a. Right angled scale

b. Measuring tape



c. Plumb bob

d. Chisel

(Ans: b)



6. The tool shown here is called

- a. Right angled scale b. Measuring tape c. Plumb bob d. wooden float (Ans: d)



7. The tool shown here is called

- a. Right angled scale b. drilling machine c. drilling machine d. wooden float (Ans: c)



8. The equipment shown here is called

- a. Roller b. Concrete mixer c. Vibrator d. trolley (Ans: c)



9. The equipment shown here is called

- a. Roller b. Concrete mixer c. Vibrator d. trolley (Ans: c)



10. The equipment shown here is called

- a. Roller b. Concrete mixer c. Vibrator d. trolley (Ans: c)



11. The tool shown here is called

- a. shovel b. crowbar c. hammer d. wooden float (Ans: a)



12. The tool shown here is called

- a. Aluminium channel b. spirit level c. hammer d. wooden float (Ans: a)

13. Spalling hammer is used for

- a) driving wooden headed chisels b) rough dressing of stones
c) carving of stones d) breaking small projections of stones

14. The instrument used to measure verticality of a wall is

- a) Scale b) Rope c) Plumb bob d) Water level (c)

Knowledge of properties of building material

15. The actual standard size of bricks is
A) 18 x 9 x 9 cm b) 19 x 8 x 8cm c) **19 x 9 x 9cm** d) 12 x 9 x 9cm (c)
16. The average weight of a brick is
a) 2 to 3 kg b) **3 to 3.5kg** c) 4 to 4.5 kg d) 5 to 5.5kg (b)
17. A first class brick should not absorb water more than ____ of its own dry weight after 24 hours immersion in cold water
a) 10% b) 15% c) **20%** d) 25% (c)
18. Depression made at the top of a brick is called
a) frog b) slot c) cavity d) clearance (a)
19. The frog of a brick is normally made on its
a) top face b) bottom face c) longer face d) shorter side (a)
20. Which of the following ingredients of the brick earth enables the brick to retain its shape?
a) alumina b) silica c) iron d) magnesia (b)
21. The initial setting time for Ordinary Portland Cement (OPC) as per IS specifications should not be less than ____ minutes.
a) 10 b) 30 c) 60 d) 600 (b)
22. The final setting time for Ordinary Portland Cement (OPC) as per IS specifications should not be more than ____ minutes.
a) 10 b) 30 c) 60 d) 600 (d)
23. Lime mortar is generally made with
a) quick lime b) fat lime c) hydraulic lime d) white lime (c)
24. The volume of a bag of cement is about
a) 0.035 cum. b) 0.053 cum c) 0.35 cum. d) 0.53 cum. (a)
25. While handling cement, the cement bags should be stacked at least mm clear of exterior wall
a. 250 mm b) 500 mm c) 1000 mm d) anywhere (Ans: b)
26. Standard bag of cement is of kg.:
a) 30 kg b) 50 kg c) 20 kg d) 52 kg (Ans: b)
27. The height of stack of cement, while cement is being stored should not exceed:
a) 10 bags b) 15 bags c) 20 bags d) none of above (Ans: a)
28. The representative samples of cement should be sent to laboratory for testing of the cement which is stored for a period more than....
a) 1 month b) 6 months c) 12 months d) none of above (Ans: b)

29. Maximum quantity of silt in sand shall not be more than %.
- a) 20% b) 15% c) 10% d) 8% (Ans: d)
30. Over the foundation concrete masonry may construction may be commenced after (Ans: c)
- a) 12 hrs. b) 24 hrs. c) 48 hrs. d) 72 hrs.
31. Number of bricks required for cubic metre is ____ numbers. (d)
- a) 300 b) 200 c) 400 d) 500
32. Bitumen felt is used for ____
- a) Plastering b) waterproofing c) both a & b d) none of these (b)
33. Bulking of sand is caused due to
- a) Surface moisture b) air voids c) viscosity d) silt (a)
34. The tendency of a stone is, to split along
- a) Texture b) fracture c) cleavage d) structure (c)
35. Which of the following stones is best suited for construction of piers and abutments of a railway bridge?
- a) Granite b) sandstone c) Lime stone d) quartzite (a)
36. Good quality of stones must be
- a) Durable b) free from clay c) resist action of acids d) All (d)
37. In stone masonry, stones are so placed that the direction of pressure to the plane of bedding is
- a) Right angle b) 45° c) 60° d) parallel
38. Asphalt is obtained from distillation of ____.
- a) Petroleum b) Bitumen c) Plastic d) none of this (a)
39. Clay and silt content in good brick earth must be at least ____.
- a) 40% b) 50% c) 30% d) 25% (b)
40. If P is the percentage of water required for normal consistency, water to be added for determination of initial setting time is ____.
- a) $0.70P$ b) $0.75P$ c) $0.80P$ d) $0.85P$ (d)
41. The type of roof which slopes in two directions with a break in slope on each side is known as
- a) Gable roof b) hip roof c) gambrel roof d) mansard roof (c)
42. For a good building stone, specific gravity should be greater than
- a) 1.5 b) 1.7 c) 2.2 d) 2.7 (d)
43. Mortar joint which is normal to the face of the wall is known as
- a) Bed joint b) wall joint c) cross joint d) bonded joint (c)
44. Quick lime is ____
- a) Obtained by calcination of pure lime b) has a great affinity to moisture (d)
- c) is amorphous d) all the above
45. The tendency of a stone is to split along
- a) Texture b) fracture c) cleavage d) structure (c)

46. Geologically, marble is known as ____
 a) Sedimentary rock b) igneous rock c) metamorphic rock d) stratified rock (c)
47. The stone suitable for rubble masonry should be ____
 a) Hard b) tough c) heavy d) light (a)
48. A good building stone should not absorb water more than
 a) 5% b) 10% c) 15% d) 20% (a)
49. Soundness test of cement determines
 a) quality of free lime b) Ultimate strength c) durability d) Initial setting (a)
50. Which of the following cements is suitable for use in massive concrete structures like dams (b)
 a) OPC b) low heat cement c) rapid hardening cement d) sulphate resisting cement
51. Fineness aggregate generally used in cement mortar is
 a) Sand b) lime c) earth d) none of these (a)
52. Which of the following cements is suitable for use in mass concrete structures like dams.
 a) OPC c) low heat Portland cement
 b) rapid hardening cement d) sulphate resisting cement (c)
53. Rocks formed from molten magma are called
 a) sedimentary rocks c) metamorphic rocks
 b) igneous rocks d) none of these (b)
54. Rocks formed by gradual deposition are called
 a) sedimentary rocks c) metamorphic rocks
 b) igneous rocks d) none of these (a)
55. Rocks formed due to alteration of original structure due to heat and excessive pressure are called
 a) sedimentary rocks c) metamorphic rocks
 b) igneous rocks d) none of these (c)
56. colour of statutory marble used for sculptor's work is
 a) red b) blue c) white d) green (c)
57. The hardest rock is
 a) marble b) diamond c) talk d) quartz (b)
58. The softest rock is
 a) marble b) diamond c) talk d) quartz (c)
59. The rock general used for roofing is
 a) granite b) basalt d) slate d) pumic (a)
60. A stone is rejected if it absorbs water more than
 a) 5% b) 10% c) 15% d) 20% (b)
61. Stone used for ornamental work
 a) soft b) hard c) light d) heavy (a)
62. Stones used for construction of retaining walls must be
 a) soft b) hard c) light d) heavy (d)
63. In stone masonry, if stones are so placed that their layers are parallel to the direction of load, they
 a) split easily b) are affected by moisture c) a & b d) none of these (c)
64. Main ingredient of a good quality brick earth is
 a) magnesisa b) lime c) silica d) alumina (d)

65. Jhumb bricks are
A) under burnt b) over burnt c) kutchha d) none of these (b)
66. Refractory bricks resist
A) high temperature b) chemical action c) dampness d) all the above (a)
67. Refractory bricks are used for
A) retaining walls b) columns c) piers d) combustion chambers (d)
68. Glazing of clay products is done to improve
69. A) to improve their appearance c) to protect them from corrosive action
B) to protect them from atmospheric effect d) all the above (d)
70. A pug mill is used for
A) softening brickearth c) tempering brick earth
B) moulding brick earth d) all the above (c)
71. Lime which contains high percentage of calcium oxide generally slacks with water is
A) fat lime c) hydraulic lime
B) quick lime d) none of these (b)
72. The property by virtue of which lime sets under water is known as
A) slacking c) hydraulicity
B) setting d) calcinating (c)
73. For construction of structures under water, the type of structures under water, the type of lime used is
A) hydraulic lime c) quick lime
B) fat lime d) pure lime (a)
74. Lime mortar is generally made with
A) quick lime c) hydraulic lime
B) fat lime d) plain lime (c)
75. Normal curing period for lime mortar is
A) one day c) 7days
B) 3days d) 10days (d)
76. Plaster of paris is obtained by calcinating
A) bauxite c) kankar
B) gypsum d) lime stone (b)
77. With storage of cement, the strength of cement
A) increases c) decreases
B) remains the same d) none of these (c)
78. Bulking of sand is mainly due to
A) surface moisture c) air voids
B) viscosity d) clay (a)

Brick Masonry

79. The process of mixing clay, water and other ingredients to make brick is
a) Kneading b) moulding c) pugging d) drying (a)
80. The lengthy face of the brick is known as
a) Face b) king closer c) queen closer **d) stretcher** (d)

81. Horizontal layer of bricks or stones is called
a) Bed b) course c) quoin d) none of these (a)
82. The part of the brick obtained by cutting the triangular corner portion from the middle points of width and length of brick is called
A) king closer b) queen closer c) stretcher d) none of these (a)
83. A part of a brick obtained by cutting a brick longitudinally into two equal parts is called
 a) king closer **b) queen closer** C) stretcher D) bat (b)
84. The brick half piece to its length is called
 A) king closer b) queen closer c) stretcher **d) half bat** (d)
85. Queen closer may be placed
 A) in header course B) in stretcher course **c) in stretcher course next to first brick** (c)
 d) in stretcher course next to first brick
86. The 9 cm x 9 cm side of a brick as seen in the wall face, is generally known as
 a) stretcher b) face c) front **d) header** (d)
87. The horizontal upper part of a step on which foot is placed in ascending or descending a stairway is called
 A) riser **b) tread** c) flight d) nosing (b)
88. In stairs, the vertical portion of a step providing a support to the tread, is known as
 a) **riser** b) flier c) soffit d) pitch or slope (a)
89. The purpose of the frog provided on a brick is for
 a) to engrave name of manufacturer b) key to the mortar to bond bricks
c) A & B d) to reduce the weight (c)
90. A horizontal layer of bricks laid in mortar is known as
 A) **course** b) stretcher c) header d) closer (a)
91. A horizontal layer of bricks laid in mortar is known as
 A) **course** b) stretcher c) header d) closer (a)
92. Coping is defined as a
 A) horizontal course of masonry projecting from the face of the wall.
 B) horizontal moulded projection provided near the top of a building.
C) covering placed on the exposed top of an external wall.
 D) Triangular shaped portion of masonry at the end of a sloped roof. (c)
93. A bat is the portion of a
 A) wall not exposed to weather b) **brick cut across the width**
 c) wall between facing and backing d) none (b)
94. Hearting is the portion of a
 A) wall not exposed to weather b) brick cut across the width (c)
c) wall between facing and backing d) brick cut in a manner that its one long face remains uncut.
95. A type of bond in brick masonry consisting of alternate course of headers and stretchers is called
 A) **English bond** b) Flemish bond c) stretching bond d) heading bond (a)
96. A type of bond in brick masonry in which each course consists of alternate headers and stretchers is called
 A) English bond b) **Flemish bond** c) stretching bond d) heading bond (b)

97. In a stretcher course
 A) all bricks are laid as headers b) **all the bricks are laid as stretchers**
 C) the arrangement of bricks is similar to English bond (b)
98. A stretcher bond is used for
 A) **half brick wall** b) one brick wall c) one and half brick wall d) two brick wall (a)
99. A header bond is used for
 A) half brick wall b) **one brick wall** c) one and half brick wall d) two brick wall (b)
100. The most commonly used bond for all wall thicknesses is
 A) **English bond** b) Flemish bond c) stretching bond d) heading bond (a)
101. Wall built on the edge of a roof slab for a small height is called
 a) **parapet wall** b) Sunshade c) Lintel d) None (a)

Stone Masonry

102. Long stone used in Stone masonry are called
 A) Block stones b) Corner Stones c) **Bond stones** d) None (d)
103. The original layers of stones along which they have formed is called
 A) bed b) through bed c) **natural bed** d) none of these (c)
104. A single stone which is fixed at regular intervals joining face and back is called
 A) frog b) **through stone** c) natural stone d) plinth course (b)
105. Pieces of stones are called
 A) ballast b) **spalls** c) crushed stone d) none of these (b)
106. Wall built to resist the pressure of earth filling is known as
 A) breast wall b) **retaining wall** c) parapet wall d) buttress (b)
107. In arches, stratified stones are placed so that their planes are
 a) Parallel b) perpendicular c) radial d) none (c)

Plastering & pointing

108. Cement mortar cover on a brick or stone masonry is called
 a) DPC b) water proofing c) **Plastering** d) none (c)
109. ____ is used to ensure that the thickness of plastering is uniform.
 a) Bull point b) pivot point c) bull mark d) bench mark (c)
110. Before plastering, the surface has to be _____.
 a) Rough b) smooth c) watered d) cemented (a)
111. _____ are used to press mortar and spread it uniformly.
 a) Trowel b) aluminium rod c) floats d) brush (c)
112. Which of the finishes below, is not a plaster finish ?
 a) Rough-cast b) pebble dash c) sand faced d) wooden (d)
113. Development of thin hair cracks on the plastered surface is known as
 a) Cracking b) crazing c) braking d) none of these (b)

114. Binding material used in mortar for plastering is _____.
a) Cement b) lime c) neither a nor b d) both a & b (d)

Paving & Dado

115. Dado is usually provided in
a) dinning halls **b) bath rooms** c) living rooms d) verandah (b)
116. Tiles provided on the walls at the level of flooring for a height of about 15cm is called
a) Skirting b) dado c) both a & b d) none of these (a)

Concreting works

117. In case of multi-storeyed buildings, the forms to be removed first are
a) sides of beams b)forms of columns c) bottom of beams d) all the above at the same time. (a)
118. The angular steps used for changing direction of the stairs, are called
a) round steps b) angular steps **c) winders** d) radial steps (d)
119. The form work from the underside of slabs, can be removed only after
A)1day b) 4days **c)7days** d)14days (c)
120. The platform at the end of a series of steps, is known as
a) Platform b) Relief c) Rest **d) Landing** (d)
121. The projecting part of tread beyond the face of riser is called
A)pitch b)**nosing** c)baluster d)stringer (b)
122. A temporary rigid structure having platforms raised up as the building increases in height is called
a) underpinning b) **scaffolding** c) shoring d) jacking (b)
123. Segregation in concrete results in
A) honey combing b)porous layers c)surface scaling d)**all of these** (d)
124. In lime concrete, lime is used as
A)coarse aggregate b)fine aggregate c)**binding material** d)admixture (c)
125. The material used as an ingredient of concrete is usually
A)cement b)aggregate c)water d)**all of these** (d)
126. Concrete laid above window or door opening is called
A) Sunshade b) Parapet **c) Lintel** d) None (c)
127. Poring of water on works in which cement is used is called
A) Curing b) wetting c) drying d) dumping (a)
128. Concete which Steel bars are used is called
a) Plain concrete **b) Reinforced concrete** c) Mass concrete d) none (b)
129. Coarse aggregate generally used in india is
A) Granite b) Brick bats c) gravel d) none (a)
130. Fine aggregate generally used in concrete is
A) lime b) earth **c) sand** d) none (c)

131. Main cause of roof leakage is
 A) Stagnation of water on the roof b) lack of slope c) choking of rain water pipes d) all (d)
132. strength of cement concrete primarily depends upon
 a) Quality of water c) quantity of cement
 b) Quantity of aggregate d) water-cement ratio (d)
133. Slump test for concrete is carried out to determine
 a) Strength c) workability
 b) Durability d) water content (c)
134. A badly mixed concrete results in
 A) segregation c) honey combing
 B) bleeding d) none of these (c)
135. Strength and quality of concrete depends on
 A) grading of aggregates c) shape of aggregates
 B) surface area of aggregates d) all the above (d)
136. A concrete having a slump of 6.5cm is
 A) dry c) semi-plastic
 B) earth moist d) plastic (d)
137. Air entrained in concrete
 A) increases workability c) decreases workability
 B) decreases resistance to weathering d) increases strength (a)
138. Increased cohesiveness of concrete makes it
 A) less liable to segregation c) more liable to bleeding
 B) more liable to segregation d) all of these (a)
139. After casting, an ordinary cement concrete on drying
 A) expands c) shrinks
 B) cools d) none of these (c)
140. Separation of coarse aggregate from mortar is called
 A) bleeding c) segregation
 B) creeping d) shrinkage (c)
141. Maximum percentage of chemical ingredient of cement is that of
 A) magnesium oxide c) iron oxide
 B) aluminium d) lime (d)
142. Minimum percentage of chemical ingredient of cement is that of
 A) magnesium oxide c) iron oxide
 B) aluminium d) lime (a)
143. Efflorescence in cement is caused due to an excess of
 A) alumina c) iron oxide
 B) silica d) alkalis (d)
144. Dicalcium silicate
 A) hydrates rapidly c) hardens rapidly
 B) generates less heat of hydration d) has less resistance to sulphate attack (b)
145. Tricalcium aluminate
 A) hydrates rapidly c) hardens rapidly
 B) generates less heat of hydration d) has less resistance to sulphate attack (b)
146. High strength of rapid hardening cement at early stage is due to its
 A) finer grinding c) increased lime content
 B) burning at high temperature d) higher content of tricalcium (c)
147. For road pavements, the cement generally used is
 A) OPC c) low heat cement
 B) rapid hardening cement d) none of these (b)
148. Inert material of a cement concrete mix is
 A) water c) aggregate
 B) cement d) none of these (c)

149. A good aggregate should be
 A) chemically inert c) sufficiently strong
 B) hard & durable d) all (d)
150. Gypsum in cement
 A) increases setting time c) does not affect setting time
 B) decreases setting time d) none of these (b)
151. Water cement ratio is in volume of water required for ___ of cement
 A) 10kg c) 20kg
 B) 40kg d) 50kg (d)
152. Placing of concrete is preferably done at a temperature of
 A) 15°C c) 18°C
 B) 27 +/- 2°C d) 5°C (b)
153. Segregation is responsible for
 A) honey –combed structure c) porous layers
 B) surface scaling d) all the above (d)
154. High temperature
 A) increases strength of concrete c) decreases strength of concrete
 B) has no effect on strength of concrete d) none of these (c)
155. Higher workability is required if structure is
 A) made with cement concrete c) thin and heavily reinforced
 B) thick and reinforced d) thick and heavily reinforced (c)
156. Internal friction between ingredients of concrete is decreased by using
 A) less water c) rich mix
 B) more water and coarse aggregate d) fine aggregates (b)

Measurements & simple estimation

157. How many centimetres are equal to one metre ?
 a) 10 b) 100 c) 1000 d) 10000 (b)
158. What is the unit of plastering generally used ?
 a) Metres b) Feet c) Kg d) sqm (d)
159. What is the quantity of concrete in a slab of size – 6m x 5m x 0.10m ?
 a) 11m³ b) 3 m³ c) 30 m³ d) 0.3 m³ (b)
160. What is the length of skirting in a room of size – 4.5m x 3.5m with a door opening of width 1m ?
 a) 16m b) 8m c) 7m d) 15m (d)
161. What is the area of white washing for a ceiling of size – 4m x 3m ?
 a) 7m² b) 4m² c) 12m² d) 3m² (c)
162. What is the area of flooring in a room of size – 5m x 3m ?
 a) 15m² b) 8m² c) 2m² d) 1.5m² (a)
163. How many millimetres are equal to one metre ?
 a) 10 b) 100 c) 1000 d) 10000 (c)
164. No. of cement bags required for a cement quantity of 1000kg is _____.
 a) 100 b) 50 c) 30 d) 20 (d)
165. If cement bags required for one cubic metre of 1:2:4 concrete is 6.4, then no. of bags required for 10cubic metres is _____.
 a) 6.4 b) 64 c) 640 d) in sufficient data (b)

Safety precautions

166. Safety gear very essentially required in high rise structures is ____

- a) Gum boots b) helmet c) Gloves d) none of these (b)



167. Safety gear in the picture is called

- a) Safety belt b) Handgloves c) goggles d) apron (b)



168. Safety gear in the picture is called

- a) Safety belt b) Handgloves c) goggles d) apron (c)



169. Safety tool in the picture is called

- a) Safety belt b) Handgloves c) goggles d) apron (a)

Carpenter – Question Bank

Syllabus

1. Quality, properties & defects of timber
2. Carpentry tools
3. Carpentry joints
4. Carpentry accessories
5. Carpentry process
6. Wood working machines
7. Paints, varnishes & lacquers
8. Furniture & trusses
9. Estimation of carpentry works & safety precautions

1. Quality, properties & defects of timber

- | | Answer |
|---|--|
| 1. Seasoning of timber
A) increases the weight of timber
b) does not give dimensional stability | c) improves strength properties of timber
d) all of these
(b) |
| 2. Which part of the tree is mostly useful for carpentry work?
A. Heart wood. B. Sapwood. C. Bark. D. Root. | (a) |
| 3. It is a combination of steps leading from one floor to the other floor of a building-----.
A. Stair. B. Step C. Room. D. Roof. | (a) |
| 4. A joint in which the wooden members overlap is called
a) Bridle joint b) Biscuit joint c)Lap joint d) finger joint | (c) |
| 5. A joint in which two pieces of wood are joined by simply placing their ends together without any special shaping is called.
a) Bridle joint b) Butt joint c)Lap joint d) finger joint | (b) |
| 6. Laminated wood is called
a) Log b) Plywood c) Balk d) None | (b) |
| 7. The most durable wood for making furniture is
a) Teak b) mango c) kail d) none | (a) |
| 8. Wood logs are used in Engineering works by grinding or processing them in to their shape, the wood obtained as result of this action is called as
a) Building c) Road
b) <u>Timber</u> d) None of them | (b) |
| 9. Highly ductile types of wood have an average lifespan of month or.....year or more.
a) <u>120 month or 10 year</u> c) 12 month or 05 year
b) 50 month or 07 year d) 05 month or 01 year | (a) |
| 10. Low sustainability types of wood have an average lifespan of less than month.
a) 50 month c) 30 month
b) <u>60 month</u> d) 45 month | (b) |
| 11. The inner wood/timber of wood is not attacked by termites.
a) Babul c) <u>Teak</u>
Mango d) None of them. | (c) |
| 12. Identification of timber is done by
a) <u>Waight,Smell,Touch,Taste etc.</u> c) hammering, brocken
b) Painting, by dropping d) None of them | (a) |

13. What is the effect of seasoning of timber on the weight of wood?
a) Stay still b) increases c) **Decreases** d) None of them (c)
14. What are the types of defects in wood?
a) Synthetic c) **a & b** (c)
b) Natural d) not both
15. The Surface to be cut while making a Joint should be such that the load acting on its at
a) Triangle c) **Right Angle** (c)
b) Circle d) pentagon
16. The action of cutting the sharp edge of a piece of wood at 45 degree is called
a) **Chamfer** c) Housing (a)
b) Mitering d) square
17. Width joints are also known as Joint.
a) Lap Joint c) Tenon joint
b) **Winning Joint** d) Mortise Joint (b)
18. At what angle are the pieces of wood not joined in mitering joints?
a) 60° c) **90°**
b) 50° d) 30° (c)
19. At what angle are the pieces of wood are cut in the kalami joints?
a) 30° c) 65°
b) **45°** d) 55° (b)
20. and joints are most commonly used in jointing work.
a) **Mortise and Tenon** c) Blind and Mortise (a)
b) Housing and Tenon d) Mortise and Housing
21. The thickness of the wood is divided into how many parts in a Bridel Joints.
a) 1 c) 2
b) 4 d) **3** (d)
22. nails are used in Dowel pin joint
a) Wire c) **Wooden**
b) Screw d) None of them (c)
23. Which of the following is a developed form of T-Bridel Joint.
a) Dovetail c) **Closed/Stopped Bridel Joints**
b) Corner d) Kalami (c)
24. Wooden logs are made by machines by boiling them in hot water and then straightened by pressing in hot press.
a) Wooden scrap c) Bat
b) Mirror d) **Veneer** (d)
25. How plywood is made?
a) Knocking wood c) burning of wood
b) **Gluing the Veneer** d) None of these (b)
26. How many grades in plywood are there according to IS: 303-1975?
a) 6 c) 8
b) **4** d) 12 (b)
27. Which of the following wood is of boiling waterproof grades?
a) Anne c) Rosewood
b) Birch d) **all given** (d)

28. They are used in making Cupboard, Flush door, partition, doors and roof panels.
 a) Wood c) **Plywood**
 b) Plastic d) Rubber (c)
29. They are made from wood shavings and sawdust.
 a) Insulation board c) Black board
 b) (Lamination board d) **Particle board** (d)
30. Sanmika is also known as.....
 a) Plywood c) Particle board
 b) **Decolum** d) Fiber board (b)
31. Wood that is manufactured by pasting thin plys of natural wood, soft or hardwood or a combination of the two with synthetic resins is called
 a) Rubber wood c) insulation board
 b) Plastic d) **plywood** (d)
32. Full form of MDF is
 a) Mild density fibre board c) moderate density fibre board
 b) **Medium density fibre** board d) modal density fibre board (b)
33. Gypsum board is used for
 a) Doors c) windows
 b) cupboards d) ceiling (d)
34. The type of glass that reduces sun light entering inside is____.
 a) Sheet glass b) tempered glass c) wired glass d) **tinted glass** (d)
35. The glass that is strong and has more resistance power to wind pressure is ____.
 a) Sheet glass b) **tempered glass** c) wired glass d) tinted glass (b)

2. Carpentry Tools



36. What is the name of this tool ?

- a) Saw b) **hammer** c) mallet d) hand drill

(b)



37. What is the name of this tool ?

- a) **Saw** b) hammer c) mallet d) hand drill

(a)



38. What is the name of this tool ?

- a) Saw b) hammer c) **mallet** d) hand drill

(c)



39. What is the name of this tool ?

- a) Saw b) hammer c) mallet d) **hand drill**

(d)



40. What is the name of this tool ?

- a) Saw b) hammer c) **plane** d) hand drill

(c)



41. What is the name of this tool ?

- a) Saw b) **chisel** c) mallet d) hand drill

(b)



42. What is the name of this tool ?

- a) **try square** b) hammer c) mallet d) hand drill

(a)



43. What is the name of this tool ?

- a) Saw b) hammer c) **coping saw** d) hand drill

(c)



44. What is the name of this tool ?

- a) Saw b) hammer c) **measuring tape** d) hand drill

(c)



45. What is the name of this tool ?

- a) Saw b) **G clamp** c) mallet d) hand drill

(b)



46. What is the name of this tool ?

- a) Saw b) hammer c) mallet d) **spirit level**

(d)

47. Hand saw range in length from inches to inches.
 a) 10 to 16 c) 15 to 20
 b) **18 to 24** d) 18 to 28 (b)
48. The number of teeth in a Hand saw is to per inch.
 a) **6 to 8** c) 1 to 2 (a)
 b) 8 to 4 d) 6 to 10
49. The angle of the teeth of a hand saw is..... degrees.
 a) 80 c) **75**
 b) 90 d) 65 (c)
50. The saw which are used to cut the wood across or in in a straight line are called.....
 a) Cutting c) Round saw
 b) **General saw** d) circle Saw (b)
51. They range in length from 10 inch to 16 inches and width from 3 inches to 15 inches.
 a) **Tenin Saw** c) Hand saw (a)
 b) Cross cut saw d) General Saw
52. The number of teeth in a tenin saw is to per inch.
 a) 6 to 8 c) **8 to 10**
 b) 8 to 4 d) 6 to 10 (c)
53. They are used for cutting, peeling, grooving, and other types of perforation of wood.
 a) Hammer c) Punch
 b) **Chisel** d) marking gauge (b)
54. There are types of Hand Hammer..
 a) Ball Pin Hammer c) Straight Pin Hammer
 b) Cross Pin Hammer d) **all of them** (d)
55. What type of blade does a dovetail chisel have?
 a) **Carbon Steel** c) Cast Iron (a)
 b) Bronze d) Copper
56. How many types of axes are mainly used to carpentry work?
 a) 1 c) **3**
 b) 2 d) 4 (c)
57. In carpentry work, Striking tools are
 a) **Mallet Hammer, claw hammer** c) Hacksaw, Steel Tape (a)
 b) Compass plane d) Wooden Scale
58. In carpentry work, measuring tools are
 a) **Scale and Steel Tape** c) Pin Punch and Hacksaw (a)
 b) Hammer and Nails d) None of them
59. Pencil, Thread, marking knife etc., is called as Tools in Carpentry work.
 a) Testing c) Drilling (b)
 b) Measuring d) **Marking**
60. Rip saw, Cross cut saw, Handsaws are called as Tools in carpentry work.
 a) Measuring c) Planning
 b) **Sawing/Cutting** d) Marking (b)
61. In carpentry work, Testing tools are
 a) Hand saw c) Pin Punch and hacksaw
 b) **Water pipe level, Try Square, Plumb bob** d) None of them (b)

62. Firmer Chisel, Bevel Chisel, Paring Chisel is called as.....in carpentry work.
 a) **Chipping Tools** c) Cutting Tools (a)
 b) Marking Tools d) Measuring Tools
63. In carpentry work, Holding tools are
 a) Bench Vice c) T-Bar Clamp (d)
 c) G-Bar Clamp d) **all of them**
64. Augur, Hand Drill, Drill Machine is called as.....in carpentry work.
 a) Levelling Tools c) Cutting Tools
 b) **Boring tools** d) measuring tools (b)
65. In carpentry work, Finishing tools are
 a) Rasp File c) Files (d)
 b) Triangular File d) **all of them**
66. mm size hole can be made with Hand drill.
 a) **12** c) 130 (a)
 b) 200 d) 140
67. The Rope is wrapped around the middle of it.
 a) Gilmet_ c) **Deshi Drill**
 b) Hammer d) Plastic Hammer (c)
68. What is the main part of the Plane (Randa) made of it?
 a) Wooden_ c) Copper
 b) Cast iron d) **a & b** (d)
69. What tools do you use to tighten the screw?
 a) Hammer c) wooden stick
 b) **Screwdriver** d) Nails (b)
70. Hand scraper size is
 a) **150 x 50 x 1 mm** c) 10 x 10 x 10 mm (a)
 b) 50 x 150 x 5mm d) 50 x 15 x 1 mm
71. It is made of ground flint or quartz, its colour is yellow sandy.
 a) Finishing c) Hand Scraper
 b) **Sand Paper** d) Shaving Scraper (b)
72. In carpentry work, plaining tools are
 a) Hammer and Nails c) Jack Plane and Rebate Plane (c)
 b) Hammer and Tape d) None of them
73. Which vice is used for sharpening the saw ?
 A. saw vice. B. carpenter vice. C. Bar clamp. D. C- clamp. (a)
74. Which of the tool used for testing the straightness of large surface?
 A. Steel rule B. Try square C. **straight edge** D. Foot rule (c)
75. While sawing sight of eye should be-----.
 A. On right side of the saw. B. On Left side of the saw.
 C. **Directly above the saw.** D. On right side of the saw. (c)
76. Which saw is suitable for curve cutting?
 A. Cross cut saw B. Tenon saw C. Rip saw D. **Compass saw** (d)
77. How to hold the hammer handle while driving the nail?
 A. Middle of the handle. C. Anywhere in length of the handle.
 b. Near the hammer head of the handle. D. **End of the handle.** (d)
78. The tool used for marking and testing right angles
 a) Straight edge b) Steel rule c) **Try square** d) none (c)

79. Tool used to check whether the surface is really plane nad horizontal is
a) **spirit level** b) Mortise gauge c) Cutting gauge d) Divider (a)
80. A saw is used for the following purposes
a) **to cut wood** b) to make the surface plain c) for rounding the edges d) for measuring (a)
81. Tool used for fitting, shaping and surface decoration of wooden pieces
a) Jack Saw b) Bow Saw c) Axe d) **Chisel** (d)
82. Tool used for shaving or smoothening of wood is
a) Saw b) Chisel c) **Planning tool** d) Gimlet (c)
83. Tool used for making round holes in wood is
a) Jack Saw b) Bow Saw c) Axe d) **Boring tool** (d)
84. Tool used to give light blows to tools having wooden handles
a) Claw hammer b) **Mallet** c) drill d) Gimlet (b)
85. A heavy table of rigid hard wood of 3 to 3.5m long is called
a) **Carpenter's bench** b) scraper c) Pincer d) none (a)
86. Joints used for connecting wooden pieces to form hollow cylinders are called
a) **circular joint** b) Box joint c) widening jointd) none (a)
87. Nails made of wire are called
a) clasp nails b) Panel pins c)**Wire nails** d) Oval brads (c)
88. Nails with oval heads are called
a) Clasp nails b) Panel pins c)Wire nails d) **Oval brads** (d)
89. Nails are designated by their
a) Diameter b) **length** c) Colour d) none (b)
90. Wooden nails are called
a) **Dowels** b) Pins c) Screws d)bolt (a)
91. Which of the following is not a hinge
a) T-hinge b)Strap hinge c) helical hinge d) **dowel** (d)
92. A grinder machine is primarily used for
a) for turning parts b) cross cutting, levelling etc.
c) **for sharpening tools** d) for cutting rectangular slots (c)
93. Angle at which the teeth of a saw are ground is called
a) **Rake** b)pitch c) set d) none (a)
94. Number of teeth per inch of a saw blade is called
a) Rake b)**pitch** c) set d) none (b)
95. ____ is used for more precise cutting such as dove tails, mitres etc.
a) **Back saw** b) hand saw c)compass saw d) coping saw (a)
96. ____ is used to cut along curves or short distances
b) Back saw b) hand saw c)**compass saw** d) coping saw (c)
97. ____ is used to make pilot holes or clearance holes of small diameter in thin members
a) Auger b) plane c) jack plane d) bradawl (d)
98. ____ is used to produce grooves of different sizes
a) Auger b) plane c) plough plane d) bradawl (c)
99. ____ is used to makr a straight line across a piece of wood for cutting
a)Auger b) try square c) jack plane d) bradawl (b)

100. _____ is used to remove small nails from wood
 a) Auger b) pincer c) jack plane d) bradawl (b)
101. Grinding stone is used for _____
 a) Making holes b) nailing c) sharpening tools d) none of these (c)

Carpentry accessories

102. _____ hinges are used when the door panel is required to be away from the wall at open position.
 a) Butt b) parliamentary c) continuous d) concealed (b)
103. They are used to joints or strengthen two or more pieces of wood.
 a) **Nails** c) clips (a)
 b) fevicol d) joints
104. Carpentry process These parts of the Nails are.....
 a) Head c) point
 b) body d) **a, b & c** (d)
105. This nail head is diamond shaped, we called it.....
 a) Round Nails c) Flat Nails
 b) **Diamond Head Nails** d) None of these (b)
106. It is made of thin wire and its top is shaped like an inverted cone.
 a) Round Nails c) Flat Nails
 b) Diamond Head Nails d) **Panel pin Nails** (d)
107. The length of this Nails varies from 45mm to 65mm, this Nails is used in making corrugated iron roof.
 a) Round Nails c) **Roofing Nails** (c)
 b) Diamond Head Nails d) Panel pin Nails
108. Flat head screw size is..... to mm.
 a) 1.2 mm to 15.0 mm c) **12mm to 150mm** (c)
 b) 10mm to 180mm d) 4mm to 8mm
109. What are butt hinges made of?
 a) Rubber c) Wood
 b) **Steel** d) Plastic (b)
110. The Rising Butt Hinge raises the door cm above the floor when they are opened.
 a) **10** c) 20 (a)
 b) 30 d) 15
111. This hinge is used in Garage door, Godam door and Main door etc.,
 a) Butt Hinge c) **Strep Hinge**
 b) Rising Butt Hinge d) T-Hinge (c)
112. The device used for locking door is _____.
 a) Handle c) Butt hinge
 b) **Aldrops** d) Nails (b)
113. How many type of lock?
 a) 02 c) 03
 b) **05** d) 04 (b)
114. Marking on wooden pieces is done to
 a) set out dimensions b) as a guide for further operations
 c) to avoid repeated measurements d) **all** (d)

115. The operation of making rectangular or square holes and recesses in wooden pieces is called
a) Chiselling **b) Mortising** c) boring d)none (b)
116. The process of cutting convex, concave and circular surfaces on a piece of wood is called
a) **Moulding** b) Boring c) Mortising d) Chiselling (a)
117. Moulded wooden pieces are used in
a) photo frames b) doors c) windows **d) all** (d)
118. The process of making blind holes in wooden pieces is called
a) **Recessing** b) Boring c) Mortising d) Chiselling (a)
119. Outside vertical members of a shutter are called
a) Top rail **b) Stiles** c) Mullion d) None (b)
120. The top most horizontal member of the shutter is called
a) Top rail b) Stiles c) Mullion d) None (a)
121. The complete assembly of stiles, panels and rails is called
a) partition b) Glaze **c) shutter** d) none (c)
122. The vertical member used to sub-divide a door opening vertically
a) Top rail b) Stiles **c) Mullion** d) None (c)
123. A group of members that act as basis for fixing doors and windows is
a) Frame b) shutter c) Panel d) None (a)
124. A top rail is
a) the vertical member used to sub-divide a door opening vertically
b) the top most horizontal member of the shutter
c) Outside vertical members of a shutter
d) None (b)
125. Stiles are
a) the vertical member used to sub-divide a door opening vertically
b) the top most horizontal member of the shutter
c) Outside vertical members of a shutter
d) None (c)
126. A mullion is
a) the vertical member used to sub-divide a door opening vertically
b) the top most horizontal member of the shutter
c) Outside vertical members of a shutter
d) None (d)
127. A frame work of straight members used as beam to bridge over large spans is known as
a) Stairs **b) Truss** c) Shutter d)none (b)
128. The sequence of steps provided to afford the means of ascent and descent between the floors or landings are known as
a) Stairs b) Truss c) Shutter d)none (a)
129. Horizontal portion of stair on which the foot rests during ascent or descent
a) riser **b) tread** c) novel d) stringer (b)
130. Vertical support provided between the treads is called
a) riser b) tread c) novel d) stringer (a)
131. Which of the following is not a part of stairs
a) riser b) tread c) novel **d) ridge** (d)

132. The clear horizontal distance between the supports is called
 a) Rise of Truss **b) Span** c) Pitch of truss d) none (b)

133. Which of the following is not a proper hinge type ?
 a) **Daimond hinge** c) Butt hinge
 b) Tee hinge d) Parliamentary hinge



134. The type of hinge shown in the figure is
 a) Butt hinge c) double action hinge
 b) Tee hinge d) concealed hinge (b)



135. The type of hinge shown in the figure is
 a) Butt hinge c) **flush hinge** (c)
 b) Tee hinge d) concealed hinge



136. The type of hinge shown in the figure is
 a) **Tee hinge** c) flush hinge (a)
 b) Tee hinge d) concealed hinge



137. The type of hinge shown in the figure is
 a) Butt hinge c) flush hinge
 b) **Double action hinge** d) concealed hinge (b)



138. The type of hinge shown in the figure is
 a) Parliamentary hinge c) flush hinge (a)
 b) Tee hinge d) concealed hinge



139. The type of accessory shown in the figure is
 a) hinge c) tower bolt
 b) door closer d) **aldrop** (d)



140. The type of accessory shown in the figure is
 a) hinge c) **tower bolt** (c)
 b) door closer d) aldrop



141. The type of accessory shown in the figure is

- a) hinge
- b) door closer

- c) tower bolt
- d) **door closer**

(d)



142. The type of accessory shown in the figure is

- a) hinge
- b) door closer

- c) **pad bolt**
- d) aldrop

(c)



143. The type of accessory shown in the figure is

- a) **safety hasp**
- b) door closer

- c) tower bolt
- d) aldrop

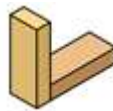
(a)

Carpentry joints

144. Which of the following is a bridle joint

- a) **open-tenon joint**
- b) dovetail joint
- c) straight joint
- d) corner joint

(a)

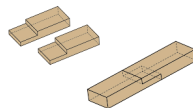


145. what is the name of the joint in the figure

- a) Lap joint
- b) butt joint

- c) mitre joint
- d) none of these

(b)

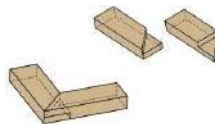


146. what is the name of the joint in the figure

- a) Lap joint
- b) butt joint

- c) mitre joint
- d) none of these

(a)



147. what is the name of the joint in the figure

- a) Lap joint
- b) butt joint

- c) mitre joint
- d) none of these

(c)



148. what is the name of the joint in the figure

- a) Lap joint
- b) butt joint

- c) mitre joint
- d) dowel joint

(d)

(b)

Paints, varnishes & lacquers

164. The paint used for wooden items or furniture is usually of a
 a) Simple c) Medium
 b) **(High quality)** - d) None of these (b)
165. How many types of paint are there?
 a) 2 c) **4**
 b) 3 d) 0 (c)
166. How many types of Varnish are there?
 a) **4** c) 2 (a)
 b) 3 d) 1
167. Which type of varnish is used on hardwood substances to hide grain defects ?
 a) Wax polish b) asphalt varnish c) flat varnish d) french polish (d)
168. Lead is used as _____ in paints
 a) Base b) carrier c) drier d) pigment (a)
169. Maximum surface drying time (in minutes) for class A type plastic emulsion paint as per Indian standard is
 a) 45 b) 75 c) 60 d) 240 (a)
170. Formation of bubbles on painted surfaces is known as _____
 a) Bloom b) blistering c) flaking d) fading (b)
171. Quantity of drier in paints is limited to ____
 a) 2% b) 4% c) 6% d) 8% (d)
172. Which of the following is the most durable varnish ?
 A) oil varnish c) spirit varnish
 B) turpentine varnish d) water varnish (a)
173. When paint is applied in three coats, the first coat is known as
 A) stopping b) finishing coat c) under coat d) priming coat (d)

Furniture & Trusses

174. Space between adjacent bents in a roof truss is called ____
 a) Purlins b) bay c) knee d) braces (b)
175. Truss shown in the figure is called 
 a) Kingpost b) queen post c) Howe d) fan (a)
176. Truss shown in the figure is called 
 a) Kingpost b) queen post c) Howe d) fan (b)
177. A series of diagonal members of the truss that meet at the apex in order to support the roof deck is
 a) Rafter b) strut c) purlin d) ridge beam (a)
178. A non-structural member of the truss where rafters can lean against and connect to
 a) Rafter b) strut c) purlin d) ridge board (d)
179. A piece of lumber laid horizontally on a wall to support the rafters of a truss, is called
 a) Rafter b) wall plate c) purlin d) ridge beam (b)

180. The larger rafter that sits directly on a tie beam and carries a purlin is called
 a) Principal Rafter b) strut c) purlin d) ridge beam (a)
181. A rafter smaller than the principal rafter in a truss is called
 a) Common Rafter b) strut c) purlin d) ridge beam (a)
182. Longitudinal horizontal beam that sits on a post or principal rafter to support common rafters is called
 a) Rafter b) strut c) purlin d) ridge beam (c)

Estimation of carpentry works & safety precautions

183. Which of the following is a safety precaution while doing carpentry works?
 a) Never wear loose clothes while doing carpentry.
 b) keep the floor area free from obstructions.
 c) Hold the jobs firmly in clamps while working on machines.
 d) All (d)
184. Which of the following are required in carpentry shop for fire safety
 a) Fire extinguishes b) Sand buckets c) enough quantity of water d) all (d)
185. Which of the following is a precaution to be observed in making a joint in wood.
 a) Avoid sharp corners b) select a proper joint as per requirement
 c) feed the stock in correct direction d) all (d)
186. Always wear Clothes while working on machines.
 a) Tight c) Loose - - (c)
 b (Rainy) d) None of these



187. Safety gear in the picture is called
 a) Safety belt b) Handgloves c) goggles d) apron (b)



188. Safety gear in the picture is called
 a) Safety belt b) Handgloves c) goggles d) apron (c)



189. Safety gear in the picture is called
 a) Safety belt b) Handgloves c) goggles d) apron (d)

MULTIPLE CHOICE QUESTIONS OF FITTER AND PLUMBING

1. A finish cut is given to improve the surface finish of a rough milled work piece (D)
 - A. Decrease cutting speed, feed rate and depth of cut
 - B. Increase feed rate, depth of cut and reduce cutting speed
 - C. Increase feed rate, depth of cut and cutting speed
 - D. Increase cutting speed, reduce feed rate and depth of cut
2. The normal module of helical gear with real module (m) of 6.62 and having an angle of 25 deg is (B)
 - A. $6.62 \times \sin 25 \text{ deg}$
 - B. $6.62 \times \cos 25 \text{ deg}$
 - C. $6.62 \times \tan 25 \text{ deg}$
 - D. $6.62 \times \cot 25 \text{ deg}$
3. Thread ring gauges are used check external threads. Separate 'GO' and 'NO GO' gauging members are provided. Which one of the following screw thread elements is not checked with the ring gauge ? (B)
 - A. Pitch
 - B. Helix angle
 - C. Profile
 - D. Pitch diameter
4. Morse taper is one of the internationally accepted standard tapers. The morse taper are available in number form ? (A)
 - A. 0 to 7
 - B. 0 to 8
 - C. 1 to 7
 - D. 1 to 8
5. A gear wheel has 36 teeth (z) and 3 mm module (m) its pitch diameter cutter ? (D)
 - A. 12 mm
 - B. 75 mm
 - C. 80 mm
 - D. 105 mm
6. A main purpose of using worm and worm wheel drivers in machines and their accessories is to ? (B)
 - A. Transmit large torque
 - B. Provide large speed reduction from worm shaft to worm wheel
 - C. Transmit higher speeds
 - D. Provide large reduction from worm wheel to worm shaft
7. The tooth thickness of rack is measured by ? (B)
 - A. Universal Vernier caliper
 - B. Gear tooth Vernier caliper
 - C. Flange micrometer
 - D. Gear tester
8. There are two types of milling processes based on the direction of cutter rotation and work feed direction in cut milling ? (D)
 - A. The work is fed in the same direction as the rotation of the cutter
 - B. Chip removal starts at the thickness part
 - C. Machine with backlash eliminator is essential
 - D. The work is fed against direction of the cutter rotation

9. A shaft is turned in one finish cut which one of the following parameters will directly influence the machine time ? (D)
- A. Cutting depth
 - B. Setting angle
 - C. Diameter of work piece
 - D. Tool travel distance
10. In a planning machine the depth of cut is given by ? (B)
- A. Adjusting tool slide
 - B. Rotating the feed screw of the tool holder
 - C. Moving cross slide
 - D. Lifting the work piece
11. You have to machine a flat surface on a work piece of two meters length. Which machine will you choose for this ? (A)
- A. Planning
 - B. Slotting
 - C. Milling
 - D. Shaping
12. Why it is necessary to maintain an approach distance between the cutting tool and the work while working on shaping machine ? (D)
- A. To cool down the cutting edge of the tool bit
 - B. To avoid any ridge at the work piece
 - C. To allow the chips to fall and clear the cutting edge.
 - D. To enable the clapper box to return to cutting
13. Oil grooves are to be cut in brass half bearings. Which one of the following chisels is suitable ? (C)
- A. Flat chisel
 - B. Cross chisel
 - C. Half round nose chisel
 - D. Web chisel
14. The quality control allows at the most 0.4% defective parts. How many defective parts can be allowed in a production of 500 parts ? (B)
- A. 1
 - B. 2
 - C. 10
 - D. 20
15. On which unit the tool setting is done on NC machine ? (C)
- A. On special devices away from the machine
 - B. On the NC machine during idle time
 - C. On the presetting devices
 - D. None of the above.
16. The component of the surface texture upon which the roughness is superimposed is known as ? (D)
- A. Surface roughness
 - B. Surface texture
 - C. Lay
 - D. Waviness

17. Which one of the following groups of properties enables the manufacture of chain hooks from Wrought iron ? (C)
- A. Ductility, malleability and hardness
 - B. Hardness, toughness and ductility
 - C. Malleability, ductility and toughness
 - D. Hardness, toughness and brittleness
18. You have to file an aluminum block to a smooth finish, which one of the following cut of file is most suitable ? (A)
- A. Double cut
 - B. Curved cut
 - C. Rasp cut
 - D. Single cut
19. Which one of the following is an artificial abrasive ? (D)
- A. Emery
 - B. Diamond
 - C. Corundum
 - D. Silicon carbide
20. The grain size of a grinding wheel is indicated by numbers, which range of grain size referred to as 'Very fine' ? (D)
- A. 10-24
 - B. 30-60
 - C. 80-180
 - D. 220-600
21. High carbon steel has to be forged, which color indicates the most suitable forging temperature? (A)
- A. Yellow red
 - B. Dark cherry red
 - C. White
 - D. Light yellow
22. The lead screw pitch of a milling machine is 5 mm and the dividing head ratio is 40:1 the lead of the milling machine is (D)
- A. 0.125 mm
 - B. 5 mm
 - C. 8 mm
 - D. 200 mm
23. The axis of plate cam blank and the end mill spindle should always remain ? (B)
- A. Inclined to each other
 - B. Parallel to each other
 - C. Opposite to each other
 - D. Vertical and inclined
24. Which milling machine is particularly adopted for milling internal or external profiles ? (D)
- A. Pantograph milling machine
 - B. Universal milling machine
 - C. Planetary milling machine
 - D. Tracer controlled milling machine
25. A 42 teeth involute helical gear with a helix angle of 45 deg is to be cut on a milling machine ? (B)
- A. 12 to 13
 - B. 35 to 54
 - C. 135 to rake
 - D. 17 to 20

26. CNC machine are not manually operated. They controlled by means of ? (A)
- A. A programme
 - B. An operating
 - C. A cam
 - D. A plug board system
27. Counter boring is done for ? (D)
- A. Deburring hole ends
 - B. Enlarging holes to accurate size
 - C. Finishing cored holes
 - D. Accommodating socket head screws
28. A point to point control system is suitable only for one of the applications ? (C)
- A. Milling profile
 - B. Turning
 - C. Drilling
 - D. Grinding
29. A steel work piece of height tensile strength is to be machined with a HSS milling cutter, which one of the following rake angles is best suited for the cutter ? (A)
- A. 8°
 - B. 12°
 - C. 20°
 - D. 28°
30. By using quick return mechanism in shaping machine the cutting stroke moves slow and return stroke fast. What is the ratio between cutting stroke and return stroke ? (B)
- A. 2:3
 - B. 3:2
 - C. 5:3
 - D. 3:5
31. What will be result if the clearance angle in drill is increased ? (B)
- A. Poor wedging action
 - B. Weak cutting edge
 - C. Rough holes surface
 - D. Increased point angle
32. An irregularly shaped workpiece is turned on a lathe. Which one of the following work holding accessories is used ? (D)
- A. Three jaw chuck
 - B. Two jaw chuck
 - C. Driving plate
 - D. Face plate
33. Solid H.S.S. cutters and carbide inserted tooth cutters are commonly used for milling. The permissible cutting speed of an inserted tooth cutter in relation to that of a HSS cutter is ? (A)
- A. Twice as much
 - B. Five to ten times greater
 - C. Smaller
 - D. Same

34. It is required to machine a single start worm of 2 module (m) and 60 mm pitch diameter, the speed ratio is 40:1, to what length should the worm be cut ? (C)
- A. 21 mm
 - B. 14.6 mm
 - C. 29.3 mm
 - D. 33.3 mm
35. The pattern on the work surface caused by the movement of the cutting tool is called ? (C)
- A. Waviness
 - B. Roughness
 - C. Surface texture
 - D. Lay
36. A product is said to have the quality when ? (C)
- A. Its shape and dimensions are within the limits
 - B. It appears to be very good
 - C. It is fit for use
 - D. The choice of material is right
37. Which taper is used on spindle nose of the lathe head stock ? (D)
- A. Jernø taper
 - B. Brown and sharp taper
 - C. Pin taper
 - D. Morse taper
38. Why do you hold a work piece lengthwise while machining in a planing machine ? (C)
- A. It is easier to load workpiece lengthwise
 - B. The idle time will be minimized
 - C. The surface quality will be improved
 - D. The tool life will be increased.
39. A hole whose lower deviation is zero is called basic hole. Which one of the following letters indicates basic hole?(D)
- A. E
 - B. F
 - C. G
 - D. H
40. Rough and finish boring operations are carried out to machine a hole in a milling machine, for rough boring select?(B)
- A. High spindle speed and coarse feed
 - B. Slow spindle speed and coarse feed
 - C. Slow spindle speed and fine feed
 - D. High spindle speed and fine feed
41. While machining cast iron coolant should be ? (A)
- A. Dry air
 - B. Kerosene
 - C. Machine oil
 - D. Soft water
42. The tool post of planing machine is mounted on ? (C)
- A. Apron
 - B. Cross rail
 - C. Clapper box
 - D. Saddle

43. The tensile strength of a metal is its ability to resist fracture when subjected to tensile loads, the tensile strength of metals are expressed in ? (B)
- N/sq.mm.
 - Kg/sq.mm
 - N-meter
 - Kg-meter
44. Which one of the characteristics of a milling cutter is most suitable for climb milling ? (C)
- Left hand cutting
 - Teeth material is carbide
 - Larger clearance and rake angle
 - The teeth are straight to the axis of the cutter
45. A gear wheel has 36 teeth and 3 mm module, its pitch diameter is ? (D)
- 12 mm
 - 75 mm
 - 80 mm
 - 108 mm
46. Which one of the following thread forms is provided in the threaded parts where the pressure acts on one flank of the threads during transmission ? (D)
- V thread
 - Square thread
 - Knuckle thread
 - Buttress thread
47. Which one of the bushes used in a drill jig and permits cutting tools of different diameters ? (B)
- Press fit bushes
 - Removable bushes (slip)
 - Fixed removable bushes
 - Linear bushes
48. Which one of the following equipment is used in the shop floor for the checking of the form that is being turned? (B)
- Template
 - Snap gauge
 - Dial test indicator and slip gauges
 - Tool room microscope
49. While grinding and lapping cemented carbide tipped tool with diamond wheels a good flow of coolant should be directed to cover the grinding zone, the coolant suitable is ? (A)
- Soluble oil
 - Mineral oil
 - Sulphurised oil
 - Mixture of paraffin and water
50. Which one of the following operation can be done on slotting machine ? (C)
- External keyway on long shaft
 - Internal grooves
 - Woodruff keyway on a shaft
 - Keyway for feather keys
51. A screw thread is designated as 1" B S P thread in 1 inch B S P thread . What does 1" indicates ? (D)
- Major diameter of thread
 - Minor diameter of thread
 - Pitch diameter of thread
 - Hole diameter of thread

52. What will be the result if the clearance angle in drill is increased ? (B)
- A. Poor wedging action
 - B. Weak cutting edge
 - C. Rough hole surface
 - D. Increased point angle
53. The temperature to which a work piece is heated depends on the material and the type of forging process. The temperature range for forging low carbon steel is ? (C)
- A. 700 -800 deg Celsius
 - B. 650-920 deg Celsius
 - C. 800 -1300 deg Celsius
 - D. 450 -700 deg Celsius
54. It is commonly observed that the face of grinding wheel becomes shiny or smooth or glazed after some use due to which of the reasons stated below (A)
- A. Grade of mill is too hard
 - B. Abrasive of the wheel not suitable for the purpose
 - C. Grain size is too coarse
 - D. Structure of the wheel is too open
55. A travelling steady is fixed on the saddle of a lathe. What is the function of the steady rest ? (A)
- A. To prevent bending of long shafts due to cutting forces
 - B. To avoid load on the lathe center while turning long
 - C. To reduce load on cutting tool while turning
 - D. To enable to turn at higher cutting speed than recommended
56. Zero setting of the two point bore dial gauge before the measurement is necessary to ? (D)
- A. Account for the errors in the gauge
 - B. Facilitate comparison
 - C. Setup initial pressure in the gauge
 - D. Eliminate inaccuracy of the measurement
57. Indexing head mechanism works with ? (B)
- A. Rock and gear
 - B. Worm and worm gear
 - C. Two helical gear
 - D. Two bevel gear
58. Which gear arrangement used to change the circular motion of horizontal to vertical without change in speed ratio ? (C)
- A. Two spur gear
 - B. Two helical gear
 - C. Two bevel gear
 - D. Worm and worm gear
59. What is a built up edge in respect of a turning tool ? (C)
- A. Job material embedded on tool edge
 - B. A carbide tip soldered on a tool shank
 - C. A method of reconditioning of worn out cutting tool edge
 - D. A tool cutting edge with a crater on it
60. Slip gauges are used as standard for precision length measurement. The slip gauges are available in four grades as per BIS standards. Which one of the following grade is meant only for reference ? (C)
- A. '0' grade
 - B. '1' grade
 - C. '00' grade
 - D. '11' grade

61. How do you recognize a drill for soft metal? (A)
- A. By the large helix angle
 - B. By small helix angle
 - C. By the chisel edge angle
 - D. By the point angle which is 90 degrees
62. Dressing and turning of a grinding wheel are? (B)
- A. Exactly the same operation
 - B. Done with the same equipment
 - C. Done only for coarse grinding wheels
 - D. Only for form grinding
63. The web of twist drill, due to repeated grinding causes resistance to feeding while drilling a 12mm diameter hole. The above effect is reduced by providing? (C)
- A. Negative rake of web
 - B. Thinning of web
 - C. Less feeding force
 - D. More feeding force
64. It is required to finish grind a dia 50mm hardened steel shaft on a cylindrical grinding machine. If the recommended surface speed of the work is 33 meters/minute, the rpm of the work is? (C)
- A. 190
 - B. 150
 - C. 210
 - D. 250
65. A 1.5 mm displacement of tool point in boring operation will result in a change in the diameter equal to? (C)
- A. 0.75 mm
 - B. 1.5 mm
 - C. 3 mm
 - D. 6 mm
66. The position of gear cutter on the arbor for rack milling is? (B)
- A. Nearer to the column
 - B. Nearer to the arbor support
 - C. At the middle
 - D. At any point on the arbor
67. Various alloying elements are added to produce different alloy steels. Which one of the following combination of alloying elements is used for HSS? (D)
- A. Chromium, nickel and molybdenum
 - B. Nickel, molybdenum and silicon
 - C. Chromium, vanadium and manganese
 - D. Chromium, vanadium and tungsten
68. Which is the correct expression for the unit of feed rate in milling? (A)
- A. m/min
 - B. mm/rev
 - C. mm/sec
 - D. mm/min
69. In a shaping machine with mechanical driven ram, the ram speed is not uniform ? (D)
- A. At the beginning of the cutting stroke
 - B. In the middle of cutting stroke
 - C. At the end of the return stroke
 - D. In the middle of the return stroke

70. Thread measurement with inserts fitted in the anvil and spindle of screw thread micrometer are selected on the basis of one the following elements of a thread being measured? (A)
- A. Major diameter
 - B. Minor diameter
 - C. Effective diameter
 - D. Pitch
71. The safe way of working (A)
- A. An effective and right way of working
 - B. An ancient way of working
 - C. A way of handling the wok in a hurry
 - D. A way of normal working
72. The best way of avoiding accident is by (C)
- A. Doing work in ancient way
 - B. Doing work in one's own way
 - C. Observing safety rules related to job, machine and workplace
 - D. Using safety equipment
73. An oily floor should be cleaned by (C)
- A. Cotton waste
 - B. Putting water
 - C. Putting sawdust or sand
 - D. Spraying carbon dioxide
74. In case of arc welding, one should protect his eyes by using (A)
- A. Dark glass screen
 - B. Sun goggles
 - C. Mask
 - D. Clear glass
75. While grinding one must use (C)
- A. Dark glass screen
 - B. Sun goggles
 - C. Safety goggles
 - D. Mask
76. The tool which is used for laying out large circles is (A)
- A. Trammel
 - B. Divider
 - C. Jenny caliper
 - D. Scriber
77. The point angle of center punch is (C)
- A. 30 deg
 - B. 60 deg
 - C. 90 deg
 - D. 120 deg
78. A divider is used for (D)
- A. Scribing circles
 - B. Scribing arcs
 - C. Transferring and stepping of distance
 - D. All the above.

79. Which head is used and set to any required angle in the combination set (B)
- A. Square head
 - B. Protractor head
 - C. Centre head
 - D. Rule
80. The length of the hammer handle for a 500 g hammer should be about (C)
- A. 275 mm
 - B. 300 mm
 - C. 325 mm
 - D. 350 mm
81. Generally the length of the handle of a vice is (B)
- A. 1.5 times the normal size of the vice
 - B. 2.5 times the normal size of the vice
 - C. 3.5 times the normal size of the vice
 - D. 4.5 times the normal size of the vice
82. The peen of a cross-peen hammer is (C)
- A. Angular to the handle
 - B. Straight to the handle
 - C. Cross to the handle
 - D. Bent towards the handle
83. The pin vice is used for (C)
- A. Holding odd-shaped small work pieces
 - B. Fixing the pins
 - C. Holding the pins
 - D. Holding the studs
84. Steel rule is a (D)
- A. Marking instrument
 - B. Precision instrument
 - C. Checking instrument
 - D. Direct reading measuring instrument
85. Steel rule is made of (C)
- A. Brass
 - B. Zinc
 - C. Stainless steel
 - D. Cast iron
86. Which of the following instrument is used for checking for flatness and squareness of a surface (A)
- A. Try square
 - B. Vernier height gauge
 - C. Slip gauge
 - D. Bevel gauge
87. The base unit of length as per S.I. unit is (D)
- A. Inch
 - B. Foot
 - C. Centimetre
 - D. Metre

88. The minimum measurement that can be read with the help of steel rule is (D)
- A. 0.01 mm
 - B. 0.02 mm
 - C. 0.05 mm
 - D. 0.50 mm
89. Try square is used to check up an angle of (D)
- A. 30°
 - B. 45°
 - C. 60°
 - D. 90°
90. The least count of Vernier bevel protractor is (B)
- A. 1'
 - B. 5'
 - C. 10'
 - D. 25'
91. The minimum measurement that can be correctly read with a Vernier calipers is called (B)
- A. Zero reading
 - B. Least count
 - C. Main scale reading
 - D. Actual reading minus zero error
92. The chief chemical property of aluminum is that it is (A)
- A. Soft
 - B. Brittle
 - C. Strong
 - D. Tough
93. Generally bearing bushes are made of (D)
- A. Copper
 - B. Brass
 - C. White metal
 - D. Gun metal
94. The chief alloying elements of stainless steel are (A)
- A. Chromium and Nickel
 - B. Chromium and Tungsten
 - C. Nickel and Vanadium
 - D. Nickel and Tungsten
95. Brass is an alloy of (C)
- A. Copper and Tin
 - B. Lead and Tin
 - C. Copper and Zinc
 - D. Copper and Silver
96. The property by which metal can be rolled into sheet is (B)
- A. Elasticity
 - B. Malleability
 - C. Ductility
 - D. Tenacity

97. A cutting tool used to finish and enlarge a hole is known (D)
A. Drill
B. Tap
C. Die
D. Reamer
98. A cutting tool used to cut outside threads is called (C)
A. Drill
B. Reamer
C. Die
D. Tap
99. It is the process of removing very small chips from metal surfaces by mean of a sharp edge tool. What is this tool called as? (A)
A. Scraper
B. Chisel
C. Hacksaw
D. Reamer
100. Which one among the following material can be cut with a rasp cut file? (C)
A. Steel
B. Cast iron
C. Wood
D. Bronze
101. The chisel used to cut keyway is (A)
A. Cape chisel
B. Flat chisel
C. Round nose chisel
D. Diamond point chisel
102. The length of hacksaw blade is measured from (B)
A. One end of the toothed portion to the other end
B. Center of one pin hole to the center of other pin hole
C. End to end of blade
D. End of one hole to the end of the other pin hole
103. Setting of teeth in hacksaw blade is (B)
A. Not required
B. Required to avoid friction between the blade and the workpiece
C. Require for increasing the strength of the blade
D. Required for providing teeth on the blade
104. Which one of the following material is used for making a grinding wheel (A)
A. Silicon carbide
B. Granite
C. Sand
D. Calcium carbonate
105. Anvil is a (A)
A. Heavy block of cast steel
B. Heavy block of mild steel
C. Heavy block of high carbon steel
D. Light block of aluminum

106. Forging is done when the metal is in (B)
- A. Liquid condition
 - B. Plastic condition
 - C. Elastic condition
 - D. None of the above
107. Forging is done at (B)
- A. The melting point of the metal
 - B. Below the melting point of the metal
 - C. Above the melting point of the metal
 - D. None of the above
108. Cast iron cannot be forged because it has the property of (D)
- A. Softness
 - B. Stiffness
 - C. Toughness
 - D. Brittleness
109. The thickness of sheet metal is indicated by a series of numbers, which is called as (B)
- A. Number size
 - B. Gauge
 - C. Standard size
 - D. None of the above
110. Mallet is made up of (C)
- A. Lead
 - B. Brass
 - C. Hardwood
 - D. Cast iron
111. Which one of the following types of joints is used in which the end of sheet is placed over the end of another sheet and joined together? (A)
- A. Lap joint
 - B. Butt joint
 - C. Knocked up joint
 - D. Grooved seam joint
112. Which one of the following is common reason for using aluminum sheets (A)
- A. Lightness
 - B. Brightness
 - C. Dullness
 - D. Darkness
113. Which of the following notches is used when making a job with 90° bend? (B)
- A. Square notch
 - B. V-notch
 - C. Wired notch
 - D. Slant notch
114. The element used as main constituent along with lead for soft soldering is (A)
- A. Tin
 - B. Copper
 - C. Silver
 - D. Aluminum

115. The center to center distance between two adjacent rivets in the same row, measured parallel to the seam or edge of the plate is called (B)
- A. Lead
 - B. Pitch
 - C. Margin
 - D. Lag
116. The arc utilized in electric arc welding is a (C)
- A. High voltage, high current discharge
 - B. Lowvoltage, low current discharge
 - C. Low voltage, high current discharge
 - D. High voltage, low current discharge
117. The position in which it is easiest to the weld is (A)
- A. Flat
 - B. Vertical
 - C. Horizontal
 - D. Overhead
118. The function of central hole in the tip of cutting blow pipe is (C)
- A. Supply oxygen for preheating
 - B. Supply acetylene for preheating
 - C. Supply oxygen for cutting
 - D. Supply acetylene for cutting
119. A feeler gauge is used for (B)
- A. Adjusting the parts for play
 - B. Checking gap between mating parts
 - C. Checking radius of jobs
 - D. Checking accuracy of holes
120. The difference between the maximum and minimum sizes allowed in manufactured components is called (C)
- A. Clearance
 - B. Allowance
 - C. Tolerance
 - D. Limit
121. Lubricant is necessary to (A)
- A. Run the machine smoothly taking least load
 - B. Run the machine quickly
 - C. Stop the machine immediately
 - D. Produce work piece of greater accuracy
122. The dimension of a nut piece is expressed in terms of (B)
- A. Head of the bolt
 - B. Nominal diameter of the bolt
 - C. Core diameter of the bolt
 - D. Pitch diameter of the bolt
123. Which one of the following thread form on bolts and nuts is meant for general fastening purpose(A)
- A. 'v' threads
 - B. Square threads
 - C. Knuckle threads
 - D. Acme threads

124. A plain washer helps to (A)
A. Distribute force over large area
B. Distribute the force to nut
C. Cover the clearance hole of the job
D. Improve appearance of the job
125. Spring washers are used under nuts to prevent (D)
A. Damage to the bolt
B. Damage to the nut
C. Damage to the job
D. Slackness of nuts due to vibrations
126. Which one of the following is permanent fastening (D)
A. Screw fastening
B. Fastening with bolt and nut
C. Brazing
D. Welding
127. The distance from a given point on one thread to corresponding point on the next thread is called (B)
A. Helix
B. Pitch
C. Lead
D. Travel
128. The most common shape of nut is (B)
A. Square
B. Hexagonal
C. Round
D. Flat
129. The bearings in a car wheel are subjected to (C)
A. Radial load only
B. Thrust load only
C. Both radial and thrust load
D. Neither radial nor thrust load
130. Bearings are used for (D)
A. Support and hold the shaft in a fixed position
B. Allow the shaft to run freely
C. Minimize the rubbing action
D. All of the above
131. Rubber ring joints can be provided in the pipeline to _____ (B)
A. Water free seal
B. Water tight seal
C. Water peel seal
D. None of the above
132. What is the use of hand taps? (A)
A. Internal threads
B. External threads
C. Internal gauge
D. Internal drilling

133. In an acetylene cylinder the acetylene is dissolved in _____ (C)
A. Carbon dioxide
B. Water
C. Acetone
D. Mercury
134. Which grade G I pipe is used for water supply? (B)
A. Yellow
B. Blue
C. Red
D. Brown
135. The angle of metric thread is _____ (A)
A. 60 degrees
B. 55 degrees
C. 90 degrees
D. 47 degrees
136. What are the diameter of A C pipes available in _____ (C)
A. 4 cm to 100 cm
B. 5 cm to 100 cm
C. 2 cm to 100 cm
D. 6 cm to 100 cm
137. Name of the tool used to check internal pipe threads is ____ (C)
A. Pipe taps
B. Ring gauge
C. Pipe plug threads
D. Pipe bush
138. When pressure test can be started in solvent welder PVC pipeline (A)
A. After 24 hours
B. After 12 hours
C. After 5 hours
D. After 36 hours
139. Where are collar joints used? (B)
A. Smaller diameter C I pipe
B. Smaller diameter A C pipe
C. Smaller diameter S W pipe
D. Smaller diameter PVC pipe
140. Which is the preferred to fix scour valve (A)
A. Lowest point in the pipeline
B. Higher point in the pipeline
C. Straight line in pipeline
D. None of the above
141. Hardness that cannot be removed by boiling the water is called (C)
A. Difficult hardness
B. Stiff hardness
C. Permanent hardness
D. Tough hardness

142. Galvanized iron is coated with_____ (C)
- Copper
 - Lead
 - Zinc
 - Tin
143. What you should be sure you have in plenty before considering buying a solar water heater (A)
- Abundant sunshine
 - Very hot water
 - Intermittent rain
 - All of the above
144. There are two primary chemicals used to purify water namely _____ (A)
- Iodine and chlorine
 - Sodium and chlorine
 - Chlorine and fluorine
 - Fluorine and iodine
145. Which material is used for joining C.I. Pipes ? (B)
- Lead and cement
 - Lead and lead wool
 - Zinc and lead wool
 - Copper and hemp yarn
146. What is used at the junction of house sewer and municipal sewer ? (C)
- Nahani trap
 - P- trap
 - Intercepting trap
 - S- trap
147. What is used to overcome siphonic action (A)
- Anti siphonage pipe
 - Vent pipe
 - Coupler
 - Vent cowl
148. What happens if cast iron pipes are coated with coal tar (B)
- Loose strength
 - Prevent corrosion
 - Does not sag
 - Does not fig
149. Which component in gully trap is used to prevent gases from entering waste lien (C)
- Air seal
 - C.I. cover
 - Water seal
 - C.I. grating
150. Which accessories are used to change the direction of flow in the pipe..... (D)
- Water meter
 - Pipe
 - Cocks
 - Fittings
151. In the context of water purification RO: stands for..... (A)
- Reverse osmosis
 - Relative osmosis
 - Reduced osmosis

- D. Refreshed osmosis
152. The use of asbestos cement is banned in some countries because..... (B)
- A. It cannot be repaired easily
 - B. It leads to health problems
 - C. It is highly corrosive
 - D. It is too costly
153. Metals possess physical and mechanical properties. Which one of the following is a physical property of metals ? (C)
- A. Tenacity
 - B. Malleability
 - C. Fusibility
 - D. Ductility
154. Which one of the following is the resistance of a metal to elastic deformation (A)
- A. Stiffness
 - B. Toughness
 - C. Strength
 - D. Ductility
155. Displacement pumps are of two types (B)
- A. Reciprocating and ram
 - B. Reciprocating and rotary
 - C. Reciprocating and centrifugal
 - D. Reciprocating and jet
156. A portion of the plumbing system that receives discharges of soil and waste stacks within the building and conveys the same to the house sewer is (D)
- A. Main drain
 - B. Soil drain
 - C. Waste drain
 - D. House drain
157. A plumbing fixture used for washing the middle private part of the body especially the Genitals is (A)
- A. Bidet
 - B. Ball faucet
 - C. Mini shower
 - D. Water house
158. What is boiling point of water in Fahrenheit (F) scale..... (B)
- A. 112°f
 - B. 212°f
 - C. 312°f
 - D. 100°f
159. Which test is applied in underground drains for soundness ... (C)
- A. Hydraulic test
 - B. Pneumatic test
 - C. Water test
 - D. Sound test
160. What are the two sub systems in your home plumbing... (A)
- A. Incoming fresh water and outgoing waste water
 - B. Low pressure water and high pressure
 - C. Hot and cold water
 - D. None of the above

161. How to prevent algae growth in O.H. tank ? (A)
- A. Copper sulphate
 - B. Aluminum sulphate
 - C. Lead powder
 - D. Bleaching powder
162. What is the check the alignment and condition of inside the pipe ... (B)
- A. Smoke test
 - B. Mirror test
 - C. Air test
 - D. Hydraulic test
163. How many days curing is required for S.W. pipe joints... (A)
- A. 7 days
 - B. 2 days
 - C. 5 days
 - D. 3 days
164. What is the size of flush pipe for low level flushing cistern (B)
- A. 32 mm
 - B. 40 mm
 - C. 25 mm
 - D. 50 mm
165. What causes the siphonic action in soil pipe ... (C)
- A. Leaked air
 - B. Foul air
 - C. Sucked air
 - D. Air diffuser
166. What instrument is used while conducting air test in pipe line... (A)
- A. Manometer
 - B. Vinometer
 - C. Thermometer
 - D. Tint meter
167. State the size of ball used in ball test..... (A)
- A. 13 mm less than inside diameter of pipe
 - B. 12 mm less than inside diameter of pipe
 - C. 11mm less than inside diameter of pipe
 - D. 10 mm less than inside diameter of pipe
168. What is the use of NAHANI trap... (A)
- A. To collect waste water from bath room
 - B. To collect rain water
 - C. To collect soil pipe from sewage
 - D. To collect raw water from river
169. Why mono block pumps are more popular ... (B)
- A. Large in size
 - B. Small in size
 - C. No valves
 - D. No priming

170. How many pipes are there in a one pipe system (D)
- A. One
 - B. Three
 - C. Four
 - D. Two
171. The space between the teeth of a handsaw is called ... (A)
- A. Gullet
 - B. Kert
 - C. Flank
 - D. Pitch
172. Which bond is commonly used for ... (D)
- A. Stretcher bond
 - B. Header bond
 - C. Flemish bond
 - D. English bond
173. The clearance angle of a drill is ... (B)
- A. 3° to 5°
 - B. 8° to 12°
 - C. 12° to 20°
 - D. 15° to 20°
174. What is usually the included angle of the conical point of a scriber (A)
- A. 15°
 - B. 30°
 - C. 60°
 - D. 90°
175. One Pascal is equal to ... (B)
- A. 1 Newton/sq.mm.
 - B. 1 Newton/sq.m.
 - C. 1 Newton/sq.cm.
 - D. 1 Newton/sq.dm.
176. Ferrous metal is an alloy of .. (C)
- A. Iron and silicon
 - B. Carbon and silicon
 - C. Iron and carbon
 - D. Manganese and silicon
177. In which pipes are used in water providing plants ... (A)
- A. C.I. Pipe
 - B. G.I. Pipe
 - C. A.C. Pipe
 - D. S.W. Pipe
178. Cast iron is used for manufacturing machine beds because ... (B)
- A. It is heavy in weight
 - B. It can resist more compressive stress
 - C. It is a cheaper metal
 - D. It is a brittle metal

179. A device installed in a drainage system to prevent reverse flow is .. (A)
- A. Back water valve
 - B. Back flow preventer
 - C. Back siphonage
 - D. Back vent pipe
180. In metric micro meters what is the pitch of the spindle thread (B)
- A. 0.1 mm
 - B. 0.5 mm
 - C. 0.2 mm
 - D. 0.01 mm
181. The pipe fitting used to connect a service pipe to a water main is called as ... (B)
- A. Adjusting nut
 - B. Ferule
 - C. Coupling
 - D. Air valve
182. In a septic tank the ventilation pipe usually provided is of .. (C)
- A. 100 mm dia
 - B. 150 mm dia
 - C. 75 mm dia
 - D. 50 mm dia
183. Flogging is the method of generating a mist for the application of (C)
- A. Spray
 - B. Soak
 - C. Sanitizers
 - D. Filtering
184. Gate valve is one of the most common valves used in the main supply lines to the .. (B)
- A. Ventilating line
 - B. Water supply system
 - C. Back flow system
 - D. Drainage system
185. Air lift pump is installed to draw more water from the deep well the pump is operated by .. (C)
- A. Secondary electrical sources
 - B. Acute air
 - C. Compressed air
 - D. Primary electrical sources
186. White metal is an alloy of (C)
- A. Copper, lead, tin and antimony
 - B. Copper, zinc and tin
 - C. Copper, zinc, tin and antimony
 - D. Copper and tin
187. Dresser coupling and Victaulic joint basically are (C)
- A. Back push joint
 - B. Chemical joint
 - C. Mechanical joint
 - D. Adhesive joint

188. Which one of the following alloys can resist salt water corrosion ... (A)
- A. Zinc alloy
 - B. Gun metal
 - C. Nickel chrome alloy
 - D. Brass
189. The system of water distribution which is suited to a city growing irregularly is .. (D)
- A. Grid iron system
 - B. Radial system
 - C. Ring system
 - D. Tree system
190. Which tool is used for heating while carrying out soldering (B)
- A. Torch lamp
 - B. Blow lamp
 - C. Holding lamp
 - D. Winding lamp
191. The water closet having an integral part of trap S and P type outlet have a water seal size of .. (C)
- A. 25 mm
 - B. 50 mm
 - C. 75 mm
 - D. 100 mm
192. What type of tap is used for hot and cold water pipe line in a system ... (B)
- A. Stopcock
 - B. 2 or 3 in mixer tap
 - C. One in one mixer
 - D. Direct mix of the O H T
193. Collar joint shall be finished off with a fillet sloping at a surface angle of (D)
- A. 15°
 - B. 25°
 - C. 35°
 - D. 45°
194. Sewer pipe may have to be laid under the condition of ... (B)
- A. Cushion
 - B. Trench
 - C. Length
 - D. Threading
195. A device used in kitchens serving hotels dining rooms club houses and restaurants is (A)
- A. Grease basin
 - B. Yard basins
 - C. Garage basin
 - D. Oil catch basin
196. In a hot water system expansion / vent pipes are installed on the cylinder and boiler because they..(D)
- A. Prevent air locks
 - B. Stop buildup of lime
 - C. Supply cold water
 - D. Release excess steam and water

197. The pump attached with impeller and pump is ... (A)
- A. Mono block pump
 - B. Jet pump
 - C. Air lift pump
 - D. Rotary pump
198. For cutting thin tubing the most suitable pitch of the hack saw blade is ... (B)
- A. 1.8 mm
 - B. 0.8 mm
 - C. 1.4 mm
 - D. 0.1 mm
199. The hose pipe for the oxygen line is ... (A)
- A. Black
 - B. Maroon
 - C. Red
 - D. Brown
200. Dual systems of distribution means ... (C)
- A. Continues supply system
 - B. Pumping and intermittent system
 - C. Gravity and pumping system
 - D. Gravity and continues system
201. What are the materials required for flanged joint (A)
- A. Cement and hemp yarn
 - B. Screw and washer
 - C. Nut and bold
 - D. Lead and tin
202. How much clearance form wall to be kept while laying G.I. pipe internally (A)
- A. 1.5 cm
 - B. 2.5 cm
 - C. 3.5 cm
 - D. 4.5 cm
203. What is general fixing height of wash basin from floor level..... (A)
- A. 80 cm
 - B. 70 cm
 - C. 60 cm
 - D. 65 cm
204. What is height of fixing of automatic cistern for urinal ... (B)
- A. 1800 mm
 - B. 1900 mm
 - C. 1600 mm
 - D. 1500 mm
205. How many types of flushing cisterns are available based on operation ... (D)
- A. 5 types
 - B. 3 types
 - C. 4 types
 - D. 2 types

206. What is the size of waste coupling for kitchen sink (B)
- A. 32 mm
 - B. 50 mm
 - C. 38 mm
 - D. 40 mm
207. The Brick or stone used in corner masonry of a wall is called (C)
- A. King closer
 - B. Blank space
 - C. Quoin closer
 - D. Mortar
208. Which part ensures uniform pressure on the measuring faces in a micrometer ... (A)
- A. Ratchet stop
 - B. Thimble
 - C. Spindle
 - D. Barrel
209. What is plate with a short handle and is used mainly to hold mortar. What is this tool... (C)
- A. Spade
 - B. Shovel
 - C. Hawk
 - D. Joint filler
210. Rust is formed from iron and which other element ... (A)
- A. Oxygen
 - B. Hydrogen
 - C. Nitrogen
 - D. Sulphur
211. Spindle of gate valve rotates without closing due to ... (A)
- A. Spindle thread badly worn-out
 - B. Spindle is bent
 - C. Gland nut loose
 - D. Defective packing
212. What is the size of manhole generally constructed within compound for house drainage .. (B)
- A. 90 X 70 cm
 - B. 90 X 80 cm
 - C. 90 X 60 cm
 - D. 90 X 90 cm
213. Name the valve is used to regulate the pressure in pipe line (A)
- A. Relief valve
 - B. Needle valve
 - C. Gate valve
 - D. Check valve
214. What is the size of frog in brick (A)
- A. 100 mm length x 40 mm width x 10 to 20 mm depth
 - B. 100 mm length x 30 mm width x 10 to 25 mm depth
 - C. 100 mm length x 50 mm width x 10 to 15 mm depth
 - D. None of the above

215. Cross cut chisel is used for (C)
- A. Chipping excess metal
 - B. Curved grooves
 - C. Key ways
 - D. Corner
216. Which types of pipes can be cut easily by pipe cutter (D)
- A. S.W. pipe
 - B. C.I. pipe
 - C. A.C. pipe
 - D. G.I. pipe
217. Name the apparatus used for testing slump ... (C)
- A. Sand cone test
 - B. Mud cone test
 - C. Slump cone test
 - D. None of the above
218. Which method of casting C.I. pipes gives good result (C)
- A. Sand casting
 - B. Mud casting
 - C. Centrifugal casting
 - D. None of the above
219. What is the range of S.W. pipes available in the market ... (A)
- A. 100 to 600 mm
 - B. 100 to 300 mm
 - C. 100 to 180 mm
 - D. 100 to 700 mm
220. Which side of mixing tap hot water line to be connected ...(B)
- A. Right side
 - B. Left side
 - C. Middle side
 - D. Corner side
221. What is the term generally employed for a piece of pipe which threaded on both ends and less than 12 inches long ? (A)
- A. Coupling
 - B. Nipple
 - C. Union
 - D. Plugs
222. Pipe wrench is used for pipes of diameter (D)
- A. Less than 15 mm
 - B. More than 150 mm
 - C. 50 mm to 150 mm
 - D. 15 mm to 50 mm
223. If the globe valve begins to leak between the packing nut and valve stem (B)
- A. Gland nut to be replaced
 - B. Packing to be replaced
 - C. Valve stem to be replaced
 - D. Bonnet to be replaced

224. The lower most level or surface of a sewer is known as (A)
- A. Invert
 - B. Bedding
 - C. Benching
 - D. Drain
225. What process is used to remove permanent hardness in water ... (C)
- A. Purification process
 - B. Coagulation process
 - C. Base exchange process
 - D. Sedimentation process
226. Dug wells are also known as (A)
- A. Draw wells
 - B. Tube wells
 - C. Driven wells
 - D. Artesian wells
227. What should be done to remove trapped air in centrifugal pump ... (d)
- A. Packing
 - B. Washing
 - C. Use booster pump
 - D. Priming
228. What is provided in elevated storage reservoir for circulation of air... (B)
- A. Manhole
 - B. Ventilator
 - C. Float gauge
 - D. Overflow pipe
229. What type of bacteria treats waste in percolation area ? (C)
- A. Fungi
 - B. Anaerobic
 - C. Aerobic
 - D. Lime
230. The cistern which is operated by a chain is called ... (B)
- A. Ball type cistern
 - B. Bell type cistern
 - C. Pull type cistern
 - D. Push type cistern
231. Which of the following fire extinguishing agent is suitable for a live electrical fire? (B)
- A. Water
 - B. Carbon dioxide
 - C. Carbon tetrachloride
 - D. Foam
232. The calliper meant for measuring the width of the plot is ____ (B)
- A. Outside calliper
 - B. Inside calliper
 - C. Jenny caliper
 - D. Odd leg caliper

233. The bench vices are specified by____ (A)
- A. The width of jaw
 - B. The length of spindle
 - C. The moving distance of moving jaw
 - D. The length of fixed jaw
234. Which head is used for locating center of the cylindrical jobs? (D)
- A. Square head
 - B. Try square
 - C. Steel rule
 - D. Center head
235. Scribes are made of____ (C)
- A. Mild steel
 - B. Brass
 - C. High carbon steel
 - D. Cast iron
236. Which chisel is used for cutting key ways? (C)
- A. Flat chisel
 - B. Diamond point chisel
 - C. Cross cut chisel
 - D. Round nose chisel
237. The part of universal surface gauge which helps to draw a parallel line along a datum edge is __ (B)
- A. Rocker arm
 - B. Guide pins
 - C. Sung
 - D. Fine adjusting screw
238. Which marking media is used for casting and forging surfaces? (A)
- A. Chalk powder
 - B. Prussian blue
 - C. Copper sulphate
 - D. Red lead
239. The key has curved bottom to match the shaft. The key is known as____ (A)
- A. Hollow saddle key
 - B. Sunk key
 - C. Feather key
 - D. Flat saddle key
240. The good conductor of heat and electricity____ (C)
- A. Stainless steel wire
 - B. Iron wire
 - C. Copper wire
 - D. Brass wire
241. What is countersinking angle for seating countersink head machine screw and debarring of holes? (D)
- A. 60 degrees
 - B. 70 degrees
 - C. 80 degrees
 - D. 90 degrees

242. Which inside dimension is not possible to measure by the inside micrometer? (B)
- A. 10.45
 - B. 26.35
 - C. 76.20
 - D. 110.55
243. The depth bar of Vernier calliper is attached with ____ (B)
- A. Fixed jaw
 - B. Movable jaw
 - C. Vernier scale
 - D. Fine adjustment screw
244. A drift is used for ____ (A)
- A. Removing machine from drill spindle from the machine spindle
 - B. Drawing a broken drill from the work
 - C. Fixing chuck on the machine spindle
 - D. Drawing a drill location
245. Which one of the following hammer is in heavy forging work? (B)
- A. Ball pein hammer
 - B. Cross pein hammer
 - C. Straight pein hammer
 - D. Sledge hammer
246. Soft clamps are used for clamping sheet metal in bench vise because ____ (D)
- A. They prevent breakage
 - B. They prevent indentation
 - C. They prevent wear and tear
 - D. They give high accuracy
247. One of the function of fuller in forging shop is ____ (C)
- A. Swaging down
 - B. Upsetting
 - C. Necking down
 - D. Bending down
248. After hardening the tool is reheated and cooled to get required property of toughness. This process is called ____ (B)
- A. Flame hardening
 - B. Tempering
 - C. Induction hardening
 - D. Case hardening
249. Diluted hydrochloric acid is used as flux for soldering ____ (A)
- A. Galvanized iron steel
 - B. Copper sheet
 - C. Stainless steel sheet
 - D. Brass sheet
250. A stake is a ____ (D)
- A. Marking tool
 - B. Hand tool
 - C. Cutting tool
 - D. Supporting tool

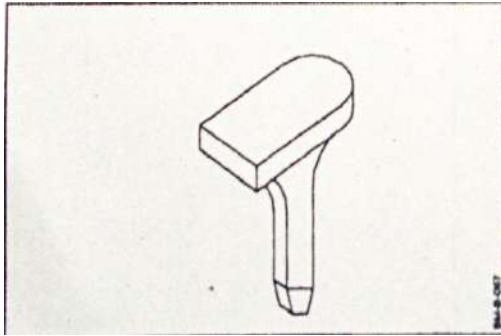
251. The most suitable tool for correct folding of sheet metal at 90° is ____ (A)
- A. Folding bars
 - B. Angle iron
 - C. Hand hammer
 - D. Hatchet stake
252. The maximum distance from the edge to the center of the first rivet should be (A)
- A. Two times the diameter of rivet
 - B. Three times the diameter of rivet
 - C. Four times the diameter of rivet
 - D. Five times the diameter of rivet
253. The colour code for identifying a gas cylinder containing oxygen is ____ (C)
- A. Red
 - B. Blue
 - C. Black
 - D. Maroon
254. The root opening in square butt welding is given ____ (D)
- A. To maintain correct dimension
 - B. To keep the joint in alignment
 - C. To control the distortion
 - D. To obtain penetration
255. If a patient does not respond to mouth-to-mouth resuscitation treatment, a first-aider should immediately ____ (A)
- A. Seek medical help
 - B. Check for broken limbs
 - C. Keep the body warm with blankets
 - D. Check pupils and pulse
256. Which grade of file is used for removing rapidly a large quantity of metal? (D)
- A. Dead smooth file
 - B. Smooth file
 - C. Second cut file
 - D. Rough file
257. A slight convexity is given in the cutting edge of the flat chisel to ____ (B)
- A. Cut keyway on a shaft
 - B. Prevent digging of the ends
 - C. Cut curved surface
 - D. Cut sharp corners
258. The size of divider is specified by ____ (C)
- A. Distance between points when opened fully
 - B. Total length of legs
 - C. Distance between pivot and the point
 - D. Length of legs without points
259. Try square is used for checking ____ (C)
- A. Check for round surface
 - B. Check for groove surface
 - C. Check for flat surface
 - D. Check for irregular surface

260. What is the part used to change the range of depth micrometer? (D)
- A. Thimble
 - B. Stock
 - C. Graduated sleeve
 - D. Extension rod
261. Which work holding devices support to the round job while drilling the job on a drilling machine? (A)
- A. "V" block and clamp, bolts, packing piece
 - B. The machine vice and bolts, packing piece
 - C. The hand vice with clamps, bolts
 - D. The pin vice with clamp, bolts
262. The best placement of stock for heating in the forge is ____ (B)
- A. Below the tuyere with the fire coming from deep inside
 - B. On the top of the fire covered with thin layer of coal
 - C. Away from the tuyere with a thick layer of coal on top
 - D. Near the tuyere allowing the air to fall directly on the stock
263. After hardening process the metal becomes more ____ (B)
- A. Malleable
 - B. Brittle
 - C. Tough
 - D. Ductile
264. Which hammer is used for sheet metal work? (D)
- A. Ball pein hammer
 - B. Sledge hammer
 - C. Cross pein hammer
 - D. Soft hammer(Wood)
 - E.
265. The purpose of rivet set used in riveting is ____ (D)
- A. To bring sheet closely together
 - B. To straighten the sheet before riveting
 - C. To remove the burr between the sheets
 - D. To align the rivet in correct position
266. More spatters are used for ____ (B)
- A. Slow speed
 - B. Excess current
 - C. More speed
 - D. Bigger gauge of electrode
267. The micrometer has negative error 0.03 mm shows a reading of 25.52 mm. the correct dimension is__ (B)
- A. 25.50 mm
 - B. 25.55 mm
 - C. 25.57 mm
 - D. 25.60 mm

268. After threading a hole by a tap, it was found that the crest of the thread was not formed completely. This defect is due to_____ (A)
- Hole size slightly more than the tap drill size
 - Insufficient coolant supply
 - Broken the tip of the cutting edge of tap
 - Hole size slightly less than the tap drill size
269. Which type of non-destructive test is suitable to check the internal defects weld in high pressure boiler welding (D)
- Visual test
 - Liquid penetrant test
 - Magnetic particle test
 - Radiographic test
270. A new hacksaw blade after a new strokes becomes loose because of the_____ (C)
- Wing nut thread being worn out
 - Improper selection of the set of screw
 - Stretching of the blade
 - Wrong pitch of the blade
271. Fire clay, dinas and talc bricks are main refractory material employed in forge. What is the melting point of natural talc? (C)
- 1000°
 - 1200°
 - 1500°
 - 1700°
272. The swage is a tool used in forge shop. It is made out of_____ (B)
- High carbon steel
 - Malleable cast iron
 - Medium carbon steel
 - Low carbon steel
273. The type of hammer used in forge shop weigh from 1 to 2 kg and is fitted with short wooden handle is _____ (A)
- Hand hammer
 - Sledge hammer
 - Ball pane hammer
 - Straight pane hammer
274. Drawing out process is done on anvil. Name the part of operation done is_____ (A)
- Face
 - Beak
 - Tail
 - Round hole
275. Name the cutting tool fixed in the anvil square hole. (B)
- Hot set
 - Hard die
 - Cold set
 - Anvil
276. While normalizing the component should be cooled by_____ (D)
- Dipping in water
 - Forced air
 - Quenching in oil
 - In still air to room temperature

277. Identify the name of stake shown in figure below

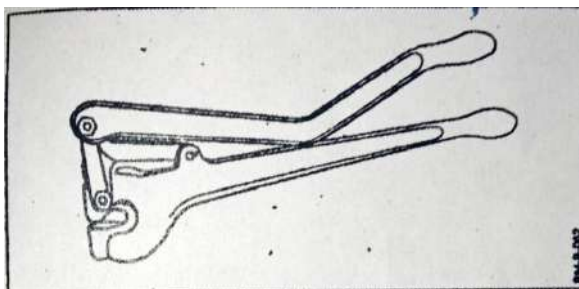
(A)



- A. Round head stake
- B. Funnel stake
- C. Half moon stake
- D. Copper smith stake

278. The figure shown is a type of punch. Identify it.

(D)



- A. Solid punch
- B. Tinner's hand punch
- C. Hollow punch
- D. Iron hand punch

279. The preferred material for soldering bit is

(C)

- A. Lead
- B. Tin
- C. Copper
- D. Zinc

280. The type of brush used to remove coarse rust in a sheet metal before painting is

(B)

- A. Wooden brush
- B. Nylon brush
- C. Wire brush
- D. Painting brush

281. Calipers are used for ?

(A)

- A. Measurements
- B. Cutting instruments
- C. Making of joint
- D. Covering of wound

282. Among drainage pipes the accessory used to stop the foul gases entering into the house by providing water is called?

(C)

- A. Valve
- B. Union
- C. Trap
- D. Sink

282. Which of the following is not a trap (C)

- A. S-Trap
- B. P-Trap
- C. Z-Trap
- D. Q-Trap

283. Both P and S trap are used for which of the following (A)

- A. Water closet
- B. Wash basin
- C. Water tank
- D. Flush tank

284. The material used for making socket and spigot joint cast iron pipes is (A)

- A. Lead
- B. Rubber
- C. Plastic
- D. Iron

285. Before casting lead for making Socket and spigot joint which one of the following is carried out first? (A)

- A. Thread packing to be done
- B. Lead packing to be done
- C. Iron packing to be done
- D. Rubber packing to be done

286. The pipe holding accessory required to hold it before making cutting is (A)

- A. Bench vice
- B. Calipers
- C. Axe
- D. Spanner

287. The instrument used for cutting pipes is (C)

- A. Bench vice
- B. Spanner
- C. Hack saw
- D. Calipers

288. All pipe used in plumbing applications will have all of the following markings except: (C)

- A. Pressure rating in psi
- B. Nominal pipe size
- C. Length of the pipe
- D. Manufacturer's brand name

289. What size of P-Trap is required for a kitchen sink? (C)

- A. 1"
- B. 1 1/4"
- C. 1 1/2"
- D. 1 3/4"

290. For 2" to 4" Dia. The distance between the manholes should be (B)
- A. 100'-200'
 - B. 300'-500'
 - C. 600'-800'
 - D. 1000'-1200'
291. For 4" to 6" Dia. The distance between the manholes should be (C)
- A. 100'-200'
 - B. 300'-500'
 - C. 600'-800'
 - D. 1000'-1200'
292. For above 6" Dia. The distance between the manholes should be (D)
- A. 100'-200'
 - B. 300'-500'
 - C. 600'-800'
 - D. 1000'-1200'
293. Urinals are placed at a height of (B)
- A. 1'
 - B. 2.5'
 - C. 5'
 - D. 6'
294. For place of connecting the underground drains pipes with vertical soil pipes is called as ? (A)
- A. Inspection chamber
 - B. Trap
 - C. Grease trap
 - D. Vent Trap
295. Which of the following is not a pipe line layout? (D)
- A. Dead End System
 - B. Grid System
 - C. Ring System
 - D. Water system
296. The following is used for provided thread for pipe? (A)
- A. Dye set and dye bit
 - B. Blow lamp
 - C. Packing chisel
 - D. Hack saw
297. After joining the CI pipes by pouring the liquid lead which of the following is used for filling is strongly? (B)
- A. Cutting Pliers
 - B. Packing chisel
 - C. Wrench
 - D. Spanner

298. Which of the following devices is used for opening when water is required and stopping when water is not-required ? (A)
- A. Bib Cock
 - B. Packing chisel
 - C. Bench vice
 - D. Sluice valve
299. At what level high level flush tank to be placed? (D)
- A. 4'
 - B. 5'
 - C. 6'
 - D. More than 6'
300. The Tap which is fixed for wash basin is called (D)
- A. Bib Cock
 - B. Stop Cock
 - C. Push Cock
 - D. Pillar Cock
301. The valve used for operation of pillar cock is (B)
- A. Sluice Valve
 - B. Stop Valve
 - C. Ball Valve
 - D. Flat Valve
302. Which of the following is used for wash basin (D)
- A. Bib Cock
 - B. Push Cock
 - C. Blow off
 - D. Waster Plug
303. Which of the following is used for mounting wash basin (B)
- A. Vice
 - B. Bracket
 - C. Wrench
 - D. Trap
304. For fixing of big diameter pipes the following is used? (B)
- A. Vice
 - B. Chain Wrench
 - C. Packing tool
 - D. Spanner
305. Identify **the** tool used for fixing the pipe. (D)
- A. Packing tool
 - B. Trap
 - C. Elbow
 - D. Adjustable wrench

306. Identify the tool used Joining pipes of two different diameters (D)
- A. Wrench
 - B. Di set
 - C. Elbow
 - D. Reducer
307. Identify the tool for joining two pipes at an angle (D)
- A. Reducer
 - B. Coupling
 - C. Socket
 - D. Elbow
308. Identify the tool used for joining two pipe of same diameter in an alignment (C)
- A. Reducer
 - B. Elbow
 - C. Coupling or Socket
 - D. Bend
309. For measuring the discharge through a pipe the following is used (A)
- A. Meters
 - B. Coupling
 - C. Elbow
 - D. Reducer
310. For joining three pipe the which of the following is used (D)
- A. Diset
 - B. Elbow
 - C. Packing tool
 - D. Tee (T)
311. For facilitating repairing the pipe line network one of the following is placed at regular intervals, identity it (C)
- A. Diset
 - B. Packing tool
 - C. Union
 - D. TEE
312. For arresting leakage of pipe at the end of pipe line network which one among the following is used (A)
- A. Plug
 - B. Elbow
 - C. Tee
 - D. Coupling
313. For removing the pipe which are placed at the centre in a pipe line network which among the following is used (B)
- A. Elbow
 - B. Flange
 - C. Lead
 - D. TEE

314. A small pipe with threads on its either side is called a (A)
- A. Nipple
 - B. Elbow
 - C. Flange
 - D. TEE
315. Identity the joint used to join two concrete pipe (B)
- A. Lead
 - B. Cement Concrete
 - C. Flange
 - D. Thread
316. The valve that is used to regulate the water supply from main water pipe line to service line is (A)
- A. Sluice Valve
 - B. Air release valve
 - C. Ball valve
 - D. Non-return valve
317. During the process of water supply through main water supply the air is expelled through which of the following valve (A)
- A. Air release Valve
 - B. Gate valve
 - C. Sluice valve
 - D. Flat valve
318. The valve that gets stopped as soon as the water tank is filled is a (B)
- A. Gate Valve
 - B. Float valve
 - C. Sluice valve
 - D. Air release valve
319. The valve that is used to reduce the pressure increase due to sudden stoppage or due to blockages is (A)
- A. Pressure release Valve
 - B. Float valve
 - C. Sluice valve
 - D. Gate valve
320. The valve that is used to make the water flow in one direction is (D)
- A. Pressure release Valve
 - B. Ball valve
 - C. Gate valve
 - D. Non-return valve
321. The valve that is used at every 300m for water pumping to high heights is (D)
- A. Non Return Valve
 - B. Ball valve
 - C. Float valve
 - D. Sluice valve

322. The valve that is used to remove drainage from manholes(D)
A. Non Return Valve
B. Float valve
C. Air release valve
D. Drain or Screw valve
323. The valve that is used to check water not to enter the households is(D)
A. Check Valve
B. Float valve
C. Pressure release valve
D. Stop valve
324. If the length of pipe line is more the sluice valve is placed at which of the following intervals (B)
A. 1-2 Kms.
B. 2-6 Kms.
C. 6-10 Kms
D. 10-15 Kms
325. If the depth of drain is more than 300cm, the dimension of inspection chamber is (D)
A. 60x45 cm
B. 75x60 cm
C. 90x75 cm
D. 120x105 cm
326. What fitting is required to join copper with galvanized pipe? (C)
A. Adaptor
B. Coupling
C. Dielectric union
D. Solder joint
327. In order to fit a valve in the running line an offset pipe taken Normal to axes of pipe is called (A)
A. Nipple
B. Union
C. Coupler
D. Adopter
328. To change the alignment of pipe to 90° the accessory used is (A)
A. Bend or elbow
B. Winch or pivot .
C. Sluice valve
D. None of these
329. The phrase DI is the acronym for (A)
A. Ductile Iron
B. Durable Iron
C. Density Iron
D. Derived Iron
330. PVC stands for (A)
A. Poly vinyl chloride
B. Poly Viral Chloride
C. Poly versatile Chloride
D. Poly Vinyl Chlorine

331. CPVC stands for (A)
- A. Chlorinated poly vinyl chloride
 - B. Chloroform Poly vinyl Chloride
 - C. Common Poly Vinyl Chloride
 - D. Chlorinate Poly versatile chloride
332. The valve that operates with the use of ball is a Ball valve (B)
- A. Gate valve
 - B. Ball Valve
 - C. Float valve
 - D. Sluice Valve
333. The valve that operates by using the gate movement is a Gate valve (A)
- A. Gate valve
 - B. Ball Valve
 - C. Float valve
 - D. Sluice Valve
334. The pipe used for casing in the bore well is called UPVC pipe (B)
- A. Unplasticized Poly vinyl chloride
 - B. Unplasticized Poly vinyl chloride
 - C. Unitary poly vinyl chloride
 - D. Uniform Poly vinyl chloride
335. A draw-off tap with a vertical inlet is called as Pillar cock (C)
- A. Bib Cock
 - B. Angle cock
 - C. Pillar cock
 - D. Stop cock
336. The Draw-off tap with horizontal inlet is called as Bib cock (A)
- A. Bib Cock
 - B. Angle cock
 - C. Pillar cock
 - D. Stop cock
337. A tap with bent up nozzle with long length enough to provide space between the wall and the water drop point is called Long body bib cock (D)
- A. Bib Cock
 - B. Angle cock
 - C. Pillar cock
 - D. Long Body Bib cock
338. A cock which has two functions with one drop point as bib cock and other drop point used for attaching a health faucet or hand shower is called as (C)
- A. Bib Cock
 - B. Angle cock
 - C. Two way Bib cock
 - D. Long Body Bib cock

339. Nominal bore of the pipe stands for (C)

- A. External Diameter
- B. Outside Diameter
- C. Internal Diameter
- D. Average Diameter

340. In order to connect a higher dia. pipe to a lower dia. pipe the accessory used is a Reducer (D)

- A. Augmenter
- B. Enhancer
- C. Union
- D. Reducer

341. The No. of reducers based on their alignment are 2 (B)

- A. 4
- B. 2
- C. 3
- D. 5

342. _____ is the accessory that in general joins two pipes of standard or non-standard length based on the site conditions. (C)

- A. Augmenter
- B. Enhancer
- C. Union
- D. Reducer

343. The flexible pipe which is used to convey water from one location to other is called as (C)

- A. CI Pipe
- B. DI Pipe
- C. Hose Pipe
- D. UPVC pipe

344. The peripheral used to control the flow of liquid in a conduit is called a (A)

- A. Valve
- B. Pipe
- C. Wrench
- D. Trap

345. The flow of water is bifurcated and made to flow in two perpendicular directions is achieved by using an accessory "T" (A)

- A. Q
- B. R
- C. W
- D. T

346. What does PP-R (D)

- A. Plastic Propylene Random Copolymer
- B. Plastic Propylene Rigid Copolymer
- C. Plastic Propylene Rigid Copolymer
- D. Polypropylene random copolymer

347. Pipe that are connected with threads are in general have some unseen gaps which can be closed using a _____ (B)
- A. Coagulant
 - B. Sealant
 - C. Gum
 - D. Bleaching powder
348. The stone ware pipes are glazed to prevent chipping of stone ware due to _____ of running water (A)
- A. Pressure
 - B. Friction
 - C. Corrosion
 - D. Velocity
349. Most cheapest way of sewerage disposal can be done with one of the following pipes (C)
- A. Asbestos Pipes
 - B. UPVC pipes
 - C. Stone ware glazed pipes
 - D. Hume pipes
350. The pipe that provides better stability for high temperate liquid/steam supplies of order 200 ° Celsius is (A)
- A. GI pipe
 - B. PVC
 - C. CPVC
 - D. PP-R
351. _____ Pipe is better for potable water as it checks the growth of bacteria. (D)
- A. PVC
 - B. GI
 - C. DI
 - D. CPVC
352. _____ pipes are in general referred as NP pipes (Non Pressure pipes) (D)
- A. PVC
 - B. Asbestos
 - C. UPVC
 - D. Hume
353. No. of categories of NP pipes in India are _____ (C)
- A. 3
 - B. 2
 - C. 4
 - D. 5
354. Np-1 stands for low work and lighter pipe (A)
- A. Lighter Pipe
 - B. Denser Pipe
 - C. Medium Pipe
 - D. Heavy Pipe

355.NP-4 stands for (D)

- A. Lighter Pipe
- B. Denser Pipe
- C. Medium Pipe
- D. Heavy Pipe

356.Stoneware pipe are made up of (A)

- A. Clay
- B. Stone
- C. Rock
- D. Cement

357.EPDM stands for (A)

- A. Ethylene Propylene Diene Monomer
- B. Ethylene Propylene Di Monomer
- C. Ethylene Propylene Diene Material
- D. Ethylene Propane DieneMonomer

358.PTMT stands (A)

- A. Polytetra Methylene Terephthalate
- B. Polytetra Methylene Terepropane
- C. Polytetra Methylene Tetraethane
- D. None of these

359.In general manhole covers are made with _____(B)

- A. Wrought
- B. Cast Iron
- C. Pig iron
- D. Mild steel

360.The IS code for Glazed stone ware pipes and its fittings is (D)

- A. 456
- B. 800
- C. 516
- D. 651

361.Based on the crushing strength, pipe are classified into _____ Types (A)

- A. 3
- B. 2
- C. 4
- D. 5

362.The main purpose of a trap is to prevent _____ gasses entering into the house by holding enough standing water. (A)

- A. Pleasant
- B. Combustible
- C. Foul
- D. Life saving

363.Which is the most safest trap (A)

- A. P
- B. V
- C. S
- D. Q

364. The legs of the trap are meeting at right angle to each other for _____ trap (C)

- A. V
- B. S
- C. P
- D. Q

365. The legs of the trap meet at an angle that the trap is _____ trap (D)

- A. V
- B. S
- C. P
- D. Q

366. The legs of the trap are parallel to each other then it is _____ trap (B)

- A. V
- B. S
- C. P
- D. Q

367. The depth of water seal in the trap should be atleast ____ (B) ____ mm

- A. 50
- B. 75
- C. 45
- D. 25

368. Common gases which are produced in the sewage system are (A)

- A. Methane, Hydrogen Sulphide, Nitrogen & Carbon Monoxide
- B. Oxygen, Nitrogen
- C. Hydrogen, Oxygen, Sulphur Dioxide
- D. Carbon Dioxide & Oxygen

369. The trap generally used for upper stories is _____ trap. (B)

- A. P
- B. Q
- C. S
- D. V

370. The minimum depth of water seal provided by Nahani trap is ____ (A) ____ mm

- A. 50
- B. 75
- C. 45
- D. 25

371. Which of the following is not a common reasons for failure of trap seal (D)

- A. Evaporation
- B. Capillary Action
- C. Leakage due to wavering out of the seal
- D. Pressure

372. Which of the following is a low density pipe are _____ (D)

- A. C.I. pipe
- B. D.I. pipe
- C. Cement Pipe
- D. PVC

373. Which of the following is not the purpose for which Jolly is provided over the Nahani trap (D)
- A. Allowing only liquid waste through it
 - B. Preventing Solid substances into trap
 - C. Facilitating easy cleaning mechanism
 - D. Allows movement of insects through it easily
374. One gallon is equal to (C)
- A. 4.222
 - B. 3.505
 - C. 3.785
 - D. 4.005
375. _____ is used in water as disinfectant as it kills potential pathogens in water which may cause various diseases (A)
- A. Chlorine
 - B. Bromine
 - C. Iodine
 - D. Hydrogen
376. The correct bevel of rounded blade is restored by grinding it over (D)
- A. Sand Stone
 - B. Granite
 - C. Marble
 - D. Grindstone
377. The standard length of GI pipe available in the market is (C)
- A. 10m
 - B. 4.5m
 - C. 6m
 - D. 7.5m
378. Brick are laid with its _____ up for proper interlocking (C)
- A. Length
 - B. Width
 - C. Frog
 - D. Depth
379. _____ C.I. covers are used as manhole covers on Road (C)
- A. Light duty
 - B. Medium Duty
 - C. Heavy duty
 - D. None of these
380. Soakage pits are generally constructed _____ septic tank (D)
- A. Before
 - B. After
 - C. At least 100m away
 - D. Near

381. While sharpening the blade the material used to minimize the heat caused due to friction is (D)
- A. Water
 - B. Kerosene
 - C. Alcohol
 - D. Oil
382. Normally foot rests are fixed in manholes at a distance of 40cm (A)
- A. 40 Cm
 - B. 60 Cm
 - C. 75 Cm
 - D. 100 Cm
383. GI pipe sockets are normally designated by its Nominal bore of pipe (D)
- A. Outer Bore
 - B. Diameter
 - C. Effective bore
 - D. Nominal Bore
384. _____ Pipes are coated with Zinc to prevent the iron from getting rust (A)
- A. Iron Pipes
 - B. Steel Pipes
 - C. Copper Pipes
 - D. CPVC pipes
385. One eighth bend changes the direction of sewage pipe by (D)
- A. 22.5°
 - B. 36°
 - C. 45°
 - D. 60°
386. _____ is a fitting with three openings or a joint where three pipes meet. (C)
- A. Z
 - B. L
 - C. Y(Wye)
 - D. None of these
387. Which of the following is not used for preventing leakages for the flange type fittings in pipe line networks? (D)
- A. Gasket
 - B. Packing
 - C. O ring
 - D. Cello Tape
388. _____ are heating devices used by plumber for solder or fixing copper pipes (D)
- A. Light torches
 - B. Pressure Torches
 - C. Pyrometers
 - D. Blowtorches

389. Which of the following is not a valve that are fitted to the pipe (D)
- A. Sluice Valve
 - B. Air release valve
 - C. Pressure Release valve
 - D. Indian Valve
390. Pressure valve or safety valve is used under which circumstances (A)
- A. At the end of lengthy pipe lines where water hammering occurs
 - B. At the tapering section of pipe
 - C. At the locations where the reducers are kept,
 - D. At flanges joints
391. Name the pipe which is not used as sewage pipe lines? (D)
- A. Earthenware or stoneware salt glazed pipes
 - B. Cement concrete pipes
 - C. Cast iron pipes
 - D. Ductile iron pipes
392. What should be the ration main pipe line diameter in terms of service pipe line diameter (A)
- A. 3
 - B. 2
 - C. 4
 - D. 5
393. For 3" Diameter water supply pipe line the dia. Of ferrule should be (B)
- A. 0.75"
 - B. 0.50"
 - C. 1.00"
 - D. 1.25"
394. For 4" and 6" water supply pipe line the dia. Of ferrule should be? (A)
- A. 0.75"
 - B. 0.50"
 - C. 1.00"
 - D. 1.25"
395. Where does the water meter is fixed (C)
- A. At the end of service line
 - B. At the middle of service line
 - C. At the point of take off of service line form main line
 - D. At 10m distance from the take off point of service line from main lines
396. Which of the following joint pertains to GI pipe line (A)
- A. Flanged Joint
 - B. Lap Joint
 - C. But joint
 - D. None of these
397. Scour or blow of pipes are used for location of pipes in (B)
- A. Summits
 - B. Valleys or dead ends
 - C. Level
 - D. None of these

398. Inspection chambers are usually spaced at _____ feet intervals (C)
- 75'
 - 90'
 - 100'
 - None of these
399. After repairing the old pipe line for defect the same is joined with new pipe line with the following _____ accessory intervals (D)
- Tee
 - Valve
 - Reducer
 - Union
400. Inspection chambers are used for (A)
- Checking the blockages and clearing
 - For making a junction
 - Drainage connection at 90° crossing only
 - None of These
401. Intercepting trap is provided at (B)
- Inside the building to check foul gases
 - At the end of building sewer network before connecting to public sewer to check foul gases entering into households
 - For connecting to IWC/EWC for checking the entry of foul gases into the house
 - None of These
402. Which of the following is inevitable for length pipe connection (D)
- Leakages are likely owing to more joints
 - Drop of pressure due to friction
 - Thermal expansion or contraction likely to occur
 - All of these
403. Which of the following plumbing system effectively handles thermal stresses owing to temperature increase or decrease? (D)
- CI pipe system
 - DI pipe system
 - GI pipe system
 - CPVC pipe system
404. Pipe wrench is used for _____ of pipes in plumbing. (D)
- Tighten or loosen
 - Assembling and disassembling
 - They use their jaws as a means for gripping
 - All of these
405. In order to stop the pressure from the places of summit in a pipe line network to travel backward the valve used is. (C)
- Ball valve
 - Gate valve
 - Reflex valve
 - All of these

406. Which valve is used at the summit of pipe line networks (B)
- A. Ball valve
 - B. Air release valve
 - C. Reflex valve
 - D. All of these
407. Which of the following is not a joint of drainage system (D)
- A. Bandage
 - B. Collar
 - C. Mechanical
 - D. Ankle
408. Where does asbestos cement pipe used (C)
- A. Sewer water
 - B. Drinking water
 - C. Rain water
 - D. None of the above
409. Identify the water meter among the options (A)
- A. Rotary type
 - B. Angular
 - C. Digital
 - D. None of the above
410. What of the following is not a joints in plumbing (D)
- A. Threaded Joint
 - B. Flange Joint
 - C. Spigot Joint
 - D. Stitch joint
411. Two stone ware glazed pipes are joined using (A)
- A. Cement mortar
 - B. Lime mortar
 - C. Welding
 - D. Soldering
412. Two stone ware glazed pipes are joined using
- A. Cement mortar
 - B. Lime mortar
 - C. Welding
 - D. Soldering
413. Which of the following is not a special used for pipe fitting (D)
- A. Union
 - B. Elbow
 - C. TEE
 - D. Ankle
413. SDR in PP-R means (A)
- A. Standard Dimension ratio
 - B. Standard Diameter ratio
 - C. Standard Diameter Rate
 - D. Standard Dimension rate

414 .Which of the following metal is not used in plumbing (D)

- A. Zinc
- B. Brass
- C. Iron
- D. Silver

415 . FPS in FPS non-modular brick means (A)

- A. Feet Pound Second
- B. Foot Pound Second
- C. Feet Pounce Second
- D. Foot pounce second

416.Which of the following is a water tight seal (B)

- A. Pipe range
- B. Pipe Dope
- C. Range Dope
- D. None of these

417 . The height of handicapped toilet should be between (B)

- A. 15" to 17"
- B. 17" to 19"
- C. 19" to 21"
- D. 21" to 23"

418 . Which of the following is best suited for pipe lines in coastal areas (C)

- A. Cast Iron
- B. Wrought Iron
- C. Galvanized iron
- D. Pig iron

419. The IS code for specification of sewer bricks (B)

- A. 516
- B. 4885
- C. 2062
- D. 456

420. Identify the composite pipe (B)

- A. GI pipe
- B. PE-AL-PE pipe
- C. DI Pipe
- D. Cement pipe

421. One inch is equal to (B)

- A. 254 mm
- B. 25.4 mm
- C. 2.54 mm
- D. 0.254 mm

422 . Brick of Class 7.5 indicates (B)

- A. Having a compressive strength of 7.5 Kg/Sq.m
- B. Having a compressive strength of 7.5 N/Sq.mm
- C. Having a compressive strength of 7.5 Kg/Sq.mm
- D. None of these

423. Function/Functions of Ferrule which is used for joining service pipe with Main water supply (D)
- A. As a means of tight compression fitting
 - B. To prevent water and air leakage
 - C. Extensively used in pipe and fixtures joints
 - D. All of the above
424. Identify the wrong one among the following in case of precaution to be taken by (B)
Plumber in ensuring safety
- A. Should wear goggles in order to protect eyes from flying objects
 - B. Being casual in case of working with inflammable substances
 - C. Should be careful while handling Sharpe edges objects
 - D. Should ensure adequate measure taken while working with underground pipes as there is a risk of electrical shock
425. Which of the following is used in joining two materials or to take up a repair to existing one so as to make water tight (A)
- A. Adhesives like glue
 - B. Alcohol
 - C. Turpentine oil
 - D. None of these
426. Which of the following are the functions of vent cowl (D)
- A. To increase the draft from the pipe
 - B. To arrest back flow
 - C. Arresting birds to build their nests
 - D. All of these
427. Which one of the following is considered as the basic step to unclog any blockages in pipe (A)
- A. To pour hot water through pipe
 - B. To pour cold water through pipes
 - C. Using a composition of Vinegar, Baking soda and water
 - D. Using caustic soda
428. What does HWT mean (A)
- A. Hot water tank
 - B. Half width of tank
 - C. Height width tape
 - D. None of these
429. Which of the following is used to arrest grease coming out from the canteen? (C)
- A. Intersecting trap
 - B. Gully trap
 - C. Grease trap
 - D. None of these
- 430 The perimeter of 2" pipe is (B)
- A. π
 - B. 2π
 - C. 3π
 - D. None of these

431. The number of joints in a pipe of length 10m where a nipple is to be placed at every 2.5m intervals starting from one end are (B)
- A. 2
 - B. 3
 - C. 4
 - D. None of these
432. Water tank is measure by its (A)
- A. Capacity to hold water
 - B. By weight
 - C. By density
 - D. By nature of materials
433. Teflon tape is used to provide (A)
- A. Water seal on a threaded joint
 - B. It is a polytetrafluoroethylene (PTFE) film tape
 - C. It helps in lubricate the connection making threading a bit smoother
 - D. All the above
434. Which among the following is a locator used for location for internal diameter (B)
- A. Solid supports
 - B. Pin type locator
 - C. Vee locator
 - D. Nest locator
435. Which one of the following is used for making a branch right angle to the main line in pipeline fitting? (C)
- A. Union
 - B. elbow
 - C. Tee
 - D. Flange.
436. Which one of the following accommodates four pipes in pipe fitting (D)
- A. Socket
 - B. Elbow
 - C. Tee
 - D. Cross
437. Which among the following is used to block up the pipe on one end (A)
- A. Plug
 - B. Union
 - C. Tee
 - D. Cross
438. Which among the following is used for extending the length in straight line by joining two different diameter pipes. (B)
- A. Socket
 - B. Reducing socket
 - C. Union
 - D. Flange

439. Which among the following is used to separate the connection without disturbing the pipeline.

(A)

- A. Union
- B. Plug
- C. Socket
- D. Cross

440. Which among the following methods is generally used to cut threads on G.I. pipes (D)

- A. By centre lathe
- B. By thread rolls
- C. By tap sets
- D. By die stock

441. Non-return Valve permits water supply in (A)

- A. One way
- B. Two way
- C. Three way
- D. Four way

442. Gate Valve permits water flow in (A)

- A. Straight line
- B. Angular
- C. Right angle
- D. None of the above

443. Which among the following is the cause for water flowing from tap even when firmly closed?

(C)

- A. Spindle bent
- B. Spindle threads worn out
- C. Defective washer
- D. Valve on the spindle loose

444. What are the common causes of flange leak? (D)

- A. Centering of gasket
- B. Out of parallel flange face
- C. Damaged flange face
- D. All of the above

MULTIPLE CHOICE QUESTIONS ON PAINTING

1. To remove old paint from a thick M.S. plate, the best method is ____ (D)
 - A. Water blasting
 - B. Emery sheet
 - C. Solvent cleaning
 - D. Flame cleaning
2. ____ is used to mix paint. (B)
 - A. Emery sheet
 - B. Paddle
 - C. Marking liquid
 - D. Pallet board
3. Purpose of putty application is (B)
 - A. To protect material from corrosion
 - B. To cover dents and undulations
 - C. To give glossy appearance
 - D. To give durability to paint
4. In airless spray (B)
 - A. Air is not required
 - B. Air required
 - C. Air and water are required
 - D. Air and water not required
5. A part of brush is (A)
 - A. Ferrule
 - B. Cover
 - C. Band
 - D. Core
6. Water emery is used (C)
 - A. To remove rust
 - B. To rub wooden surface
 - C. To rub putty (flatting)
 - D. To clean metal surface
7. Causes of corrosion (A)
 - A. Inherent nature of metals, to go back to their own state
 - B. When materials are heated
 - C. When cooled below 0°C
 - D. None is correct
8. To extinguish fire on paint, use (C)
 - A. Water
 - B. Gunny bag
 - C. Sand
 - D. None of the above

9. Scraping knife is used (D)
- A. To remove putty on the metal surface
 - B. To cut stencil
 - C. To scrap old paint on soft metals
 - D. To scrap old paint on hard metal surface
10. Masking tape is used (B)
- A. To cover electrical circuits
 - B. To cover the unwanted areas while painting
 - C. Both A and B
 - D. None of the above
11. Corrosion resistance is a (B)
- A. Constant property
 - B. Not a constant property
 - C. No such thing
 - D. Electrical property
12. Corrosion resistance of a material depends on (A)
- A. Composition of corrosive atmosphere
 - B. Processing method
 - C. The design of components
 - D. Carbon content
13. Phosphating is done (A)
- A. Before painting
 - B. After painting
 - C. Before doing blasting
 - D. Before degreasing
14. Cold Phosphating is done (D)
- A. Below room temperature
 - B. Above room temperature
 - C. In very cold atmosphere
 - D. At 10°C
15. Spray painting consumes (B)
- A. Less paint than brushing
 - B. More paint than brushing
 - C. There is no difference at all
 - D. More air
16. The common defect in spray painting is (A)
- A. Orange peel
 - B. Sagging
 - C. Pin holes
 - D. Cracks
17. In conventional spray (A)
- A. Air is required for atomization
 - B. Air is not required
 - C. Air is used to pressurize paint
 - D. None is correct

18. Pigment are added in paint manufacturing o impart (A)
- A. Colour
 - B. Strength
 - C. Gloss
 - D. To accelerate drying
19. Turpentine is added to paint to (A)
- A. Modify the application consistency of paint
 - B. Reduce brightness of paint
 - C. Improve adhesiveness of paint
 - D. Improve colour
20. As soon as metal surface preparation is done (A)
- A. Primer must be applied immediately
 - B. Primer to be applied within 4 hours
 - C. There is no need to paint immediately
 - D. None of the above
21. The system of pain is classified based on (A)
- A. Resin
 - B. Pigment
 - C. Thinner
 - D. Plasticizer
22. The commonly used paint for marking road sign is (C)
- A. Alkyd paints
 - B. Polyurethane paint
 - C. Fluorescent paint
 - D. Bitumen paint
23. Surface preparation is a must before carrying out painting operation because (D)
- A. To get good adhesion
 - B. To get good surface finish
 - C. To avoid corrosion
 - D. Both A and B
24. Acid cleaning is also known as (A)
- A. Acid pickling
 - B. Degreasing
 - C. Wiping
 - D. Flame cleaning
25. Acid cleaning is mainly used to (A)
- A. Remove rust
 - B. Remove grease oil
 - C. To create surface roughness
 - D. To enable proper paint adhesion
26. Elcometer is used measure (A)
- A. Dry film thickness of paint
 - B. Wet film thickness of paint
 - C. Viscosity of paint
 - D. Corrosion of paint

27. Blow lamp is used to remove (C)
- A. Rust
 - B. Mud, sand
 - C. Old paint
 - D. Grease oil
28. Tie associated with (D)
- A. Brush painting
 - B. Spray painting
 - C. Dip painting
 - D. Stencil marking
29. Dry film thickness is measured in (A)
- A. Microns
 - B. Mm
 - C. Cm
 - D. Inches
30. Orange peel is a paint defect associated with (A)
- A. Spray painting
 - B. Brush painting
 - C. Dip painting
 - D. Flow painting
31. Paddle is used to (B)
- A. Mark material
 - B. Mix paint
 - C. Apply paint
 - D. Cut stencil
32. Spray painting method (conventional) consumes (A)
- A. More paint than brush painting
 - B. Less paint than brush painting
 - C. No difference
 - D. Less air
33. Viscosity is measured in (D)
- A. Mm
 - B. Cm
 - C. Hours
 - D. Seconds
34. Roller painting is generally used on (A)
- A. Flat surface only
 - B. Flat and irregular surfaces
 - C. Irregular surfaces
 - D. Curved surface
35. "sagging" defect occurs due to (B)
- A. Too thick paint
 - B. Too thin paint
 - C. Poor pigment content
 - D. Spraying

36. Paint is a material (A)
- A. Fire prone
 - B. Fire retardant
 - C. Fire resistance
 - D. Fire proof
37. Grit blasting is done on M.S. surfaces (B)
- A. To remove grease / oil
 - B. To remove rust
 - C. To roughen the surface
 - D. Both B and c
38. Pin hole defect is commonly associated with (D)
- A. Spray painting
 - B. Roller painting
 - C. Brush painting
 - D. Putty application
39. Paint will stick better in (A)
- A. Rough surface
 - B. Smooth surface
 - C. Any surface
 - D. Oil surface
40. Curing of paint is known as (B)
- A. Rectifying the paint defects
 - B. Drying paint
 - C. Resin making
 - D. Varnish cooling
41. When the gloss value of paint is high, its reflective power will be (A)
- A. More
 - B. Less
 - C. No such thing
 - D. Neat
42. Emulsion is the blend of (A)
- A. Water and oil
 - B. Pigments of different colours
 - C. Linseed oil and alkyd resin
 - D. Paint and varnish
43. Covering capacity of different paints is (B)
- A. Same
 - B. Different
 - C. Depends on solvent present in the paint
 - D. Depends on plasticizer
44. Dip painting is most suitable paint application method, when jobs are (D)
- A. Small
 - B. Quantity is more
 - C. To be completed quickly
 - D. All the above

45. Cold phosphate application is done (A)
- A. At room temperature
 - B. At 25°C
 - C. At 10°C
 - D. At 30°C
46. For spray painting air compressor is (A)
- A. Required
 - B. Not required
 - C. Pump is required
 - D. Required for conventional spray
47. Polyurethane paint is (A)
- A. Costlier than alkyd system
 - B. Not costlier than alkyd system
 - C. No difference at all
 - D. Cheaper than water paints
48. Purpose of painting on wooden surface is (D)
- A. To protect against corrosion
 - B. For decoration
 - C. Both A and B
 - D. To protect against insects
49. Degreasing is the process to remove (D)
- A. Grease
 - B. Oil
 - C. Rust
 - D. Both A and B
50. The spreading capacity of oil paint per litre is (B)
- A. 10 sq.m.
 - B. 10 sq.ft.
 - C. 12 sq.m.
 - D. None of the above
51. Polyurethane paint is a (B)
- A. Single pack system
 - B. Two pack system
 - C. Three pack system
 - D. Mono pack system
52. Shelf life of a paint indicates (B)
- A. Expiry life
 - B. How long the paint can be stored
 - C. The life of painting after application
 - D. Not life of paint
53. Pot life is generally associated with (B)
- A. Single pack system
 - B. Two pack system
 - C. Three pack system
 - D. Mono pack system

54. Purpose of the applying "sanding sealer" on gold size before polishing is (B)
- A. To cover dents and undulations
 - B. To fill small porous holes, to avoid oil absorption
 - C. To give good finish
 - D. To protect against insects
55. Quick drying paint (B)
- A. Must be applied by brush
 - B. Must be applied by spray
 - C. Must be applied by dipping
 - D. Must be applied by roller painting
56. Film thickness obtained by spray paint is usually ____ than brush painting (B)
- A. More
 - B. Less
 - C. Equal to
 - D. None of the above
57. Normally synthetic putty can be applied to a film thickness of more than 1000 microns in one coat (B)
- A. True
 - B. False
 - C. Only up to 100 microns
 - D. None of the above
58. Red oxide used in primer is a (D)
- A. Plasticizer
 - B. Catalyst
 - C. Accelerator
 - D. Pigment
59. Spray painting consumes __ paint than a brush painting (A)
- A. More
 - B. Less
 - C. Equal
 - D. Plastic / PVC objects
60. Electrostatic painting can be used to paint (D)
- A. Wooden table
 - B. Steel table
 - C. Glass door in a doctor's cabin
 - D. Plastic / PVC objects
61. Black enamel paint can be used to paint Black Board (B)
- A. Yes
 - B. No
62. Fire retardant paint will (B)
- A. Extinguish fire
 - B. Slow down the fire spreading
 - C. Resist fire
 - D. None of the above

63. Constituents paint includes (B)
- A. Pigment and binders
 - B. Pigments and thinners
 - C. Pigment, binder and thinner
 - D. None of the above
64. For selection of decorative paints, the important attributes are (D)
- A. Colour
 - B. Gloss
 - C. Both A and B
 - D. (C) and retention of these in service
65. High pigment volume concentration of paint has (A)
- A. Superior brightness
 - B. Inferior brightness
 - C. High raw material cost
 - D. None of the above
66. Which is the special painting process (B)
- A. Airless spray
 - B. Electrostatic spray
 - C. Brushing
 - D. Both A and B
67. To prevent acidic corrosion on metals paint used is (A)
- A. Rubber base paint
 - B. Epoxy paint
 - C. Polyurethane paint
 - D. Resin paint
68. Arrange the following methods of painting in the decreasing order of loss paint (a) brush painting (b) dipping (c) conventional spray painting (d) dipping (D)
- A. b, c, d, a
 - B. c, d, b, a
 - C. a, b, c, d
 - D. d, c, a, b
69. Galvanic corrosion occurs when (A)
- A. Break in paint film
 - B. Presence of another object closely
 - C. Both A and B
 - D. None of the above
70. The importance of dry thickness measurement of paint is (B)
- A. Finish depends on thickness
 - B. Protection depends thickness
 - C. Gloss depends on thickness
 - D. To compare spreading capacity of paint

71. Grits are made up of (D)
- A. Sand particles
 - B. Protect from corrosion material
 - C. Glass leads
 - D. Synthetic material
72. Putty is applied by (B)
- A. Brush
 - B. Knife
 - C. Spray
 - D. Hand
73. Polyurethane paints is (A)
- A. Superior to enamel paint
 - B. Inferior to enamel paint
 - C. As good as alkyd paint
 - D. Not a paint
74. Putty can be applied (B)
- A. Directly on rare metal
 - B. Only after primers application
 - C. Any time in between two coats
 - D. After undercoat paint
75. Second coat of paint should be applied (A)
- A. After the first coat is fully dried
 - B. Before the first coat is dry
 - C. Immediately following first coat
 - D. When the previous coat is to dry
76. To avoid corrosion, commonly used primer coat is (D)
- A. Zinc rich primer
 - B. Sodium bicarbonate
 - C. Synthetic enamel
 - D. Zinc chromates primers
77. Paint is diluted by using (C)
- A. Kerosene
 - B. Resin
 - C. Turpentine
 - D. Plasticizer
78. For wet flatting of putty ____ is used (D)
- A. Sand paper
 - B. Cloth emery
 - C. Paper emery
 - D. Water proof emery
79. To obtain glossy finish ____ is added to enamel paint (D)
- A. Linseed oil
 - B. Turpentine
 - C. Resin
 - D. Clear varnish

80. French polis is used for (B)
A. Ply wood
B. Teak wood
C. Peal wood
D. Paddock wood
81. Matt finish gives (A)
A. Dull surface
B. Gloss surface
C. Semi-gloss surface
D. Dark surface
82. The best suited primer on steel component is (C)
A. Zinc chromates
B. Red oxide zinc chromates
C. Bituminous emulsion
D. Red lead
83. Primer should be applied on grit blasted surface (C)
A. Within 24 hours
B. Within 8 hours
C. Immediately
D. At a convenient time
84. Before spot welding of steel components, the joints are applied with (A)
A. Zinc rich primer
B. Bituminous paint
C. Red oxide primer
D. Clear varnish
85. Acid used for hot Phosphating is (B)
A. Nitric acid
B. Phosphoric acid
C. Sulphuric acid
D. Hydrochloric acid
86. Bristles of paint brush is prepared form (B)
A. Coil fillers
B. Hairs of animals like pig/dog etc.
C. Jute fibres
D. Cotton fibres
87. For cleaning brushes ____ is used (C)
A. Water
B. Connote oil
C. Turpentine
D. Clean varnish
88. Gold size is a (B)
A. Paint
B. Similar to varnish
C. A solvent
D. A drier

89. Staining is the process of (A)
- A. Colouring of wooden surface
 - B. Cleaning of wooden surface
 - C. Application of paint on wooden surface
 - D. Producing a hard glossy surface on wood
90. Fluorescent paint (C)
- A. Absorbs light
 - B. Refracts light
 - C. Reflects light
 - D. None of the above
91. Colours that cannot be made from other colours are called (B)
- A. Complementary colours
 - B. Primary colours
 - C. Secondary colours
 - D. Tertiary colours
92. Identify primary colour (D)
- A. Orange
 - B. Violet
 - C. Green
 - D. Red
93. The dry film thickness of paint film is generally measured in microns. It is usually less than (C)
- A. Absorption paint
 - B. Loss of paint
 - C. Evaporation of solvent
 - D. None of the above
94. In the airless spray, to reduce the problems of condensation of compressed air connection from the air must be taken from (A)
- A. Top
 - B. Middle
 - C. Anywhere
 - D. Bottom operations
95. Which of the following is the correct sequence of evenness on sheet metals (C)
- A. Decreasing, painting, shot blasting
 - B. Painting, decreasing, enameling
 - C. Decreasing, blasting, painting
 - D. None of the above
96. For accelerated drying of paint in an oven the painted components taken in the oven (B)
- A. Immediately after painting
 - B. Only after flash off
 - C. Drying and flash off takes place simultaneously
 - D. None of the above

97. Infrared radiation is used for (D)
- A. Evaporation of paint
 - B. Evaporation of pigment
 - C. Evaporation of solvent
 - D. Evaporation of resin
98. "wet on wet" in painting means (A)
- A. Painting of the second coat in the wet film
 - B. Painting of only one coat
 - C. Baking between coats
 - D. Painting of the second coat in the dried film
99. The surface finish of grit blasted surface is expressed in (B)
- A. pH
 - B. SA
 - C. Center strokes
 - D. Lumens
100. Phosphating of components is done as it (C)
- A. Gives gloss
 - B. Reduce even spray
 - C. Anti-corrosive
 - D. None of the above
101. _____ is used for regulating pressure of air supply in the spray system (D)
- A. Thermometer
 - B. Regenerator
 - C. Pyrometer
 - D. Regulator
102. The characteristic feature of aluminum paint is (B)
- A. It absorbs heat
 - B. It is good reflector of heat
 - C. It stores heat
 - D. It is easy to paint
103. Which of the following is true (A)
- A. Transfer efficiency of electrostatic spray is more than that of ordinary spray
 - B. Transfer efficiency of conventional spray is more than that of electrostatic spray
 - C. Transfer efficiency of both conventional and electrostatic spray are same.
 - D. None of the above
104. Type of power supply used in the electrostatic painting is (C)
- A. AC
 - B. Both AC and DC
 - C. DC
 - D. None of the above
105. The reaction undergone by paint during drying process is called (C)
- A. Radon activity
 - B. Association
 - C. Polymerization
 - D. Fusion

106. Painting must be applied only after paint has reached (A)
- A. Hard dry
 - B. Soft dry
 - C. Surface dry
 - D. 6 Hours
107. Surface drying time is less than tack free condition (A)
- A. It is true
 - B. Not always
 - C. False
 - D. Equal
108. Spray painting must be used in the case of (A)
- A. Quick drying paint
 - B. Late drying paint
 - C. Roller painting
 - D. Brush painting
109. The three drying time associated with paint are (C)
- A. Surface dry, Hard dry, Tack free
 - B. Tack free, Surface dry, Hard dry
 - C. Surface dry, Tack free, Hard dry
 - D. Silky dry, Smooth dry, Hard dry
110. In special paints (Epoxy) catalysts are added. (A)
- A. To speed up chemical reaction
 - B. To improve fluidity of paint
 - C. To increase viscosity of paint
 - D. To give hardness to paint film
111. Flash point and fire point of paint are important properties of paint (A)
- A. From the safety point of view
 - B. From drying point of view
 - C. From good finish point of view
 - D. From the application point of view
112. 'Tack free' drying is important from the point of (C)
- A. Finish
 - B. Subsequent painting application
 - C. Handling of painted job
 - D. Finish / glossy
113. Surface dry is important from the point of (C)
- A. Surface finish
 - B. Quality
 - C. Dust sticking on wet film
 - D. Enables successive application of paint
114. Rate of corrosion of metals is expressed as (B)
- A. Kg/sq.cm
 - B. Metre/year
 - C. Microns
 - D. Kg/year

115. Reaction of metals with aqueous environment is known as (B)
- A. Dry corrosion
 - B. Wet corrosion
 - C. Bi-metallic corrosion
 - D. Zinc corrosion
116. Electro-chemical corrosion is a (C)
- A. Bi-metallic corrosion
 - B. Stress corrosion
 - C. Wet corrosion
 - D. Dry corrosion
117. _____ is a chemical which when added in small quantities to an environment effectively decreases the corrosion rate (B)
- A. Corrosion aiders
 - B. Corrosion inhibitors
 - C. Catalyst
 - D. Electrolyte
118. Film formation through evaporation of solvent alone is known as (A)
- A. Lacquers
 - B. Heat conversion binder
 - C. Condensation binder
 - D. In organic binder
119. Film formation is through the reaction with moisture in the air is known as (C)
- A. Lacquers
 - B. Heat conversion binder
 - C. In organic binder
 - D. Condensation binder
120. Zinc rich primer provides (A)
- A. Cathodic protection
 - B. Anodic protection
 - C. Electro static protection
 - D. Electro mechanical protection
121. _____ binders are formed from two resins, which are combined, usually just before application and react with each other to form a solid film (B)
- A. Heat conversion binder
 - B. Co-reactive binders
 - C. Wale scent binders
 - D. In organic binders
122. Generally the basic material available in paint is (C)
- A. Pigment
 - B. Solvent
 - C. Resin
 - D. Plasticizer

123. Degree of Toxicity is measured in solvent by (A)
A. Threshold Limit Value
B. pH Value
C. Molecular weight
D. Valence
124. Skinning is a paint defect which occurs on long time (C)
A. Applying
B. Drying
C. Storing
D. Polymerization
125. Traffic paint must be formulated to adhere on (C)
A. Metal surfaces
B. Wooden surfaces
C. Asphaltic / concrete / brick surfaces
D. PVC material
126. Fire retardant paints are compounds based on (A)
A. Antimony/phosphorous & Bronze
B. Zinc, Iron oxide
C. Calcium, Copper, Aluminum
D. Tungsten, Nickel, Copper
127. Silicon coatings are used in (A)
A. High temperature application
B. Quick drying application
C. For high corrosion resistance application
D. Traffic paints
128. Wet film gauge is used to measure (A)
A. Wet film thickness
B. Dry film thickness
C. To test the moisture content in paint
D. To test both wet and dry film thickness
129. Wet film thickness is used to check (C)
A. Moisture content
B. pH value
C. spreading rate of paint
D. electrical resistance
130. luminescent Paint (A)
A. Reflect light
B. Absorb light
C. Gives high protection against corrosion
D. Excellent adhesion
131. Electro painting uses (A)
A. Electro deposition technique
B. Electro static method
C. Electro dynamic method
D. Spray

132. Powder coating is a (C)
- Curing method
 - Testing method
 - Pigment powder is sprayed and cured (Application method)
 - Is a Resin coating without Pigment
133. Air drying is done (D)
- By flowing air
 - By flowing cold air
 - By flowing hot air
 - Drying under normal weather condition
134. Force drying is done (B)
- By applying external force 5 kg/cm^2
 - By heating in the range of 100°F to 200°F
 - Heating more than 1000°F
 - By sending high velocity air
135. Baking is done (A)
- By heating more than 200°F in ovens
 - By giving a force 5 kg/cm^2
 - By heating and cooling
 - By sending high velocity air
136. Radiant heat ovens normally employ (B)
- Radium
 - Infra-Red-Electric lamps
 - By blowing hot air
 - By heating less than 100°F
137. In Hot spraying normally (A)
- Paint is heated 120 to 140°F
 - Painting object is heated before application
 - Both paint and objects are heated
 - After application the job is heated
138. Normally while brush painting, Brush should be held at angle of ___ to the work (A)
- 60°
 - 40°
 - 90°
 - 180°
139. In Flow Coating Atomization (A)
- Does not take place
 - Takes place inside the gun
 - Takes place outside the gun
 - Takes place at flow tip in a spray gun
140. Anti-flooding agents are added to paint (A)
- To reduce flooding and floating of ingredients of paint
 - To improve flow property
 - To improve Colouring properly
 - For Quick drying

141. Asphalt paints are used (C)
- A. To paint asbestos
 - B. To paint wood
 - C. To paint steel water tanks and concrete reservoirs for storing water
 - D. On plastic material
142. Corrosion formed by metal / gas as metal vapor reaction system is known as (A)
- A. Dry corrosion
 - B. Wet corrosion
 - C. Pitting corrosion
 - D. Bi-metallic corrosion
143. The rate of corrosion usually increases with temperature. It is (A)
- A. True
 - B. False
 - C. No relation
144. Normally phosphated coating is given by (A)
- A. Weight 4.3 to 7.5 gm/sq.m.
 - B. 80 kg
 - C. Weight less than – 0.5 gm/sq.m
145. Low viscosity volatile liquids used in coating to improve application property is known as (C)
- A. Plasticizer
 - B. Resins
 - C. Solvent
 - D. Inhibitors
146. ____ binds pigment particles into a film and adhere to the substrate (B)
- A. Solvent
 - B. Additives
 - C. Bakelite
 - D. Binders (Film former)
147. Uneven gloss observed on the painted surface is known as (B)
- A. Glossiness
 - B. Flashing
 - C. Flaking
 - D. Discolouration
148. The formation of short, shallow cracks in an exposed glossy surface is known as (C)
- A. Chalking
 - B. Cracking
 - C. Shallowing
 - D. Sagging
149. Fire retardency of paint is tested as per IS specification no. (A)
- A. IS 163
 - B. IS 101
 - C. IS 5
 - D. IS 2063