PREVIOUS YEAR PAPER

DSSSB Technical Assistant (Production) 2021 — 21 October 2021, Shift 1

DSSSB Other Posts · 21 October 2021 · Shift 1

161 of the paper's 200 questions · +1 for a correct answer, −0.25 for a wrong one · 120 minutes

Left out of the original paper: 39 (any question that needs a figure, a symbol or formatting we cannot show, or whose text did not read back cleanly from the booklet).

Questions from the Delhi Subordinate Services Selection Board's paper of 21 October 2021, Shift 1. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/dsssb-other-posts/previous-year-papers/dsssb-other-posts-2021-technical-assistant-production-21-oct-shift-1/

General Ability

1. The given two expressions will have the same value if two terms on either side or on the same side are interchanged. Find the CORRECT term to be interchanged from the options.
8 ÷ 3 – 6 + 5 × 7 = 37 + 6 ÷ 4 – 8

(a) 8 and 4

(b) 5 and 8

(c) 3 and 4

(d) 4 and 7

Answer: (c)

2. Select the CORRECT combination of mathematical signs to replace * signs and to balance the following equation.
(11 * 75 * 15) * 2 * 57

(a) ÷ + x =

(b) x ÷ + =

(c) + ÷ x =

(d) x + ÷ =

Answer: (b)

3. Four number-triples are given, three of which are alike in a certain way and one is different. Select the number-triple which is odd from the remainder.

(a) 66, 7, 9

(b) 220, 12, 18

(c) 179, 11, 16

(d) 155, 19, 8

Answer: (b)

4. If '–' and 'x' signs are interchanged and if numbers '6' and '5' are interchanged, then which of the following equations is CORRECT?

(a) 5 – 17 × 6 = 99

(b) 5 – 15 × 6 = 87

(c) 5 – 11 × 6 = 65

(d) 5 – 13 × 6 = 73

Answer: (d)

5. Which two numbers need to be interchanged to make the following equation CORRECT?
4 + 3 × 8 = 20

(a) 3 and 8

(b) 4 and 20

(c) 8 and 20

(d) 4 and 8

Answer: (d)

6. Arnab, a 15-year-old child, is three times as old as his cousin Arjun. How old will Arnab be when he is twice as old as Arjun?

(a) 15

(b) 20

(c) 22

(d) 25

Answer: (b)

7. If '#' means 'addition', '&' means 'division', '%' means 'multiplication' and '@' means 'subtraction', then what is the value of the following expression?
95 % 25 @ 36 & 9 # 56

(a) 3215

(b) 1328

(c) 2116

(d) 2427

Answer: (d)

8. Select the option that is CORRECT for the bracketed terms with respect to their inclusion in the given series.
100, 98, 94, 88, (80), 70, 58, 44, 28, 10, (–20)

(a) Both the bracketed terms are correct

(b) Both the bracketed terms are incorrect

(c) The first bracketed term is correct and second term is incorrect

(d) The first bracketed term is incorrect and second term is correct

Answer: (c)

12. Two statements are given, followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
Statements: The new ways of farming used less labour.
Conclusions:
I. The use of labour on farms has become limited.
II. The labour has not interested in farming.

(a) Only conclusion I follows.

(b) Only conclusion II follows.

(c) Both conclusion I and II follows.

(d) Neither conclusion I nor II follows.

Answer: (a)

13. Select the option that is related to the third word in the same way as the second word is related to the first word.
HUMAN : MAMMAL : : SNAKE : ?

(a) INSECT

(b) RODENT

(c) REPTILE

(d) AMPHIBIAN

Answer: (c)

14. Choose the pair that best represents a similar rel nship to the one expressed in the original pair of words.
Tiger : India

(a) Kiwi : New Zealand

(b) Giant Panda : Japan

(c) Cow : Bangladesh

(d) Bull : Pakistan

Answer: (a)

16. On a farm, there are 50 goats, 45 hens, 10 buffaloes with some housekeepers. If the total number of feet is 230 more than the number of heads in the farm, then what is the number of housekeepers in the farm?

(a) 10

(b) 5

(c) 6

(d) 8

Answer: (b)

17. Select the number that can replace the question mark (?) in the following series.
97, 105, 78, 142, '?', 233, –110

(a) 123
(b) 75
(c) 17
(d) 34

Answer: (c)

18. A man is facing towards the South. He turns 180° to his right, and then he turns 270° left. Again, he turns 45° right. In which direction is he facing now?

(a) West
(b) North-East
(c) South-East
(d) North-West

Answer: (c)

19. Five letter-clusters have been given, out of which four are alike in some manner and one is different. Select the letter-cluster that is different.
LOR, CEH, PSV, JMP, BEH

(a) JMP
(b) LOR
(c) CEH
(d) BEH

Answer: (c)

General Awareness

21. In 2019, the Archaeological Survey of India (ASI) has identified how many monuments as 'Must See Monuments'?

(a) 135
(b) 136
(c) 137
(d) 138

Answer: (d)

22. UNESCO world heritage site 'Group of Monuments at Pattadakal' situated in which of the following state?

(a) Karnataka
(b) Kerala
(c) Andra Pradesh
(d) Odisha

Answer: (a)

23. Who is credited for creation of present day Qwwali by fusing Persian, Arabic, Turkish and Indian traditions?

(a) Nijamuddin Aulia
(b) Amir Khusro
(c) Sabri brothers
(d) Nusrat Fateh Ali Khan

Answer: (b)

24. Which of these monuments is NOT related to the great Mauryan ruler Ashoka?

(a) Sanchi Stupa, Madhya Pradesh
(b) Mahabodhi Temple, Bihar
(c) Amravati Stupa, Andhra Pradesh
(d) Dhamekh Stupa, Sarnath

Answer: (c)

25. Which of the following is the classical female solo dance form of Kerala, interpreted as the dance of the celestial enchantress of Hindu mythology?

(a) Bharatnatyam
(b) Mohiniyattam
(c) Kathakali
(d) Kathak

Answer: (b)

26. Which of the following is the famous dance of L ɹkh?

(a) Chau
(b) Shondol
(c) Bhangra
(d) Rauf

Answer: (b)

27. _____ is the simplest form of composition of carnatic classical music.

(a) Varnam
(b) Sulandi
(c) Gitam
(d) Kriti

Answer: (c)

28. A pitcher shaped pot made of baked clay with a large belly is known as _____ as a musical instrument.

(a) Gabgubi
(b) Ghatam
(c) Esraj
(d) Edakka

Answer: (b)

29. Pandit Vishnu Gobind Jog is known for which of the following musical instrument?
    (a) Ghatam
    (b) Flute
    (c) Violin
    (d) Shehnai
    Answer: (c)

30. Bandar Fort is located in which of the following district of Andhra Pradesh?
    (a) Krishna
    (b) Anantapur
    (c) Chittoor
    (d) Cuddapah
    Answer: (a)

31. In which language are the Kathakali songs sung?
    (a) Kannada
    (b) Tamil
    (c) Manipravalam
    (d) Telugu
    Answer: (c)

32. Which of the following festivals is celebrated in th cenic Ziro Valley of Arunachal Pradesh to ensure a good harvest for the state?
    (a) Moatsu Mong
    (b) Lui-Ngai-Ni
    (c) Dree
    (d) Sarhul
    Answer: (c)

33. The Pilak archaeological and tourism festival is held in the state of:
    (a) Manipur
    (b) Tripura
    (c) Assam
    (d) Meghalaya
    Answer: (b)

34. The Pongal festival is held in Tamil Nadu. The word Pongal means:
    (a) to eat
    (b) to drink
    (c) to boil
    (d) to plant
    Answer: (c)

35. Which of the following plants is from the Poppy family?
    (a) Opium
    (b) Mustard
    (c) Barley
    (d) Maize
    Answer: (a)

36. What was the name of the most severe storm which hit the state of Odisha in 2019?
    (a) Amphan
    (b) Vayu
    (c) Fani
    (d) Phailin
    Answer: (c)

37. Which of the following glands of the human body produces the insulin hormone?
    (a) Pituitary
    (b) Pancreas
    (c) Parathyroid
    (d) Pineal
    Answer: (b)

38. In which of the following prehistoric periods did a culture start?
    (a) Mesolithic Period
    (b) Neolithic Period
    (c) Palaeolithic Period
    (d) Chalcolithic Period
    Answer: (b)

39. Which of the following is a gelatin-like product made primarily from red algae?
    (a) Yeast
    (b) Agar-Agar
    (c) Mushroom
    (d) Euglena
    Answer: (b)

40. Human pinworm is an example of _____.
    (a) bacteria
    (b) virus
    (c) aschelminthes
    (d) protozoans
    Answer: (c)

Arithmetic Ability

43. The greatest 5 digit number exactly divisible by 92 is:
    (a) 99922
    (b) 99952
    (c) 99912
    (d) 99902
    Answer: (c)

44. How many digits will be there to the right of the decimal point in the product of 65.55 and 0.01354?
    (a) 5
    (b) 6
    (c) 7
    (d) 8
    Answer: (b)

45. The HCF of two numbers is 8, while their LCM is 144. Find the other number, if one number is 72.
    (a) 12
    (b) 16
    (c) 18
    (d) 20
    Answer: (b)

49. The smallest three-digit prime number of the following is:
    (a) 102
    (b) 103
    (c) 101
    (d) 107
    Answer: (c)

50. What is the capacity of the largest vessel that can empty the oil from three vessels containing 32 litre, 24 litre and 48 litre an exact number of times?
    (a) 96
    (b) 48
    (c) 8
    (d) 12
    Answer: (c)

52. If each of the 22 persons in a party shakes hand with every other person, what is the total number of handshakes?

(a) 190 times
(b) 231 times
(c) 232 times
(d) 242 times

Answer: (b)

53. Which of the following is divisible by 45?

(a) 181560
(b) 331145
(c) 202860
(d) 2033552

Answer: (c)

55. How many cubes, each of the edge 3 cm can be form a cube of edge 15 cm?

(a) 25
(b) 27
(c) 125
(d) 144

Answer: (c)

57. If the 9-digit number 98×46287y is divisible by 7[illegible]hen what is the value of (2x + y)?

(a) 11
(b) 14
(c) 17
(d) 18

Answer: (d)

58. Hema gains 12.5% by selling an aticle for ₹ 630. If she sells it for ₹ 574, then her gain/loss percent is:

(a) Loss 2.5%
(b) Gain 2.5%
(c) Gain 0.25%
(d) Loss 5%

Answer: (b)

59. The average marks obtained by 60 students in a test is 50. If the average marks of the passed students is 54 and that of students who failed is 30, then what is the number of students who passed?

(a) 50
(b) 48
(c) 45
(d) 42

Answer: (a)

60. The average of the squares of four consecutive even positive integers is 126. What is the average of 2 times the greatest integer and 3 times the smallest integer among the given integers?

(a) 24

(b) 26

(c) 28

(d) 30

Answer: (b)

General English

62. Read the following sentence and identify the part that has an error.
My sister said, / "This book / is mine / and that is your."

(a) My sister said,

(b) This book

(c) is mine

(d) and that is your

Answer: (d)

63. The parts of a sentence have been jumbled. Rearrange the jumbled parts to form a meaningful sentence. bought gifts (P) / in the neighbourhood (Q) / my sister (R) / for all the children (S)

(a) RSPQ

(b) QPSR

(c) SRQP

(d) RPSQ

Answer: (d)

65. Select the most appropriate one word substitution for the given group of words.
A person belonging to all parts of the world.

(a) Contemporary

(b) Cosmopolitan

(c) Superman

(d) Supernatural

Answer: (b)

66. Choose the CORRECT homonym pair to be filled in the following sentence.
There is a red spot on the _____ of the captain in the _____ forces.

(a) naval; navel

(b) navel; naval

(c) naval; naval

(d) navel; navel

Answer: (b)

67. Select the option is appropriate for the blanks.
She is the _____ who _____ the gold medal.

(a) one; won

(b) won; won

(c) one; one

(d) won; one

Answer: (a)

68. Select the SYNONYM of the given word.
BEGET

(a) Create

(b) Begin

(c) Destroy

(d) Believe

Answer: (a)

69. Choose the option that is the homonym with the meanings a writing instrument and a holding area for animals.

(a) Pen

(b) Pain

(c) Pan

(d) pane

Answer: (a)

70. Complete the idiom in the given sentence with the CORRECT phrase from the options given below. The meaning of the idiom is given in parenthesis for guidance.
Let Mark Anthony do the talking; he's got the _____ (the ability to speak with eloquence and fluency).

(a) parrot's skill

(b) gift of the magi

(c) green fingers

(d) gift of the gab

Answer: (d)

71. Fill in the blank with the most appropriate option.
She lost the _____ in her eye.

(a) cite

(b) site

(c) sight

(d) sigh

Answer: (c)

72. Select the most appropriate meaning of the given idiom.
Tooth and nail

(a) To torture someone by pulling out their teeth or nails

(b) To fight furiously and fiercely, with all one's strength and effort

(c) To donate one's teeth and nails after death

(d) To get a barber to cut your nails and clean your teeth.

Answer: (b)

73. Select the most suitable ANTONYMS of the following word from the options given below.
Mental

(a) Fixated

(b) Deluded

(c) Balanced

(d) Rationale

Answer: (c)

74. Choose the CORRECT homonym pair to be filled in the following sentence.
_____ you mad to not _____ a coat in this cold weather?

(a) Here; where

(b) Were; wear

(c) Where; wear

(d) Wire; were

Answer: (b)

75. Select the most appropriate meaning of the given idiom.
Call it a day

(a) Start a new business

(b) Start working on something

(c) Stop working on something

(d) To argue with someone

Answer: (c)

76. Which is the hottest season of the earth?

(a) Summer

(b) Winter

(c) Autumn

(d) Spring

Answer: (a)

77. Where do people usually go in summer?

(a) hilly regions

(b) plains

(c) plateaus

(d) islands

Answer: (a)

78. Which flower is grown in India in the month of May?
(a) marigold
(b) lily
(c) lotus
(d) musk rose
Answer: (d)

79. Which of the following options is INCORRECT with reference to the summer season?
(a) Early sunrise
(b) Scorching heat during the day
(c) Absence of flowering plants
(d) Wearing cotton clothes
Answer: (c)

Discipline1

101. Which one of the following operation can NOT be performed on lathe machine?
(a) Knurling
(b) Boring
(c) Treppaning
(d) Turning
Answer: (c)

102. _____ uses non-consumable type of electr e.
(a) Metal inert gas welding
(b) Gas tungsten arc welding
(c) Submerged-arc welding
(d) Shielded metal arc welding
Answer: (b)

103. Which one of the following bolt consists of only cylindrical shank threaded at both ends?
(a) Hook
(b) Eye
(c) Stud
(d) Hexagonal
Answer: (c)

104. _____ is used for turning a nut or for holding bolt head while the nut is being screwed on or off the bolt.
(a) Washer
(b) Spanner
(c) Screw
(d) Bolt
Answer: (b)

105. _____ is the intentional difference between the maximum material limits of the two mating parts.

(a) Allowance
(b) Tolerance
(c) Limit
(d) Fits

Answer: (a)

106. Micrometer measuring faces are tipped with tungsten carbide _____.

(a) to tighten the workpiece properly
(b) to avoid parallax error
(c) to prevent rapid wear
(d) to get the reading clearly

Answer: (c)

107. The non-dimensional number which differentiates a laminar flow from turbulent flow is:

(a) Reynolds number
(b) Froude number
(c) Mach number
(d) Knudsen number

Answer: (a)

108. Buoyant force depends upon the:

(a) Surface tension
(b) Position of the CP
(c) Mass of displaced liquid
(d) Viscosity of liquid

Answer: (c)

109. Which one of the following operation can NOT be performed by drilling maching?

(a) Tapping
(b) Reaming
(c) Spot facing
(d) Knurling

Answer: (d)

110. Which of the following operation can be used to make a cone shape enlargement of the end of a holes?

(a) Countersinking
(b) Boring
(c) Reaming
(d) Lapping

Answer: (a)

111. In dimensioning, DIA 12 DEEP 20 indicates:
(a) 12 mm diameter of hole and 20 mm depth of drilled hole
(b) 20 mm diameter of hole and 12 mm depth of drilled hole
(c) 12 mm diameter of hole and 20 mm fillet on drilled hole
(d) 20 mm diameter of hole and 12 mm fillet on drilled hole
Answer: (a)

112. In thread designation, SQ 28 × 8 where SQ represent:
(a) Square thread
(b) Acmre thread
(c) Buttress thread
(d) Worm thread
Answer: (a)

113. Which of the following process is used for surface finishing purpose?
(a) Boring
(b) Broaching
(c) Hobbing
(d) Honing
Answer: (d)

114. Quick return mechaism is associated with:
(a) Lathe
(b) Shaper
(c) Milling
(d) Drilling
Answer: (b)

115. Wringing of slip gauges is used in:
(a) Line measurement
(b) Primary measurement
(c) Both line and end measurement
(d) End measurement
Answer: (d)

116. Which of the following statement is NOT a Correct statement about the thermodynamic property?
(a) Specific volume is an intensive property
(b) Pressure is an intensive property
(c) temeperature is an intensive property
(d) volume is an intensive property
Answer: (d)

117. Which of the following cycle is also called as Constant volume cycle?

(a) Carnot cycle
(b) Joule cycle
(c) Diesel cycle
(d) Otto cycle

Answer: (d)

118. Which of the following statement is TRUE in case of a planner machine?

(a) Both tool and work reciprociate.
(b) Tool is stationary and the workpiece is reciprocates.
(c) Workpiece is stationary and the tool is reciprocates.
(d) Both tool and work stationary.

Answer: (b)

119. In hydraulic shaper machine, speed of forward stroke is _____ the speed of return stroke.

(a) equal to
(b) greater than
(c) less than
(d) may be grater or less depend on design requirement of workpiece

Answer: (c)

120. A beam is said to be fixed beam, if _____.

(a) both ends of beam are rigidly fixed
(b) both ends of beam are roller supported
(c) one end is fixed and other end is fre
(d) both ends are free

Answer: (a)

Discipline2

121. The smallest circle drawn to the pitch curve from the centre of rotation of cam is known as _____.

(a) Prime circle
(b) Pitch circle
(c) Face circle
(d) Pitch curve

Answer: (a)

122. Smallest circle drawn to the cam profile from the center of rotation of radial cam is known as _____.

(a) Prime circle
(b) Pitch circle
(c) Base circle
(d) Pitch curve

Answer: (c)

123. _____ is a metal joining process in which two or more parts are joined or coalesced at their contacting surfaces by suitable application of heat or/and pressure.

(a) Riveting
(b) Welding
(c) Casting
(d) Forging

Answer: (b)

124. Plastic deformation of the metals below the recrystallization temperature is known as _____.

(a) Cold working process
(b) Hot working process
(c) Warm working process
(d) Joining process

Answer: (a)

125. In NC codes, Dwell is defined by:

(a) G01
(b) G02
(c) G03
(d) G04

Answer: (d)

126. _____ test is carried out to check the toughn s of material.

(a) Izod test
(b) Tensile test
(c) Shore test
(d) Rockwell test

Answer: (a)

127. Which one of the following machine is used for tesile test of material?

(a) Universal testing machine
(b) Floating carriage diameter machine
(c) Pin on disc apparatus
(d) Impact testing machine

Answer: (a)

128. Tacho generator is a electromechanical device directly used to measure _____.

(a) Position of the motor
(b) Speed of the motor
(c) Acceleration of the motor
(d) Pulse on and off time of machine

Answer: (b)

129. A device which provides a usual output in response to a specified measurand is known as _____.

(a) Sensor
(b) Display
(c) Signal conditioning
(d) Intelligence

Answer: (a)

131. In CNC codes, G01 indicates _____.

(a) Rapid travel
(b) Clockwise interpolation
(c) Linear interpolation
(d) Counterclockwise interpolation

Answer: (c)

132. HSS tool is used to machine 20 mm diameter steel shaft, at spindle a speed of 1000 revolutions per minute. What is the cutting speed?

(a) π mm/min
(b) 20 π m/min
(c) 20 π mm/min
(d) π m/min

Answer: (b)

133. _____ type of maintenance approach in whic quipment is allowed to function / operate till no failure occurs that no maintenance wor carr out in advance to prevent failure.

(a) Predictive
(b) Preventive
(c) Breakdown
(d) Capital

Answer: (c)

134. In concept of reliability in maintenance, Bath tub curve indicates _____.

(a) assurance
(b) failure probability
(c) water indicator
(d) to stop machine

Answer: (b)

135. In computer system, Track ball is _____.

(a) Input device
(b) Output device
(c) CPU
(d) Part of hard disk

Answer: (a)

136. Point M (0, 50) can be seen being rotated about the origin through an angle, θ = 900, in the anti-clockwise direction to position N. The co- ordinates of N will be:

(a) (0,50)
(b) (-50,0)
(c) (0,-50)
(d) (-50,-50)

Answer: (b)

137. _____ type of flaws that can not be inspected using Liquid Penetrant Testing.

(a) Fatigue craks
(b) Interal cracks
(c) Porosity
(d) Quench cracks

Answer: (b)

138. Which of the following is NOT related with flexible manufacturing systems?

(a) Ability to produce varied quantities
(b) Ability to produce wide variety
(c) Using special purpose machines
(d) Abilty to produce wide variety and varied quantity

Answer: (c)

139. FMS is best suited when _____.

(a) all products use same family of components
(b) all products use different family of components
(c) number of component is low
(d) number of component is high

Answer: (a)

140. The long form of ATC that is commonly used in the context of material handling system is _____.

(a) Automatic Tool Correction
(b) Automatic Tool Changing
(c) Automated Tool Compensation
(d) Automated Tool Coding

Answer: (b)

Discipline3

141. Automatic Guided Vehicle System (AGVS) is a materials handling system that uses _____ operated, _____ vehicles that are guided along defined pathways in the floor.

(a) independently; self-propelled

(b) dependently; human-propelled

(c) independently; human-propelled

(d) dependently; self-propelled

Answer: (a)

142. Supply chain integration is strategic in nature and has two components _____.

(a) Collaboration and Interoperability

(b) Collaboration and Allocation

(c) Interoperability and Allocation

(d) Interoperability and Synchronization

Answer: (a)

143. In a supply chain, if there exists a collaboration at inventory level, but not at planning level, then it is called _____.

(a) Collaborative Planning and forecasting

(b) Synchronized supply chain

(c) Traditional supply chain

(d) Vendor managed inventory

Answer: (d)

144. _____ is the integration of the total manuf uring enterprise through the use of integrated systems and data communications coupled ith n managerial philosophies that improve organizational and personal efficiency.

(a) Coputer Integrated Manufacturing

(b) Design for Manufacturing

(c) Design for disassembly

(d) Design for Assembly

Answer: (a)

145. A manufacturing system in which the sequence of processing operations is fixed by the equipment configuration is known as _____.

(a) Fixed automation

(b) Programmable automation

(c) Flexible automation

(d) Universal automation

Answer: (a)

146. The workpiece in Electron beam machining is held in _____.

(a) Open air

(b) Vacuum

(c) Dielectric medium

(d) Eletrolyte

Answer: (b)

147. Choose CORRECT option for EDM process.

(a) Burr free

(b) Capable of producing sharp corners

(c) Not useful for hard metals

(d) Direct contact machining

Answer: (a)

148. _____ is an effective system of integrating the quality development, quality maintenance and quality improvement efforts of various groups in an organization so as to enable marketing, engineering, production and service at the most economical levels which allow for full customer satisfaction.

(a) Total Quality Management

(b) Kaizen

(c) Six sigma

(d) Just in time

Answer: (a)

149. The degree of reaction of an impulse turbine _____.

(a) is less than zero

(b) is greater than zero

(c) is equal to zero

(d) increases with steam velocity at inlet

Answer: (c)

150. _____ of steam tubine is done to reduce turbine speed.

(a) Complexing

(b) Compounding

(c) Both complexing and compounding

(d) Either complexing or compounding

Answer: (b)

151. The point where the resultant of all the horizontal and vertical forces including parasitic forces act on a tractor drawn implement is known as _____.

(a) Centre of resistance

(b) Virtual hitch point

(c) Centre of gravity

(d) Acceleration due to gravity

Answer: (a)

152. The angle between the axis of gang and the line perpendicular to the direction of motion is _____.

(a) Disc angle
(b) Tilt angle
(c) Both Disc angle and Tilt angle
(d) Gang angle

Answer: (d)

153. For a small scale industry, the fixed cost per month is ₹ 5000. The variable cost per product is ₹ 20 and sale price is ₹ 30 per piece. The break- even production per month will be _____.

(a) 300
(b) 460
(c) 500
(d) 10000

Answer: (c)

154. At EOQ, which of the following statement is TRUE?

(a) Holding cost is zero.
(b) Ordering cost is zero.
(c) Material cost is zero.
(d) Ordering cost = Holding cost

Answer: (d)

155. When same scaling factor is used along both X and Y direction it is called _____.

(a) Uniform scaling
(b) Differential scaling
(c) Equilateral scaling
(d) Perpendicular scaling

Answer: (a)

156. The typical cycle time for a production operation for the given data:
Processing time for the operation = 8 second, Handling time = 4 second, Tool handling time = 1 second

(a) 13 second
(b) 11 second
(c) 15 second
(d) 10 second

Answer: (a)

157. The computerized technology used for draft / design parts is known as _____.

(a) CAM
(b) CAD
(c) CIM
(d) CIMO

Answer: (b)

158. _____ for a given family is a hypothetical part that includes all of the design and manufacturing attributes of the family.

(a) Group technology
(b) FMS
(c) Composite part
(d) Assembly part

Answer: (c)

159. A collection of parts that are similar either by geometric shape and size or in processing steps required in their manufacture is known as _____.

(a) Part family
(b) Machine family
(c) FMS
(d) Group technology

Answer: (a)

160. In ECM, electrolyte used is _____.

(a) Kerosene
(b) Water
(c) Air
(d) Brine solution

Answer: (d)

Discipline4

161. Which of the following material can be ma[illegible]d by EDM?

(a) Iron
(b) Plastic
(c) Ceramic
(d) Glass

Answer: (a)

162. Which one of the following is NOT one of the four main cycles of the supply chain?

(a) Manufacturing cycle
(b) Procurement cycle
(c) Replenishment cycle
(d) Payment cycle

Answer: (d)

163. Which of the following is NOT a supply chain driver?

(a) Promotion
(b) Inventory
(c) Information
(d) Transportation

Answer: (a)

164. The Quality Function Deployment (QFD) process begins with _____.

(a) Technical design parameters

(b) Target component characteristics

(c) Quality control requirements

(d) Customer wants and needs

Answer: (d)

165. Which Statistical Process Control tool provides an accurate representation of the distribution of a continuous variable?

(a) Cause and Effect Diagram

(b) Check List

(c) Histogram

(d) Pareto Chart

Answer: (c)

166. Standardization of products is done to _____.

(a) Eliminate unnecessary varieties in design

(b) Simplify manufacturing process

(c) Make interchangeable manufacture possible

(d) Reduce material cost

Answer: (c)

167. Consider the LP problem.
Maximize 4X1 + X2 subject to X1 + X2 ≤ 8; 6X1 + X2 ≤ 8, X1,X2 ≥ 0. The objective function corresponding to the optimum solution is _____.

(a) 8

(b) 12

(c) 14

(d) 0

Answer: (c)

168. Linear Programing problem can be solved by _____.

(a) Simplex method

(b) Gantt Chart

(c) Johnson's algorithm

(d) Both johnson's algorithm and Gantt chart

Answer: (a)

169. _____ and _____ are used for horizontal & vertical movement of material in the industry respectively.

(a) Monorails; conveyors

(b) Conveyors; AGVs

(c) AGVs; cranes

(d) Crane; hoists

Answer: (d)

170. According to material handling principle, rehandling and back tracking of material should be _____.

(a) Included
(b) Avoided
(c) Both included and avoided
(d) Neither included nor avoided

Answer: (b)

171. Detection of defect in _____ can be done by magnaflux method.

(a) Aluminium casting
(b) Glass
(c) Plastic
(d) Mild steel

Answer: (d)

172. Bimetallic can be used for _____.

(a) measurement of temperature
(b) measurement of pressure
(c) measurement of flow
(d) measurement of volume

Answer: (a)

173. The reading of temperature on celcius scale is 6 , what is equivalent reading of temperature on Fahrenheit scale?

(a) 130 0F
(b) 132 0F
(c) 140 0F
(d) 146 0F

Answer: (c)

174. Complete the following statement.
Gas cooled reactor uses _____ as moderator.

(a) graphite
(b) carbon-di-oxide
(c) Oxygen
(d) Helium

Answer: (a)

175. For operating rotavator on trashy soil, which type of blade is most preferable?

(a) Hook type
(b) Twisted type
(c) Straight blade
(d) L-shaped

Answer: (d)

176. The front wheel of of a 2WD tractor is example of _____.

(a) Powered wheel

(b) Towed wheel

(c) Braked wheel

(d) Self-propelled wheel

Answer: (b)

177. The casting process which uses rotating mold is _____.

(a) Slush casting

(b) Centrifugal casting

(c) Die casting

(d) Continuous casting

Answer: (b)

178. A cantilever is a beam of span 6 m with point load of 6 kN at its free end will have constant shear force throughout the span is _____.

(a) 1 kN

(b) 2 kN

(c) 6 kN

(d) 36 kN

Answer: (c)

179. Bending moment diagram of simply supported h n when a point load (W) is acting at mid span of beam will be _____.

(a) a triangular

(b) a rectangle

(c) a parabola

(d) a hyperbola

Answer: (a)

180. Rigid parts that are arranged and connected so that they produce the desired motion of the machine is called _____.

(a) Kinematic Link

(b) Kinematic Pair

(c) Mechanism

(d) Kinematic joint

Answer: (c)

Discipline5

181. The principle most commonly followed for locating workpieces in a fixture is _____.

(a) 1 - 2-3

(b) 1 - 3-2

(c) 3 - 2-1

(d) 2 - 3-1

Answer: (c)

182. In machining, Dynamometer is used for measurement of _____.

(a) Cutting force

(b) Feed

(c) Depth of cut

(d) Speed

Answer: (a)

183. A line AB with the end points A(2, 2) and B(5, 7) is to be moved by 5 units in x-direction and 7 units in y-direction then new coordinates of point A will be _____.

(a) (2, 7)

(b) (7, 9)

(c) (5, 2)

(d) (10, 14)

Answer: (b)

184. Which of the following command is used to rou ne corner of the solid model?

(a) Chamfer

(b) Extrude

(c) Shell

(d) Fillet

Answer: (d)

185. Pump is a kind of turbo machine, which _____.

(a) Consume power

(b) Produces power

(c) Both absorbs as well as produces power

(d) Neither absorbs nor produce power

Answer: (a)

186. If a steel member is subjected to temperature rise and likely to expand freely, it will develops _____.

(a) no stress

(b) thermal stress

(c) tensile stress

(d) shear stress

Answer: (a)

187. Kerala state celebrates a popular festival known as _____.

(a) Ganesh Chaturthi

(b) Onam

(c) Brajholi

(d) Lokrang

Answer: (b)

188. Ball and socket joint used in robotics is a _____.

(a) Linear joint with 1 dof

(b) Rotary joint with 1 dof

(c) Rotary joint with 2 dof

(d) Rotary joint with 3 dof

Answer: (d)

189. Which of the following robotic part is used for holding piece or tool?

(a) Controller

(b) Drivers

(c) Gripper

(d) Base

Answer: (c)

190. _____ is a drawing, of the working area, show the location of the various activities identified by their numbered symbols and are associ d with particular flow process chart either man type or machine type.

(a) Flow diagram

(b) String diagram

(c) Process diagram

(d) Product diagram

Answer: (a)

191. In Method study, "O" symbol is used for _____.

(a) Operation

(b) Transportation

(c) Delay

(d) Storage

Answer: (a)

192. In a CNC program block, N012 G03 G91 X40 Z40 ... G03 refer to _____.

(a) circular interpolation in counterclockwise direction

(b) circular interpolation in clockwise direction

(c) absolute dimensioning

(d) incremental dimensioning

Answer: (a)

193. In CNC program, Miscellaneous Code M03 describes _____.

(a) Spindle ON clockwise

(b) Spindle ON anticlockwise

(c) Coolant ON

(d) Coolant OFF

Answer: (a)

194. Corrective maintenance is also refered as _____.

(a) Preventive maintenance

(b) Predictive maintenance

(c) Breakdown maintenance

(d) Pro-active maintenance

Answer: (c)

195. _____ process is used to obtain for high surface finish.

(a) Drilling

(b) Trepanning

(c) Reaming

(d) Broaching

Answer: (c)

196. From the following option Entrepreneur's is prime motivation for starting business is:
To make money
To be independent
To become powerful
To become famous

(a) A is correct

(b) A and B Correct

(c) B is correct

(d) B and C is correct

Answer: (c)

197. Complete the following sentence.
The Constitution of India guarantees _____ fundamental rights to Indian citizens.

(a) 6

(b) 5

(c) 4

(d) 7

Answer: (a)

200. Which of the following process is used to produce only axisymmetric cup shaped article from sheet metal?

(a) Knurling

(b) Nibbling

(c) Spinning

(d) Bending

Answer: (c)

Answer key

Answer key from the Delhi Subordinate Services Selection Board's official answer key for this sitting. "—" means the key gave none.

General Ability

1	**(c)**	2	**(b)**	3	**(b)**	4	**(d)**	5	**(d)**	6	**(b)**	7	**(d)**	8	**(c)**
12	**(a)**	13	**(c)**	14	**(a)**	16	**(b)**	17	**(c)**	18	**(c)**	19	**(c)**		

General Awareness

21	**(d)**	22	**(a)**	23	**(b)**	24	**(c)**	25	**(b)**	26	**(b)**	27	**(c)**	28	**(b)**
29	**(c)**	30	**(a)**	31	**(c)**	32	**(c)**	33	**(b)**	34	**(c)**	35	**(a)**	36	**(c)**
37	**(b)**	38	**(b)**	39	**(b)**	40	**(c)**								

Arithmetic Ability

43	**(c)**	44	**(b)**	45	**(b)**	49	**(c)**	50	**(c)**	52	**(b)**	53	**(c)**	55	**(c)**
57	**(d)**	58	**(b)**	59	**(a)**	60	**(b)**								

General English

62	**(d)**	63	**(d)**	65	**(b)**	66	**(b)**	67	**(a)**	68	**(a)**	69	**(a)**	70	**(d)**
71	**(c)**	72	**(b)**	73	**(c)**	74	**(b)**	75	**(c)**	76	**(a)**	77	**(a)**	78	**(d)**
79	**(c)**														

Discipline1

101	**(c)**	102	**(b)**	103	**(c)**	104		05	**(a)**	106	**(c)**	107	**(a)**	108	**(c)**
109	**(d)**	110	**(a)**	111	**(a)**	112	**(a)**	113	**(d)**	114	**(b)**	115	**(d)**	116	**(d)**
117	**(d)**	118	**(b)**	119	**(c)**	120	**(a)**								

Discipline2

121	**(a)**	122	**(c)**	123	**(b)**	124	**(a)**	125	**(d)**	126	**(a)**	127	**(a)**	128	**(b)**
129	**(a)**	131	**(c)**	132	**(b)**	133	**(c)**	134	**(b)**	135	**(a)**	136	**(b)**	137	**(b)**
138	**(c)**	139	**(a)**	140	**(b)**										

Discipline3

141	**(a)**	142	**(a)**	143	**(d)**	144	**(a)**	145	**(a)**	146	**(b)**	147	**(a)**	148	**(a)**
149	**(c)**	150	**(b)**	151	**(a)**	152	**(d)**	153	**(c)**	154	**(d)**	155	**(a)**	156	**(a)**
157	**(b)**	158	**(c)**	159	**(a)**	160	**(d)**								

Discipline4

161	**(a)**	162	**(d)**	163	**(a)**	164	**(d)**	165	**(c)**	166	**(c)**	167	**(c)**	168	**(a)**
169	**(d)**	170	**(b)**	171	**(d)**	172	**(a)**	173	**(c)**	174	**(a)**	175	**(d)**	176	**(b)**
177	**(b)**	178	**(c)**	179	**(a)**	180	**(c)**								

Discipline5

181	**(c)**	182	**(a)**	183	**(b)**	184	**(d)**	185	**(a)**	186	**(a)**	187	**(b)**	188	**(d)**
189	**(c)**	190	**(a)**	191	**(a)**	192	**(a)**	193	**(a)**	194	**(c)**	195	**(c)**	196	**(c)**
197	**(a)**	200	**(c)**												