PREVIOUS YEAR PAPER

# DSSSB TGT Natural Science (Male) 2021 — 7 September 2021, Shift 2

DSSSB TGT · 7 September 2021 · Shift 2

150 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: 50 (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 7 September 2021, Shift 2. 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-tgt/previous-year-papers/dsssb-tgt-2021-natural-science-male-7-sep-shift-2/

## General Ability

1. Find the wrong term in the letter-cluster series given below:
REMT, AMVB, JUEJ, SDNR, BKWZ

(a) AMVB
(b) JUEJ
(c) SDNR
(d) BKWZ

**Answer: (c)**

2. Find the missing term in the following letter-clust eries given below:
P16HI, ? , B2VW, H8CD, N14JK

(a) V22OP
(b) V22PO
(c) V15OP
(d) V8PO

**Answer: (a)**

3. Select the related letters from the given alternatives:
MIGRANT : LHFQZMS : : ? : FDKBV

(a) DSRGF
(b) GSRHE
(c) DSGEW
(d) GELCW

**Answer: (d)**

4. Find out the odd word from the given alternatives.

(a) Hours
(b) Decibels
(c) Minutes
(d) Seconds

**Answer: (b)**

5. In a certain code language, “STOCK” is written as “NPLAJ”. How is “PRICE” written in that code language?

(a) KNFAD

(b) OQHBD

(c) NKDAF

(d) NPGAC

**Answer: (a)**

6. Aman is 12th from the starting in a row. Raman is 24th from the end and there are 25 boys between Aman and Raman, then how many boys are there in total?

(a) 61

(b) 62

(c) 60

(d) 63

**Answer: (a)**

7. Five friends Aman, Chintu, Rahul, Gautam and Pintu are sitting in a row at different position. Aman is sitting at the left end while Pintu is sitting second from the right end. Rahul is not an immediate neighbor of Aman and Gautam. Only one friend sits between Pintu and Gautam.
Who is sitting in the middle of the row?

(a) Chintu

(b) Pintu

(c) Gautam

(d) Aman

**Answer: (a)**

8. Two statements are followed by two conclusions numbered I and II. You have to consider these statements to be true, even if they seem to be at variance with commonly known facts. Decide which of the given conclusions logically follow/s from the given statement Statement:
All families are happy.
Some happy are healthy.
Conclusions:
(I) Some healthy are family.
(II) No healthy are family.

(a) Only I follow

(b) Only II follows

(c) Either I or II follows

(d) Neither I nor II follows

**Answer: (c)**

9. Three statements are followed by two conclusions numbered I and II. You have to consider these statements to be true, even if they seem to be at variance with commonly known facts. Decide which of the given conclusions logically follow/s from the given statement.
Statement:
Some buses are cycle
Some cycle are car.
No car is scooter.
Conclusions:
(I) Some car are buses.
(II) Some cars are cycle.

(a) Only I follow

(b) Only II follows

(c) Both I and II follow

(d) Neither I nor II follows

**Answer: (b)**

10. Three statements are followed by three conclusions numbered I, II and III. You have to consider these statements to be true, even if they seem to be at variance with commonly known facts. Decide which of the given conclusions logically follow/s from the given statement.
Statement:
Some questions are answer.
All answers are wrong.
Some wrong are correct.
Conclusions:
(I) Some wrong are question.
(II) Some correct are wrong.
(III) Some answer are wrong.

(a) Only I follow

(b) Only II follows

(c) Only III follows

(d) All follows

**Answer: (d)**

11. In the following question, select the related number from the given alternatives.
21 : 3 : : 574 : ?

(a) 23

(b) 82

(c) 97

(d) 113

**Answer: (b)**

12. In the question below, a statement is followed by two conclusions. Study the conclusions and select the correct option as the answer.
Statement
Y = M < N < B = D; M > Z; N < J
Conclusions.
I. Z < J
II. D > J

(a) Only I follow
(b) Both I and II follow
(c) Either I or II follow
(d) Only II follow

**Answer: (a)**

13. In the following question, select the missing number from the given series.
72000, 36000, 12000, 3000, 600, ?

(a) 180
(b) 160
(c) 150
(d) 100

**Answer: (d)**

## General Awareness

21. _____, is situated high aloft a hill called Neelacha arbat or Kamagiri in the city of Guwahati.

(a) Lotus Temple
(b) Konark temple
(c) Kamakhya Temple
(d) Lingaraja Temple

**Answer: (c)**

22. Pattachitra style of painting is one of the oldest and most popular art forms of _____.

(a) Maharashtra
(b) Madhya Pradesh
(c) Odisha
(d) Chhattisgarh

**Answer: (c)**

23. _____ is a dance form owing its origin to Andhra Pradesh.

(a) Kuchipudi
(b) Bharata Natyam
(c) Kathak
(d) Kathakali

**Answer: (a)**

24. _____, Hiuen Tsang, visited India during the reign of Harshavardhana.
    (a) Russian traveller
    (b) Francis traveller
    (c) Portuguese traveller
    (d) Chinese traveller

    **Answer: (d)**

25. When was the Cabinet Mission sent to India?
    (a) April 1946
    (b) March 1946
    (c) May 1946
    (d) June 1946

    **Answer: (b)**

26. Khurram was the son of which of the following Mughal Emperor ?
    (a) Jahangir
    (b) Aurangzeb
    (c) Humayun
    (d) Babar

    **Answer: (a)**

27. Alfred Nobel is associated with which of the follow , country?
    (a) Switzerland
    (b) England
    (c) Sweden
    (d) Denmark

    **Answer: (c)**

28. 'Mission Niryatak Bano' is related to which of the following states?
    (a) Madhya Pradesh
    (b) Rajasthan
    (c) Chhattisgarh
    (d) Assam

    **Answer: (b)**

29. Abdul Hamid is the President of which of the following country?
    (a) Iraq
    (b) Iran
    (c) Afghanistan
    (d) Bangladesh

    **Answer: (d)**

30. Where is glycogen stored in the human body?
    (a) Stomach
    (b) Gall Bladder
    (c) Liver
    (d) Kidney
    **Answer: (c)**

31. Jelep La pass is located in which state ?
    (a) Jammu & Kashmir
    (b) Sikkim
    (c) Uttarakhand
    (d) Himachal Pradesh
    **Answer: (b)**

32. Which of the following is a rabi crop?
    (a) Cotton
    (b) Jowar
    (c) Wheat
    (d) Chilly
    **Answer: (c)**

33. No force acts on a current carrying conductor wh t is placed _____.
    (a) far away from the magnetic field
    (b) perpendicular to the magnetic field
    (c) parallel to the magnetic field
    (d) inside a magnetic field
    **Answer: (c)**

34. The Nobel Prizes are not awarded for which of the following?
    (a) Arts
    (b) Literature
    (c) Peace
    (d) Physics
    **Answer: (a)**

35. Durand Cup is associated with which sports?
    (a) Cricket
    (b) Football
    (c) Kabaddi
    (d) Table-Tennis
    **Answer: (b)**

36. How many banks got nationalized in 1980 ?

(a) 4
(b) 9
(c) 6
(d) 11

**Answer: (c)**

37. What does GDP stand for?

(a) Gross Development Product
(b) Gross Domestic Price
(c) Gross Domestic Product
(d) Gross Development Price

**Answer: (c)**

38. In case of Emergency in the country, who among the following can suspend the fundamental rights?

(a) Prime Minister
(b) High Court
(c) President
(d) Supreme Court

**Answer: (c)**

39. Bahujan Samaj Party was formed in 1984 under t eadership of _____.

(a) Syama PrasadMukherjee
(b) Kanshi Ram
(c) Sunderlal Bahuguna
(d) Mulayam Singh Yadav

**Answer: (b)**

40. Where is the Somasila Dam is located ?

(a) Himachal Pradesh
(b) Uttar Pradesh
(c) Andhra Pradesh
(d) Madhya Pradesh

**Answer: (c)**

## Arithmetic Ability

44. Find the largest number which divides 34, 58 and 94 leaving the same remainder in each case.

(a) 6
(b) 9
(c) 12
(d) 8

**Answer: (c)**

45. A group of children has 120 chocolates with them. Eight of each of them eat 7 chocolates. Each of the remaining eats 1 chocolate less than the average number of chocolates eaten by all of them. What could be the maximum number of children in the group?

(a) 60
(b) 30
(c) 40
(d) 24

**Answer: (c)**

46. P and Q are two numbers such that if P increased by 20 percent and Q decreased by 40 percent, their sum remains constant. By what percent P is greater than Q?

(a) 200 percent
(b) 50 percent
(c) 75 percent
(d) 100 percent

**Answer: (d)**

47. If the price of rice per kg is decreased by 15 percent , one can buy 1 kg more for Rs.85. How much quantity of rice can one buy with Rs.120 with the initial price ?

(a) 8 kg
(b) 10 kg
(c) 7.5 kg
(d) 5.5 kg

**Answer: (a)**

48. A man sold an article for Rs. 840 at a profit of percent. If the ratio of the marked price to the cost price of the article is 10 : 7, respectively, then find the discount percentage offered by the man.

(a) 20 percent
(b) 18 percent
(c) 12 percent
(d) 16 percent

**Answer: (d)**

49. A loss equivalent to selling price of 6 oranges is suffered by selling 144 oranges. Calculate the loss percentage.

(a) 2 percent
(b) 3 percent
(c) 4 percent
(d) 5 percent

**Answer: (c)**

50. The ratio of male workers to the female worker in factory A is 3 : 4 and that in factory B is 5 : 4. The percentage of the females who got increment in factory A is 70 percent and that in factory B is 85 percent. If 12 females in factory A did not get the increment and 68 females in factory B get the increment, then what can be the ratio of total workers in factory A to total workers in factory B?

(a) 5 : 9

(b) 1 : 2

(c) 7 : 19

(d) 7 : 18

**Answer: (d)**

51. 650 grams of sugar solution has 55 percent sugar in it. How much sugar should be added to this mixture so that sugar becomes 75 percent of total mixture?

(a) 360 grams

(b) 600 grams

(c) 540 grams

(d) 520 grams

**Answer: (d)**

52. What is the compound interest on Rs.10,000 in a year at 6 percent per annum if it is compounded half-yearly?

(a) Rs.1236

(b) Rs.609

(c) Rs.600

(d) Rs.703

**Answer: (b)**

53. Walking at three-fourth of his usual speed, a man covers a certain distance in two hours more than the time he takes to cover the distance at his usual speed. The time taken by him to cover the distance with his usual speed is:

(a) 4.5 hours

(b) 5.5 hours

(c) 6 hours

(d) 5 hours

**Answer: (c)**

54. A certain distance is covered in a certain time. If 60 percent more distance is covered in 35 percent less time, then find the ratio of the speed in the two cases.

(a) 12 : 17

(b) 15 : 22

(c) 35 : 16

(d) 13 : 32

**Answer: (d)**

55. A and B together can complete a work in 8 days while B and C together can complete it in 12 days. A worked for 4 days, B worked for 6 days and then C finishes the remaining work in 11 days. In what time C alone can complete the work?

(a) 11 days

(b) 17 days

(c) 27 days

(d) 18 days

**Answer: (c)**

56. Fifty six men can complete a piece of work in 24 days. In how many days can 42 men complete the same piece of work?

(a) 18 days

(b) 32 days

(c) 98 days

(d) 48 days

**Answer: (b)**

## General English

61. One part of the sentence below may contain an error. Identify the part. If there is no error, choose 'No error'.
The World Health Organisation's experts says that imm ising children against the coronavirus "is not a high priority" given the extremely limited global pply of vaccines.

(a) The World Health Organisation's experts say at immunising

(b) children against the coronavirus "is not a hi priority"

(c) given the extremely limited global sup accines.

(d) No error.

**Answer: (a)**

62. One part of the sentence below may contain an error. Identify the part. If there is no error, choose 'No error'.
My father identified the person who has won a beautiful car in the lottery yesterday.

(a) My father identified the person

(b) who has won a beautiful car

(c) in the lottery yesterday.

(d) No error.

**Answer: (b)**

64. Select the most appropriate option to substitute the bracketed part in the given sentence. If there is no need to substitute the bracketed part, select 'No improvement'.
(As I did not think it was proper to) acquaint her yet with what had happened, I made an excuse.

(a) As I did not think it being proper to

(b) As I did not think properly to

(c) As I did not properly think to

(d) No Improvement.

**Answer: (d)**

65. Select the most appropriate option to fill in the blank.
Rumours spread that he _____ soon order the army to open fire.

(a) will
(b) will be
(c) would be
(d) would have

**Answer: (a)**

66. Select the most appropriate option to fill in the blanks.
Dharmendra is going _____ the knife next month to try to _____ his knee problems.

(a) above, solve
(b) under, solving
(c) above, solved
(d) under, solve

**Answer: (d)**

67. Select the most appropriate option to fill in the blanks.
"It is clear that each of these draft _____ is part of a larger plan that _____ against the ethos and interests of the islands and islanders.

(a) regulation, are
(b) regulations, is
(c) regulations, are
(d) regulation, is

**Answer: (b)**

69. Select the most appropriate synonym for the given word.
Benevolent

(a) Cruel
(b) Barbaric
(c) Gracious
(d) Savage

**Answer: (c)**

70. Select the most appropriate antonym for the given word.
Squander

(a) Confine
(b) Persecute
(c) Posit
(d) Save

**Answer: (d)**

71. Select the INCORRECTLY spelt word.

(a) Canine
(b) Compile
(c) Bolster
(d) Coureir

**Answer: (d)**

72. Select the CORRECTLY spelt word.

(a) Tropikal
(b) Tropical
(c) Trapical
(d) Tropicol

**Answer: (b)**

73. In the following question, out of the four given options, select the one which best expresses the meaning of the idiom/phrase.
Play it by ear.

(a) To focus on one thing.
(b) Last try before giving up.
(c) Act without preparation.
(d) A fleeting moment.

**Answer: (c)**

74. In the following question, out of the four given o ons, select the one which best expresses the meaning of the idiom/phrase.
Get the axe.

(a) Lose the job.
(b) Examining a group of people and deciding their suitability.
(c) Proving the effectiveness of something.
(d) Examining something carefully to not miss out any details.

**Answer: (a)**

75. Select the word which means the same as the group of the words given.
One who wants to destroy the government.

(a) Vandals
(b) Anarchist
(c) Criminal
(d) Amphibian

**Answer: (b)**

76. As a newly appointed Major-General, Arthur Wellesley won a decisive victory at _____.

(a) Many places in England.

(b) Battle of Assaye.

(c) Battle of Waterloo.

(d) Battle of Seringapatam.

**Answer: (b)**

77. Arthur Wellesley ended the Napoleonic Wars when he defeated Napoleon. Where was Napoleon defeated?

(a) Wellington

(b) Dublin

(c) Waterloo

(d) Tory

**Answer: (c)**

78. Which of the following statements is not correct?

(a) Wellington is famous for his adaptive defensive style of warfare.

(b) Wellesley rose to prominence as a general during the Peninsular campaign of the Napoleonic Wars.

(c) Following Napoleon's exile, Wellesley served as the ambassador to France.

(d) Wellesley had never been a colonel.

**Answer: (d)**

80. After the end of his active military career, Arthu ellesley went into _____.

(a) Adaptive defensive style of warfare

(b) Politics

(c) Poetry

(d) Training of young soldiers

**Answer: (b)**

## Discipline1

101. Which of the following statements is/are true?
1. If a body changes its position with time it is said to be moving 2. Nothing is in absolute rest or in absolute motion

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

**Answer: (c)**

105. Which of the following is/are type/s of forces in nature?
1. Gravitational
2. Electromagnetic
3. Nuclear
4. Weak
Choose the correct one.

(a) 1 and 2 only

(b) 1, 2 and 3 only

(c) 1, 3 and 4 only

(d) 1, 2, 3 and 4 only

**Answer: (d)**

107. Nucleus contains about _____ percent of the mass of the atom.

(a) 92

(b) 75

(c) 99.98

(d) 88.9

**Answer: (c)**

108. Which of the following statement is correct about action and reaction?

(a) Both act on the same object

(b) Both may or may not have equal magnitude

(c) Both Have same direction

(d) Both act along the line joining the bodies

**Answer: (d)**

109. A man walks with a speed of 8km/hr for 2 km and 9 km/hr for 3 km. What is the average speed for 5 km?

(a) 8.75 km/hr

(b) 9.75 km/hr

(c) 6.25 km/hr

(d) 8 km/hr

**Answer: (a)**

111. In an ideal spring, the spring force F is proportional to x where x is the displacement of the block from the equilibrium position. The s
displacement could be either positive or negative. This force law for the spring is called Hooke's law and is mathematically stated as:

(a) F = k/x s

(b) F = k + x s

(c) F = kx s

(d) F = -kx s

**Answer: (d)**

112. _____ is/are called fluid/s.
1. Liquid
2. Gas

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

**Answer: (c)**

113. Where does the centre of curvature of a concave mirror lie?

(a) On the mirror
(b) On the aperture of the mirror
(c) In the back of mirror
(d) In front of the mirror

**Answer: (d)**

115. In case of concave mirror if we place the object between centre of curvature and focus of the mirror then what will be the position of the image?

(a) At the focus
(b) At the centre of curvature
(c) Between the focus and centre of curvature
(d) Beyond centre of curvature

**Answer: (d)**

116. What is the absolute refractive index of [illegible]?

(a) 1.44
(b) 1.47
(c) 1.46
(d) 1.31

**Answer: (a)**

117. According to sign convention, the focal length of a convex mirror is _____.
A. Positive
B. Negative

(a) Only A
(b) Only B
(c) Either A or B
(d) Both A and B

**Answer: (a)**

118. Which one of the following is not associated with a good source of energy?

(a) It gives minimum amount of work per unit volume or mass.

(b) Simply accessible

(c) Easy to store and transport

(d) Moderate price rate

**Answer: (a)**

119. Up to what percentage of methane is contained by biogas?

(a) 65 percent

(b) 75 percent

(c) 85 percent

(d) 95 percent

**Answer: (b)**

120. A typical cell develops a voltage of 0.5–1 V and can produce about _____ of electricity when exposed to the Sun.

(a) 3 W

(b) 5 W

(c) 0.7 W

(d) 0.3 W

**Answer: (c)**

## Discipline2

123. What are the properties of the image f[illegible]d [illegible]he plane mirror?
A. Virtual and inverted
B. Virtual and erect

(a) A is true

(b) B is true

(c) A and B both are false

(d) Both are true

**Answer: (b)**

124. Which statement is true for a solenoid?

(a) Inside a solenoid electric field is zero.

(b) A solenoid is made up of magnet.

(c) A strong magnetic field is produced inside a solenoid.

(d) A solenoid does not behave like a magnet.

**Answer: (c)**

125. A galvanometer behaves like an ammeter when shunt resistance of very small value is added in _____.
A. Parallel
B. Series

(a) Only A
(b) Only B
(c) Either A or B
(d) Both A and B

**Answer: (a)**

126. When preparing systematic diagram of hydro power plant which of the following is not a component of it?
1. Generator
2. Turbine

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

**Answer: (d)**

127. A man picks up a bag of weight of 15 kg from the ground and puts it on his head 1.5 m above the ground. What is the work done by him on the bag?

(a) 125 J
(b) 175 J
(c) 200 J
(d) 225 J

**Answer: (d)**

128. Which one of the following is known as Slaked Lime?

(a) Calcium hydroxide
(b) Calcium oxide
(c) Calcium carbonate
(d) Calcium chloride

**Answer: (a)**

129. What is the colour of the white silver chloride when it is placed in direct sunlight?

(a) Green
(b) Grey
(c) Brown
(d) Black

**Answer: (b)**

131. Which one of the following is the best conductor of heat?

(a) Copper
(b) Gold
(c) Carbon
(d) Iron

**Answer: (a)**

132. Which one of the following is an example of Amphoteric Oxide?

(a) Copper Oxide
(b) Zinc Oxide
(c) Sodium Oxide
(d) Mercuric Oxide

**Answer: (b)**

133. _____ is the boiling point of $CaCl_2$.

(a) 1708 K
(b) 1600 K
(c) 1738 K
(d) 1900 K

**Answer: (d)**

134. Which of the following is not used as food preservatives?
1. Sodium Benzoate
2. Salts of sorbic acid

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

**Answer: (d)**

136. What is the colour of the flame when alkenes are burnt?

(a) White
(b) Yellow
(c) Blue
(d) Grey

**Answer: (b)**

137. In vinegar, what is the percentage of acetic acid dissolved in water?

(a) 3 – 5 percent
(b) 5 – 8 percent
(c) 8 – 10 percent
(d) 7 – 9 percent

**Answer: (b)**

138. What number of elements existed in nature was assumed by Newlands?

(a) 53
(b) 54
(c) 55
(d) 56

**Answer: (d)**

139. What is the atomic radius of hydrogen atom?

(a) 37 pm
(b) 57 pm
(c) 97 pm
(d) 102 pm

**Answer: (a)**

140. Why did Rutherford select a gold foil for his experiment of finding the model of an atom?

(a) As it is ductile
(b) As it is a noble metal
(c) As it is lustrous
(d) As it is thin

**Answer: (d)**

## Discipline3

141. How many electrons are present in the outermost shell of Silicon?

(a) 1
(b) 3
(c) 4
(d) 2

**Answer: (c)**

142. What is the number of valence electron present in Al + ion?

(a) 1
(b) 2
(c) 3
(d) 0

**Answer: (b)**

143. Which of the following is a property of an isobar?

(a) They have same mass number
(b) They have same atomic number
(c) They have same neutron number
(d) They have same chemical property

**Answer: (a)**

144. Which one of the following state consists a super energetic and super excited particle?
A. Plasma State
B. Bose-Einstein Condensate

(a) Only A
(b) Only B
(c) Both A and B
(d) Neither A nor B

**Answer: (a)**

145. _____ is the change of solid state directly to gaseous state without going through liquid state.

(a) Sublimation
(b) Evaporation
(c) Deposition
(d) Boiling

**Answer: (a)**

146. Which one of the following is dispersing medium for Emulsion?
A. Gas
B. Liquid
C. Solid

(a) Only A
(b) Only B
(c) A and C only
(d) B and C only

**Answer: (b)**

147. Calculate the number of moles present in 120 g of Mg. (AMU of Mg is 24)

(a) 2
(b) 3
(c) 4
(d) 5

**Answer: (d)**

148. What is the mass of 0.5 mole of calcium atom? (AMU of calcium is 40)

(a) 40.5 g
(b) 39.5 g
(c) 2 g
(d) 20 g

**Answer: (d)**

149. What is the original colour of Litmus solution?

(a) Blue
(b) Pink
(c) Purple
(d) Red

**Answer: (c)**

151. What is the pH of the mouth when tooth decay starts?

(a) Lower than 6
(b) Lower than 5.5
(c) Lower than 5
(d) Lower than 4.8

**Answer: (b)**

152. _____ water molecules are present in one formula unit of Washing Soda.

(a) 5
(b) 10
(c) 2
(d) 6

**Answer: (b)**

153. Washing soda is used in:
1. Removing permanent hardness of water 2. Glass, [illegible]p and paper industries

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Either 1 or 2

**Answer: (c)**

154. Calcium sulphate hemihydrate is another name of:

(a) Plaster of Paris
(b) Washing Soda
(c) Baking Soda
(d) Bleaching Soda

**Answer: (a)**

155. Synthetic detergents are classified into how many categories?

(a) 2
(b) 3
(c) 4
(d) 5

**Answer: (b)**

156. Single-celled organisms can produce two equal daughter-cells by -

(a) Sporulation

(b) Binary fission

(c) Encystation

(d) Budding

**Answer: (b)**

157. The primary and secondary immune responses are carried out with the help of two special types of lymphocytes present in our blood which are:

(a) A-lymphocytes and F-lymphocytes

(b) B-lymphocytes and P-lymphocytes

(c) M-lymphocytes and I-lymphocytes

(d) B-lymphocytes and T-lymphocytes

**Answer: (d)**

158. Which of the following fungi is responsible for ringworm which is one of the most common infectious disease in humans?

(a) Aspergillus

(b) Candida

(c) Tricophyton

(d) Fusarium

**Answer: (c)**

159. Nitrogen gas makes up _____ of our atmosphe

(a) 90-95 percent

(b) 85-90 percent

(c) 80-85 percent

(d) 75-80 percent

**Answer: (d)**

160. Which of the following is present at the growing tips of stems and roots and increases the length of the stem and the root?

(a) Apical meristem

(b) Vacuoles

(c) Cambium

(d) Intercalary meristem

**Answer: (a)**

## Discipline4

161. _____ tissue is composed of dead cells.

(a) Collenchymatous
(b) Sclerenchymatous
(c) Parenchymatous
(d) Aerenchymatous

**Answer: (b)**

162. Which of the following organisms do not have a defined nucleus or organelles, nor do any of them show multi-cellular body designs?

(a) Protista
(b) Fungi
(c) Monera
(d) Animalia

**Answer: (c)**

163. Which of the following animals are also bilaterally symmetrical and triploblastic, but in addition they have a true body cavity?

(a) Coelenterata
(b) Platyhelminthes
(c) Echinodermata
(d) Annelida

**Answer: (d)**

164. The diameter of the pupil in a human eye is co lled by the _____.

(a) Cornea
(b) Retina
(c) Iris
(d) Optic nerve

**Answer: (c)**

165. For a young adult with normal vision, the near point is about _____.

(a) 40 mm
(b) 25 cm
(c) 35 m
(d) 40 cm

**Answer: (b)**

166. The change in the _____ of the eye lens can thus change its focal length.

(a) Curvature
(b) Fluidity
(c) Opacity
(d) Musculature

**Answer: (a)**

167. A person with _____ can see distant objects clearly but cannot see nearby objects distinctly.

(a) Myopia
(b) Presbyopia
(c) Hypermetropia
(d) Hypopetropia

**Answer: (c)**

168. Which of the following organisms engulfs food to form food vacuoles?

(a) Amoeba
(b) Paramecium
(c) Plasmodium sporozoite
(d) Plasmodium merozoite

**Answer: (a)**

169. When the terminal phosphate linkage in ATP is broken using water, the energy released is equivalent to _____.

(a) 89 kJ/mol
(b) 1.8 kJ/mol
(c) 30.5 kJ/mol
(d) 111 kJ/mol

**Answer: (c)**

170. Which of the following hormones regulate carbo drate, protein and fat metabolism in the body so as to provide the best balance for growth?

(a) Epinephrine
(b) Oxytocin
(c) Endorphin
(d) Thyroxin

**Answer: (d)**

171. Which of the following hormones promote cell division and are present in greater concentration in areas of rapid cell division, such as in fruits and seeds?

(a) Cytokinins
(b) Gibberellins
(c) Ascorbic Acid
(d) Insulin

**Answer: (a)**

172. Which of the following is/are key concepts of Darwinian Theory of Evolution?
1. Branching descent
2. Natural selection
Choose the correct code–

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

**Answer: (c)**

173. Which of the following approach is based on the idea that organisms which are more distantly related will accumulate a greater number of differences in their DNA?

(a) Molecular phylogeny
(b) Isotopic phylogeny
(c) Atomic phylogeny
(d) Genome sequencing phylogeny

**Answer: (a)**

174. Which of the following primates were found 15 mya and was more man-like?
1. Dryopithecus
2. Ramapithecus
Choose the correct code–

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

**Answer: (b)**

175. Which of the following movement originated from an incident in a remote village called Reni in Garhwal, high-up in the Himalayas during the early 1970s?

(a) Narmada Bachao Andolan
(b) The Chipko Andolan
(c) The Sal Raksha Andolan
(d) The Namami Gange Andolan

**Answer: (b)**

176. Which plants were introduced into India for their lovely flowers, but later they caused havoc by their excessive growth by causing blocks in our waterways?

(a) Neochetina eichhorniae
(b) Pontederia Azurea
(c) Pistia Stratiotes
(d) Eichhornia crassipes

**Answer: (d)**

177. Consider the following features of a particular gas - 1. It is a reddish-brown gas with pungent smell.
2. It indirectly causes acid-rain.
Which of the following gases is being talked about?

(a) SO 2
(b) NO 2
(c) CFC
(d) SO 3

**Answer: (b)**

178. Which of the following statements is incorrect?

(a) In coastal areas the direction of wind changes from day to night.
(b) Formation of water-vapours can be influenced by the activities of human-beings.
(c) The fossil fuels like coal and petroleum contain very large amounts of nitrogen and sulphur.
(d) The combustion of fossil fuels increases the amount of suspended particles in air.

**Answer: (c)**

179. Which of the following organisms can fix atmospheric nitrogen?

(a) A few viruses
(b) A few bacteria
(c) A few fungi
(d) A few algae

**Answer: (b)**

180. For what purpose do many marine animals generally use the dissolved carbonates in sea-water?

(a) Respiration
(b) For underwater photosynthesis
(c) To make their shells
(d) For digestion of food

**Answer: (c)**

## Discipline5

181. Which of the following can NOT be classified as a group of activities that can give a good yield?

(a) Crop variety improvement
(b) Crop production improvement
(c) Crop protection improvement
(d) Crop efficiency improvement

**Answer: (d)**

182. Which of the following is a macronutrient for plants?

(a) Magnesium
(b) Molybdenum
(c) Copper
(d) Zinc

**Answer: (a)**

183. Xanthium and Cyperinus rotundus are examples of -

(a) Crop-damaging insects
(b) Crop-eating birds
(c) Weeds
(d) Nitrogen fixing micro-organisms

**Answer: (c)**

184. The levels of which vitamins are kept high in the poultry feeds?

(a) Vitamins A and B
(b) Vitamins C and D
(c) Vitamins E and K
(d) Vitamins A and K

**Answer: (d)**

185. The credit for Green Revolution in India goes to-

(a) Dr. M. S. Swaminathan
(b) Dr. Verghese Kurien
(c) Dr. P A Sanchez
(d) Dr. R S Paroda

**Answer: (a)**

186. Which of the following is termed "The True Friends of the farmers' or 'The Natural ploughers'?

(a) Earthworms
(b) Rabbits
(c) Bulls
(d) Bees

**Answer: (a)**

187. What are the hens called which are reared for eggs?

(a) Broilers
(b) Eggers
(c) Layers
(d) Brailers

**Answer: (c)**

188. Which of the following is considered to be the purest form of natural water (distilled water) free from impurities?

(a) Rain water
(b) Spring water
(c) Well water
(d) River water

**Answer: (a)**

190. Apis cerana indica is a type of _____.

(a) Horse
(b) Hen
(c) Bee
(d) Cow

**Answer: (c)**

## Teaching Methodology

191. In which of the following teaching strategies does the student acquire the knowledge himself/herself by discovering the facts himself/herself supported by the guidance of the teacher?

(a) Discussion method
(b) Demonstration method
(c) Heuristic method
(d) Lecture method

**Answer: (c)**

192. Which of the following is not a characteri[illegible] learning process?

(a) Learning is individualistic.
(b) Learning is intentional.
(c) Learning is non-transferable.
(d) Learning is the outcome of the interaction of the individual with the environment

**Answer: (c)**

193. Which of the following chapters of the Right to Education Act, 2009 provides for the responsibilities of schools and teachers?

(a) II
(b) III
(c) IV
(d) V

**Answer: (c)**

194. What is the full-form of TLM for teachers?

(a) Teaching Learning Mechanism
(b) Teaching Learning Materials
(c) Teacher Language Mechanism
(d) Training and Learning Method

**Answer: (b)**

196. In which year was the 10+2+3 pattern of education introduced in India?

(a) 1972
(b) 1973
(c) 1974
(d) 1975

**Answer: (d)**

197. How many dimensions of science education was identified in the 'Science Education for First Ten Years of Schooling - Guidelines for Upper Primary and Secondary Classes'?

(a) 5
(b) 6
(c) 7
(d) 8

**Answer: (c)**

198. Who is of the view "There is no such thing as a losophy-free science, there is only science whose philosophical baggage is taken on border w ut examination"?

(a) Daniel Dennett
(b) Richard Dawkins
(c) Sam Harris
(d) David Chalmers

**Answer: (a)**

199. Which age range is associated with later childhood?

(a) 6-12 years
(b) 10-15 years
(c) 5-10 years
(d) 12-18 years

**Answer: (a)**

200. According to the 2011 Census what is the sex-ratio in our country?

(a) 929
(b) 935
(c) 940
(d) 951

**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 | **(a)** | 3 | **(d)** | 4 | **(b)** | 5 | **(a)** | 6 | **(a)** | 7 | **(a)** | 8 | **(c)** |
| 9 | **(b)** | 10 | **(d)** | 11 | **(b)** | 12 | **(a)** | 13 | **(d)** | | | | | | |

## General Awareness

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

## Arithmetic Ability

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44 | **(c)** | 45 | **(c)** | 46 | **(d)** | 47 | **(a)** | 48 | **(d)** | 49 | **(c)** | 50 | **(d)** | 51 | **(d)** |
| 52 | **(b)** | 53 | **(c)** | 54 | **(d)** | 55 | **(c)** | 56 | **(b)** | | | | | | |

## General English

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61 | **(a)** | 62 | **(b)** | 64 | **(d)** | 65 | **(a)** | 66 | **(d)** | 67 | **(b)** | 69 | **(c)** | 70 | **(d)** |
| 71 | **(d)** | 72 | **(b)** | 73 | **(c)** | 74 | **(a)** | 75 | **(b)** | 76 | **(b)** | 77 | **(c)** | 78 | **(d)** |
| 80 | **(b)** | | | | | | | | | | | | | | |

## Discipline1

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 | **(c)** | 105 | **(d)** | 107 | **(c)** | 108 | | 09 | **(a)** | 111 | **(d)** | 112 | **(c)** | 113 | **(d)** |
| 115 | **(d)** | 116 | **(a)** | 117 | **(a)** | 118 | **(a)** | 119 | **(b)** | 120 | **(c)** | | | | |

## Discipline2

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

## Discipline3

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

## Discipline4

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

## Discipline5

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 181 | **(d)** | 182 | **(a)** | 183 | **(c)** | 184 | **(d)** | 185 | **(a)** | 186 | **(a)** | 187 | **(c)** | 188 | **(a)** |
| 190 | **(c)** | | | | | | | | | | | | | | |

## Teaching Methodology

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 191 | **(c)** | 192 | **(c)** | 193 | **(c)** | 194 | **(b)** | 196 | **(d)** | 197 | **(c)** | 198 | **(a)** | 199 | **(a)** |
| 200 | **(c)** | | | | | | | | | | | | | | |