PREVIOUS YEAR PAPER

DSSSB TGT Natural Science (Male) 2021 — 7 September 2021, Shift 3

DSSSB TGT · 7 September 2021 · Shift 3

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 3. 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-3/

General Ability

1. Find the wrong term in the letter-cluster series given below:
WNGR, CKMO, IHSL, OEYJ, UBEF

(a) CKMO
(b) IHSL
(c) OEYJ
(d) UBEF

Answer: (c)

2. Find the missing term in the following letter-clust eries given below:
FLC21, JPG33, ? , RXO57, VBS43

(a) NTK41
(b) NTL42
(c) NTK45
(d) NTM44

Answer: (c)

3. Select the related word/ letters/ number from the given alternatives.
NaCl : Salt : : H SO :?
2 4

(a) Acid
(b) Base
(c) Sugar
(d) Water

Answer: (a)

4. Select the related numbers from the given alternatives.
LHD : 321 : : XTP : ?

(a) 123
(b) 132
(c) 654
(d) 531

Answer: (c)

5. If in a certain language, SQUABBLE is coded as "76521138". How is 'EQUAL' coded in that code?

(a) 26523
(b) 86523
(c) 76522
(d) 56523

Answer: (b)

6. In a row of children facing north, Rajat is fifteenth from the left. Aman who is thirty from the right end is fourth to the right of Rajat. How many children are there in the row?

(a) 50
(b) 49
(c) 48
(d) 47

Answer: (c)

7. Chintu, Pintu, Suresh, Ramesh and Mahesh are fi[illegible]riends in a class. Each of them likes a different subject viz. Hindi, English, Maths, [illegible]ienc[illegible]d Arts, but not necessarily in the same order. Each of them study in a different class viz. I, II, [illegible] and V, but not necessarily in the same order. Pintu studies in class I and likes Mathematics subject. The one who likes English subject and studies in class V. Chintu does not like Science or English subject. Ramesh likes Arts subject and studies neither class I nor class II. Mahesh studies in class IV.
Which is Suresh's favorite subject?

(a) Science
(b) English
(c) Hindi
(d) Scince or Hindi

Answer: (b)

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:
Some board are notice.
All notice are rings.
Conclusions:
(I) Some notice are board.
(II) No ring is board.

(a) Only I follow

(b) Only II follows

(c) Both I and II follow

(d) Neither I nor II follows

Answer: (a)

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:
All kitchen are hall.
Some hall are hotel.
All hotel are guest.
Conclusions:
(I) All hall are guest.
(II) Some kitchen are hotel.

(a) Only I follow

(b) Only II follows

(c) Both I and II follow

(d) Neither I nor II follows

Answer: (d)

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 circle are rectangle.
Some square are triangle.
No square are rectangle.
Conclusions:
(I) All squares are rectangle.
(II) Some squares are rectangle.
(III) No rectangle are square.

(a) Only I follow

(b) Only II follows

(c) Only III follows

(d) Either I or II follows

Answer: (c)

11. Select the set of numbers that is similar to the following set of numbers.
Given set: (3, 18, 36)

(a) (2, 10, 16)

(b) (4, 24, 48)

(c) (6, 42, 48)

(d) (12, 72, 96)

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.
Statements:
$A \geq B > C$, $D > M \leq K$, $D \geq C$
Conclusion:
I. $C < M$
II. $B > K$

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

Answer: (d)

13. In the following question, select the missing number from the given series.
76, 80, 107, 123, ?, 284

(a) 248

(b) 250

(c) 252

(d) 254

Answer: (a)

General Awareness

21. Sheesh Mahal or the 'Palace of Mirrors' in Patiala (Punjab) was built by _____.

(a) Maharaja Harpreet Singh

(b) Maharaja Virendra Singh

(c) Maharaja Harbhajan Singh

(d) Maharaja Narinder Singh

Answer: (d)

22. Which state is associated with Warli folk paintings?

(a) Maharashtra

(b) Madhya Pradesh

(c) Himachal Pradesh

(d) Chhattisgarh

Answer: (a)

23. Radio Broadcasting started in India in the early _____.

(a) 1920's
(b) Mid 1940's & 1950's
(c) 1940's
(d) Mid 1930's & 1940's

Answer: (a)

25. On January 26, 1950, the Constitution was came into force and Dr. Rajendra Prasad was elected the _____.

(a) First Vice President of India
(b) First Home minister of India
(c) First President of India
(d) First foreign minister of India

Answer: (c)

26. Which of the following was the fifth Guru of Sikhism?

(a) Guru Amar Das
(b) Guru Angad Dev
(c) Guru Arjan Dev
(d) Guru Siri Har Krishan

Answer: (c)

27. The 2021 India-Indonesia CORPAT which took pla in July 2021 was which edition of the biannual event?

(a) 32nd
(b) 36th
(c) 31st
(d) 30th

Answer: (b)

28. Who is the current CEO of Bharat BillPay?

(a) A.K. Singh
(b) Sudhansu Dhulia
(c) P Ravikrishna
(d) Noopur Chaturvedi

Answer: (d)

29. Which of the following laws created a favourable environment for women to secure freedom and self-development?

(a) Right to Information
(b) Dowry Prohibition Act
(c) Food Security Act
(d) Policy of Reservation

Answer: (b)

30. The unit of Electromotive force of a cell is _____.

(a) Joule
(b) Ampere
(c) Dyne
(d) Volt

Answer: (d)

31. What are the pores in a leaf called through which respiratory exchange of gases takes place?

(a) Vacuoles
(b) Lenticels
(c) Stomata
(d) Xylem

Answer: (c)

32. In the manufacture of steel, Iron ore, coking coal and lime stone are required in the ratio of approximately _____.

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

Answer: (d)

33. _____ refers to the existence of more than one le of government in the country.

(a) Socialism
(b) Federalism
(c) Secularism
(d) Democracy

Answer: (b)

34. The image formed on the retina of the human eye is _____.

(a) Virtual and Erect
(b) Real and Erect
(c) Virtual and Inverted
(d) Real and Inverted

Answer: (d)

35. What is surplus budget?

(a) Income and expenditure are equal
(b) Revenue more than the expenditure
(c) Expenditure more than revenue
(d) Revenue less than expenditure

Answer: (b)

36. What is the full form of ADCCI?
    (a) Asian Chamber of Commerce and Industry
    (b) American Chamber of Commerce and Industry
    (c) Abu Dhabi Chamber of Commerce and Industry
    (d) Abu Dhabi Chamber of commercial and industrial

    Answer: (c)

37. In which of the following state of India, you will find the natural phenomenon called Chir Batti?
    (a) Gujarat
    (b) Karnataka
    (c) Kerala
    (d) Tamil Nadu

    Answer: (a)

38. Who has been awarded the 2019 Golden Foot award ?
    (a) Lionel Messi
    (b) Wayne Rooney
    (c) Neymar
    (d) Luka Modric

    Answer: (d)

39. Padma Sachdev is associated with which of the fo wing profession?
    (a) Poet, writer
    (b) Politician
    (c) Journalist
    (d) Singer

    Answer: (a)

40. Chandrakanta, written by _____, is considered to be the first work of prose in Hindi.
    (a) Mahadevi Varma
    (b) Devaki Nandan Khatri
    (c) Sumitranandan Pant
    (d) Maithili Sharan Gupt

    Answer: (b)

Arithmetic Ability

43. What value will come in place of question mark (?) in the following question?
(9) 3 + (2) 3 + 3(9 × 2)11= ?
    (a) 625
    (b) 700
    (c) 765
    (d) 1331

    Answer: (d)

44. Find the greatest number which divides 882, 396 and 1404 exactly.

(a) 22

(b) 18

(c) 16

(d) 14

Answer: (b)

45. In the set of first 100 multiples of 5, P is the average of the multiples on the odd places and Q is the average of the multiples on the even places.
By what number, the value of Q is more than P?

(a) 5

(b) 10

(c) 2.5

(d) 12.5

Answer: (a)

46. To increase the revenue from the first-class fare, the railways decrease the first-class fare by 30 percent. As a result, the revenue from the first- class fare increased by 26 percent. What is the percentage increase in first-class passengers?

(a) 50 percent

(b) 80 percent

(c) 100 percent

(d) 65 percent

Answer: (b)

47. A distributed Rs.2500 among his three fri[illegible] C and D such that B received 40 percent of the amount, C received 60 percent of remaining amount and rest of the amount is received by D. What is the share of D?

(a) Rs.700

(b) Rs.600

(c) Rs.500

(d) Rs.400

Answer: (b)

48. Average cost price of items A and B is Rs.400. A and B are sold at 10 percent and 20 percent profit respectively and total selling price of A and B is Rs.918, then find the cost price of item B?

(a) Rs.360

(b) Rs.480

(c) Rs.190

(d) Rs.380

Answer: (d)

49. After selling 17 balls for Rs.720 the loss is equal to the cost price of 5 balls. What is the cost price of 1 ball?

(a) Rs.45
(b) Rs.50
(c) Rs.60
(d) Rs.55

Answer: (c)

50. On a tree, there are some parrots and pigeons in the ratio of 7 : 9. After an hour 8 parrots fly and 6 pigeons and 10 sparrows come on the tree. The ratio of parrots and pigeons now is 1 : 4. Now, what is the ratio of parrots to sparrows?

(a) 1 : 2
(b) 3 : 5
(c) 4 : 5
(d) 1 : 1

Answer: (b)

51. If the ratio of the present age of A to B is 3 : 4 and the ratio of the present age of B to C is 6 : 5. If the present age of C is 20 years, then what is the present age of A?

(a) 22 years
(b) 16 years
(c) 20 years
(d) 18 years

Answer: (d)

53. If the speed of a train is 72 kmph. then how many kilometers are covered by it in 10 minutes and 35 second ?

(a) 12.7
(b) 18.2
(c) 15.6
(d) 17.5

Answer: (a)

54. A man travels the first part of his journey at 20 km/h and the next at 70 km/h, covering the entire journey at an average speed of 50 km/h. If he covered 42 km at the rate of 70 km/h, then find the distance covered at 20 km/h?

(a) 8 km
(b) 4 km
(c) 6 km
(d) 3 km

Answer: (a)

56. P, Q, R worked together for 10 days and received Rs.24000 as wages and they share the wages in the ratio of 5 : 2 : 1 respectively. If P alone does the work, then in how many days he can complete the work?

(a) 16

(b) 15

(c) 12

(d) 18

Answer: (a)

General English

61. One part of the sentence below may contain an error. Identify the part. If there is no error, choose 'No error'.
Unconditional cash support offer all households a choice to spend money the way they want, on what they want.

(a) Unconditional cash support offer all households

(b) a choice to spend money the way

(c) they want, on what they want.

(d) No error.

Answer: (a)

62. One part of the sentence below may contain an er[illegible] Identify the part. If there is no error, choose 'No error'.
During this period last year, there was a nationwide [illegible]kdown following the outbreak of the coronavirus disease.

(a) During this period last year, there w[illegible]

(b) a nationwide lockdown following the

(c) outbreak of the coronavirus disease.

(d) No error.

Answer: (d)

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'.
(I cannot but study) for this exam - it counts for half of our grade!

(a) I cannot study

(b) but I cannot study

(c) I cannot study but

(d) No improvement.

Answer: (d)

65. Select the most appropriate option to fill in the blank.
Among the _____ kinds, the commonest is black or red ants.

(a) score
(b) lots of
(c) separate
(d) various

Answer: (d)

66. Select the most appropriate option to fill in the blanks.
Wait until you _____ the new Bajaj scooters. They'll _____ your socks off!

(a) try, kicked
(b) tried, knock
(c) trying, kicking
(d) try, knock

Answer: (d)

67. Select the most appropriate option to fill in the blanks.
In Kerala, students and individuals _____ abroad for higher studies or jobs and for whom a vaccination certificate is necessary, _____ being given Covishield vaccine.

(a) gone, was
(b) went, are
(c) going, are
(d) going, was

Answer: (c)

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

(a) Fluke
(b) Scald
(c) Sly
(d) Stumble

Answer: (c)

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

(a) Condemn
(b) Worsen
(c) Flourish
(d) Ignore

Answer: (a)

71. Select the INCORRECTLY spelt word.

(a) plentious
(b) precipice
(c) replenish
(d) jeopardize

Answer: (a)

72. Select the CORRECTLY spelt word.

(a) Courious
(b) Cuorious
(c) Curious
(d) Cureious

Answer: (c)

73. In the following question, out of the four given options, select the one that best expresses the meaning of the idiom/phrase.
Ignorance is bliss.

(a) To want something that has been denied.
(b) To have passion underneath a calm expression.
(c) To gain attention and be the topic of conversation.
(d) To remain ignorant of things that may cause stress.

Answer: (d)

74. In the following question, out of the four given options, select the one that best expresses the meaning of the idiom/phrase.
Back to square one.

(a) To come back home.
(b) To attain the top position again.
(c) To be in the company of loved ones.
(d) To start something again.

Answer: (d)

75. Select the word which means the same as the group of the words given.
A person who loves books.

(a) Cannibal
(b) Teacher
(c) Biblioclast
(d) Bibliophile

Answer: (d)

79. Even if one were to discount food and fuel prices, then still, the core inflation has crossed the mark _____.

(a) 5.1 percent

(b) 6 percent

(c) 6.2 percent

(d) 11.6 percent

Answer: (b)

Discipline1

101. The image of an object is formed behind a concave mirror, is virtual and is larger in size. Where is the object located?

(a) Between Principal Focus (F) and Pole (P)

(b) At Principal Focus (F)

(c) Between F and 2F

(d) at 2F

Answer: (a)

102. Which of the following statements is NOT correct?
1. The size of an object as perceived by eye depends on its visual angle.
2. The human eye is most sensitive to yellow-green light having wavelength 5550 Å Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (d)

104. A rear-view on an automobile has a radius of curvature of 4.00 m. If a bus is located at 6.00 m from this mirror, then which of the following statements is NOT correct?

(a) The image is virtual.

(b) The image is smaller in size by a factor of 0.20.

(c) The mirror is convex.

(d) The image will be formed at a distance of 1.5 m at the back of the mirror.

Answer: (b)

105. In which of the following is concave mirror NOT used?

(a) Torches

(b) Dentists' mirrors

(c) Side-mirror for trucks

(d) Large mirrors to concentrate sunlight to produce heat in solar furnaces

Answer: (c)

106. Which of the following statements is NOT correct about electric current?

(a) Current is a vector quantity.

(b) 1C of electric charge is equivalent to the charge contained in nearly 6 × 10 18 electrons.

(c) An ammeter needs to be connected in series in an electrical circuit to determine how many amperes of current is flowing in the electric circuit.

(d) 1 μA = 10 -6 A

Answer: (a)

107. Which of the following is an insulator?

(a) Bakelite

(b) Aluminum

(c) Copper

(d) Silver

Answer: (a)

108. On which of the following does the value of the voltage or current generated by an AC generator NOT depend?

(a) Number of turns in the coil

(b) Strength of the field

(c) Speed at which the coil or magnetic field rotates

(d) The poles of the permanent magnet

Answer: (d)

109. Which of the following connections generally u series connections?
1. Household appliances
2. Small bulb-decorations on Deepawali
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (b)

110. 1 horse power (hp) is approximately equivalent to-

(a) 725 W

(b) 746 W

(c) 772 W

(d) 789 W

Answer: (b)

111. Which of the following types of coal is the best quality of coal?

(a) Peat

(b) Lignite

(c) Sub-bituminous

(d) Bituminous

Answer: (d)

112. Which of the following renewable energy sources can be harnessed all the time?
1. Solar energy
2. Wind energy
3. Geothermal energy
Choose the correct code.

(a) Only 1

(b) Only 2 and 3

(c) Only 3

(d) Only 2

Answer: (c)

113. A car travels in a circular motion. Which of the following statements is true?

(a) Distance travelled by the car will always be less than displacement of the car.

(b) Distance travelled by the car will always be more than displacement of the car.

(c) Distance travelled by the car will always be eq to displacement of the car.

(d) Distance travelled by the car will be zero whe isplacement is zero.

Answer: (b)

114. Which of the following is an example of N s second law of motion?

(a) When a bus stops passengers standing in the bus fall in the forward direction.

(b) A person gets hurt when he falls on a cement floor.

(c) When a person jumps out of a boat, the boat moves in the opposite direction.

(d) During swimming we push the water in the backward direction, with our hands and feet, to move in forward direction.

Answer: (b)

115. A bullet of mass 0.05 kg is fired with a velocity of 120 ms -1 from a rifle of mass 4 kg. What will be the recoil velocity of the rifle?

(a) 1.0 ms -1

(b) 1.25 ms -1

(c) 1.5 ms -1

(d) 1.75 ms -1

Answer: (c)

116. On which of the following does the frictional force depend?
1. Smoothness of the surface
2. The normal reaction
Choose the correct code.

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

Answer: (c)

118. Who out of the following had found out the accepted value of G or the universal gravitation constant?

(a) Sir Issac Newton
(b) Henry Cavendish
(c) J C Maxwell
(d) Joseph Priestly

Answer: (b)

119. Which of the following form of energy depends on mass and velocity of an object?

(a) Only Potential energy
(b) Only Kinetic energy
(c) Both Potential and Kinetic energy
(d) Neither Potential nor Kinetic energy

Answer: (b)

120. Which of the following exhibits conversi[illegible]ectric energy into kinetic energy?

(a) Electric bulb
(b) Loudspeaker
(c) Table fan
(d) LED

Answer: (c)

Discipline2

121. X climbs up a small hill in 10 minutes, Y takes only 7 minutes in going up the same hill. The weight of X is equal to the weight of Y and is 54 kg. Which of the following statements is true?

(a) X does more work than Y
(b) Y does more work than X
(c) X spends more power than Y
(d) Y spends more power than X

Answer: (d)

122. Manufacturing of which of the following utilizes the Archimedes' Principle?
1. Submarines
2. Lactometer
Choose the correct code.

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

Answer: (c)

123. Which of the following statements is NOT correct?

(a) All bodies experience buoyancy when they are immersed in a fluid.
(b) Upthrust is not experienced by a body when immersed in a gas.
(c) Archimedes Principle can be exhibited even if a body is partially submerged.
(d) Archimedes Principle depends on the density of the fluid.

Answer: (b)

124. The general range of audible frequencies for humans is-

(a) 20 Hz to 20,000 Hz
(b) 10 Hz to 25,000 Hz
(c) 24 Hz to 25,000 Hz
(d) 26 Hz to 28,000 Hz

Answer: (a)

125. The velocity of sound will be highest i

(a) Steel
(b) Glass
(c) Silver
(d) Water

Answer: (a)

126. A sound wave has a frequency of 4 kHz and wave length 40 cm. How long will it take to travel 2.5 km?

(a) 2.1 seconds
(b) 1.56 seconds
(c) 3.45 seconds
(d) 4.12 seconds

Answer: (b)

127. Which of the following devices use the multiple reflection of sound?
1. Stethoscope
2. Megaphone
Use the correct code.

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Nither 1 nor 2

Answer: (c)

128. Which of the following statements is incorrect?

(a) The plasma state consists of super energetic and super excited particles.
(b) Plasma state is used in a neon sign bulb.
(c) The Sun and the stars glow because of the presence of plasma in them.
(d) The plasma is created in stars because of very high pressure.

Answer: (d)

129. What is the relation between atmosphere (atm) and Pascal (Pa)? (Where both are the unit of measuring pressure exerted by a gas)

(a) 1 atm = 1.01 × 10 6 Pa
(b) 1 atm = 1.03 × 10 6 Pa
(c) 1 atm = 2.01 × 10 5 Pa
(d) 1 atm = 1.01 × 10 5 Pa

Answer: (d)

130. In a solution 50 g of sugar is dissolved in of water. What is the concentration of the solution in terms of mass by mass percentage?

(a) 11.1 percent
(b) 12.5 percent
(c) 7.01 percent
(d) 9.3 percent

Answer: (b)

131. Which type of colloid butter is?

(a) Sol
(b) Aerosol
(c) Foam
(d) Gel

Answer: (d)

132. How can we separate cream from milk?

(a) Centrifugation

(b) Filtration

(c) Chromatography

(d) Separating funnel

Answer: (a)

133. What is the mass of α particle?

(a) 2 u

(b) 3 u

(c) 4 u

(d) 5 u

Answer: (c)

134. What is the valency of Lithium?

(a) 0

(b) 1

(c) -1

(d) 2

Answer: (b)

135. Chlorine occurs in nature in two isotopic forms, v[illegible] masses 35 u and 37 u in the ratio of _____.

(a) 2:3

(b) 3:1

(c) 1:2

(d) 1:4

Answer: (b)

136. Why did Rutherford select gold foil for his experiment?

(a) Because he wanted a thin layer as possible.

(b) Because he wanted a good conductor of electricity.

(c) Because he wanted the layer to be as pure as possible.

(d) Because he wanted the layer to be made of a heavy element.

Answer: (a)

138. Which one of the following element belongs to the third period in the Periodic Table?

(a) Be

(b) Si

(c) C

(d) Br

Answer: (b)

139. Which of the following elements have an atomic radius of 66 pm?

(a) O

(b) H

(c) N

(d) C

Answer: (a)

140. Which of the following is an example of oxidation reaction in daily life?
1. Corrosion
2. Rancidity
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

Discipline3

141. How does the colour of silver chloride change in sunlight?

(a) White to grey

(b) Grey to white

(c) White to Green

(d) Green to white

Answer: (a)

143. Complete the chemical reaction–
Metal carbonate/Metal hydrogencarbonate + Acid → _____

(a) Salt + Water

(b) Salt + Carbon dioxide + Water

(c) Salt + Carbon mono-oxide + Water

(d) Salt + Carbon dioxide

Answer: (b)

144. Which one of the following is not a form of Calcium Carbonate?

(a) Limestone

(b) Blackstone

(c) Chalk

(d) Marble

Answer: (b)

145. What is the pH range of our body?

(a) 6.1 – 7.0

(b) 8.1 – 9.0

(c) 5.7 – 6.5

(d) 7.0 – 7.8

Answer: (d)

146. Which acid is present in Tamarind?

(a) Oxalic acid

(b) Citric acid

(c) Tartaric acid

(d) Acetic acid

Answer: (c)

147. Aqua regia is a freshly prepared mixture of concentrated hydrochloric acid and concentrated nitric acid in the ratio of _____.

(a) 3:1

(b) 2:3

(c) 3:2

(d) 1:3

Answer: (a)

148. Which one of the following does not react with dilute HCL?

(a) Al

(b) Fe

(c) Cu

(d) Zn

Answer: (c)

149. What is the boiling point of Ethanol?

(a) 290 K

(b) 209 K

(c) 351 K

(d) 111 K

Answer: (c)

150. In the formula of Hexane how many hydrogen atoms are present?

(a) 10

(b) 12

(c) 14

(d) 16

Answer: (c)

153. Which of the following is a mixture of chloroxylenol and terpineol?
(a) Dettol
(b) Furacine
(c) Soframicine
(d) Iodoform
Answer: (a)

154. What is the sweetness value of Saccharin in comparison to cane sugar?
(a) 100
(b) 550
(c) 600
(d) 2000
Answer: (b)

156. _____ is a single cell organism.
(a) Amoeba
(b) Platyhelminthes
(c) Acanthocephalans
(d) Nematodes
Answer: (a)

157. The Greek thinker _____ classified animals accor g to their habitat.
(a) Archimedes
(b) Newton
(c) Aristotle
(d) Mendel
Answer: (c)

158. Grave's disease causes due to hyper secretion of _____ hormone.
(a) Thyroid hormone
(b) Aldosterone
(c) Insulin
(d) ACTH
Answer: (a)

159. Addison's disease caused due to hyposecretion of _____.
(a) Thyroid hormone
(b) Aldosterone
(c) Insulin
(d) ACTH
Answer: (b)

160. Which of the following layers of atmosphere is the closest to the earth?

(a) Troposphere
(b) Stratosphere
(c) Mesosphere
(d) Thermosphere

Answer: (a)

Discipline4

161. Which of the following vitamins' deficiency causes Beriberi?

(a) Vitamin D
(b) Vitamin C
(c) Vitamin B1
(d) Vitamin A

Answer: (c)

162. Which of the following plant-hormones inhibit growth?

(a) Auxins
(b) Gibberellins
(c) Cytokinins
(d) Abscisic acid

Answer: (d)

163. Peripheral nervous system consists of-

(a) Brain, nerve cord
(b) Cranial nerve, Spinal nerve
(c) Brain, cranial nerve
(d) Spine, Spinal nerve

Answer: (b)

164. All the involuntary actions including blood pressure salivation and vomiting are controlled by _____ in the Hind brain.

(a) Cerebrum
(b) Cerebellum
(c) Thalamus
(d) Medulla

Answer: (d)

165. Which part of cell nucleus is the information source for making protein?

(a) Nucleolus
(b) DNA
(c) Mitochondria
(d) Ribosomes

Answer: (b)

166. Amoeba reproduces by _____.

(a) Binary fission
(b) Fragmentation
(c) Regeneration
(d) Vegetative propagation

Answer: (a)

167. The term gene was coined by-

(a) Newton
(b) Mendel
(c) Johannsen
(d) Lamarck

Answer: (c)

168. A gene is a relatively short length of DNA that codes for a _____.

(a) Protein
(b) Lipid
(c) Carbohydrates
(d) Fats

Answer: (a)

169. Which of the following is not a vestigial organ of human?

(a) Wisdom teeth
(b) Nictitating membrane of eye
(c) Vermiform appendix
(d) Heart

Answer: (d)

170. The light sensitive screen of eye is known as _____.

(a) Optic nerve
(b) Retina
(c) Aqueous humour
(d) Pupil

Answer: (b)

171. Light enters the eye through a thin membrane called _____.

(a) Retina
(b) Cornea
(c) Aqueous humour
(d) Vitreous humour

Answer: (b)

172. Which part of the eye is a dark muscular diaphragm that controls the size of the pupil?

(a) Iris

(b) Pupil

(c) Vitreous humour

(d) Cornea

Answer: (a)

173. Which of the following are sources of sulphur oxides?
1. Combustion of coal
2. Combustion of petroleum
3. Volcanoes
Choose the correct code.

(a) Only 1 and 2

(b) Only 2 and 3

(c) Only 1 and 3

(d) 1, 2 and 3

Answer: (d)

174. In what ways can carbon dioxide be used?
1. In food-preservation
2. Refrigerant
Select the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

175. Which of the following effects is not covered in the term water-pollution?
1. The addition of undesirable substances to bodies.
2. A change in temperature of water bodies.
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (d)

176. Nitrogen-fixing bacteria are found in-

(a) All species of dicot plants

(b) All species of monocot plants

(c) Legumes

(d) Rice

Answer: (c)

177. Which of the following crops is a major source of carbohydrates for energy requirement?

(a) Black gram
(b) Sorghum
(c) Linseed
(d) Fruits

Answer: (b)

178. Which of the following is NOT a way how insect pests attack the plants?

(a) They cut the root, stem and leaf.
(b) They suck the cell-sap from various parts of plants.
(c) They block the stomata on the leaves, thus stopping photosynthesis.
(d) They bore into stems and fruits.

Answer: (c)

179. Bombay duck is a type of-

(a) Bird
(b) Cattle
(c) Weed
(d) Fish

Answer: (d)

Discipline5

181. Carrot grass is a type of-

(a) Parthenium
(b) Alligator weed
(c) Cockleburs
(d) Cyprus rotundus

Answer: (a)

182. Buffer stocks are those stocks of grains that are obtained by the government through the medium of _____.

(a) FICCI
(b) ISER
(c) ICAR
(d) FCI

Answer: (d)

183. Which of the following statements is true?

(a) Ozone is formed by the action of the UV rays on molecular oxygen at the mesosphere.
(b) Ozone is formed by the action of the UV rays on atomic oxygen at the mesosphere.
(c) Ozone is formed by the action of the UV rays on molecular oxygen at the stratosphere.
(d) Ozone is formed by the action of the UV rays on atomic oxygen at the stratosphere.

Answer: (c)

184. Which of the following statements is NOT true?
1. Plant eating animals release a large amount of methane in the atmosphere.
2. Industrialization and urbanization has lead to release of gases, such as CO , CH and N O into the atmosphere 2 4 2
Choose the correct code.

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

Answer: (d)

185. Eichhornia crassipes is also known as– 1. World's most problematic aquatic weed 2. Terror of Bengal
Choose the correct code-

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

Answer: (c)

186. Which of the following statements is incorrect?

(a) Smog formation is accompanied by Thermal in[illegible]sion.
(b) Smog stays in the upper layers of atmosphere
(c) Exposure to smog causes respiratory proble[illegible]
(d) Smog destroys crops and reduces [illegible]-vie[illegible].

Answer: (b)

187. Which of the following statements is incorrect?

(a) CNG though eco-friendly is expensive as compared to petrol or diesel.
(b) CNG burns most efficiently.
(c) CNG can't be adulterated by petrol or diesel.
(d) Very little of CNG is left unburnt.

Answer: (a)

188. Which of the following is NOT a primary pollutant?

(a) Carbon monoxide
(b) Nitrogen Oxides
(c) Volatile organic compounds
(d) Ground level ozone

Answer: (d)

189. To remove permanent hardness of water, we can add calculated amounts of–

(a) Washing soda
(b) Hydrochloric acid
(c) Calcium chloride
(d) Aluminium sulphate

Answer: (a)

190. Which of the following is considered to be the purest form of water?

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

Answer: (a)

Teaching Methodology

191. Which day is celebrated as the International Women's Day?

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

Answer: (d)

192. In which of the following time did the concept Non-Formal Education come into picture in India?

(a) Late 50s and early 60s
(b) Late 60s and early 70s
(c) Late 70s and early 80s
(d) Late 80s and early 90s

Answer: (b)

193. For a child the concept of natural laws becomes almost fully developed by the age of -

(a) 8 years
(b) 10 years
(c) 12 years
(d) 6 years

Answer: (c)

194. In which year did the “USSR Experts of UNESCO Planning Mission” visit India on technical assistance project?

(a) 1963
(b) 1967
(c) 1971
(d) 1975

Answer: (a)

195. Which of the following is not a nature of science?

(a) Science is both a body of knowledge and a process.

(b) Science is a community enterprise.

(c) Science is not for everybody.

(d) Science is a global human endeavor.

Answer: (c)

196. Which of the following statements is incorrect?

(a) Hypothesis is an educated guess based on the observation

(b) Theory is an accepted hypothesis.

(c) Natural law explains things, but do not describe them.

(d) Scientific facts are believed to be dependent of the observer.

Answer: (d)

197. Which factors affect learning?
1. Maturation
2. Readiness to learn 3. Learning environment Choose the correct code.

(a) Only 1 and 2

(b) Only 2 and 3

(c) Only 1 and 3

(d) 1, 2 and 3

Answer: (d)

198. In the management of group-learning, which k of grouping might lead to the labelling of few students as bright and few as weak?

(a) Grouping students by ability

(b) Grouping students by interest

(c) Grouping by students' choice

(d) Random student grouping

Answer: (a)

199. Which chapter of the Right to Education Act, 2009 provides for the Protection of Right of Children?

(a) V

(b) VI

(c) VII

(d) VIII

Answer: (b)

200. Which of the following organisation has taken the stand 'Discriminatory behaviors take many forms, but they all involve some form of exclusion or rejection'?

(a) WHO

(b) UNO

(c) MADRE

(d) Equality Now

Answer: (b)

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

General Awareness

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

Arithmetic Ability

43	**(d)**	44	**(b)**	45	**(a)**	46	**(b)**	47	**(b)**
48	**(d)**	49	**(c)**	50	**(b)**	51	**(d)**	53	**(a)**
54	**(a)**	56	**(a)**						

General English

61	**(a)**	62	**(d)**	64	**(d)**	65	**(d)**	66	**(d)**
67	**(c)**	69	**(c)**	70	**(a)**	71	**(a)**	72	**(c)**
73	**(d)**	74	**(d)**	75	**(d)**	79	**(b)**		

Discipline1

101	**(a)**	102	**(d)**	104	**(b)**	105	**(c)**	[illegible]	**(a)**
107	**(a)**	108	**(d)**	109	**(b)**	110	**(b)**	111	**(d)**
112	**(c)**	113	[illegible]	4	**(b)**	115	**(c)**	116	**(c)**
118	**(b)**	119	**(b)**	120	**(c)**				

Discipline2

121	**(d)**	122	**(c)**	123	**(b)**	124	**(a)**	125	**(a)**
126	**(b)**	127	**(c)**	128	**(d)**	129	**(d)**	130	**(b)**
131	**(d)**	132	**(a)**	133	**(c)**	134	**(b)**	135	**(b)**
136	**(a)**	138	**(b)**	139	**(a)**	140	**(c)**		

Discipline3

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

Discipline4

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

Discipline5

181	**(a)**	182	**(d)**	183	**(c)**	184	**(d)**	185	**(c)**
186	**(b)**	187	**(a)**	188	**(d)**	189	**(a)**	190	**(a)**

Teaching Methodology

191	**(d)**	192	**(b)**	193	**(c)**	194	**(a)**	195	**(c)**	196	**(d)**	197	**(d)**	198	**(a)**
199	**(b)**	200	**(b)**												