PREVIOUS YEAR PAPER

DSSSB TGT Natural Science (Female) 2021 — 27 September 2021, Shift 1

DSSSB TGT · 27 September 2021 · Shift 1

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 27 September 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-tgt/previous-year-papers/dsssb-tgt-2021-natural-science-female-27-sep-shift-1/

General Ability

1. Find the wrong term in the letter-cluster series given below:
TLCN, DVMX, NFWH, XRGR, HZQB

(a) DVMX
(b) NFWH
(c) XRGR
(d) HZQB

Answer: (c)

2. Find the missing term in the following letter-clust eries given below:
R9AP, Z17IX, H25QF, ? , X41GV

(a) P32VN
(b) Q33YM
(c) P33YN
(d) R32YN

Answer: (c)

3. In the following question, select the related word from the given alternatives.
BACK : DBFV : : HEAL : ?

(a) JGCN
(b) PBXJ
(c) KXJB
(d) PJBX

Answer: (d)

4. In the following question, select the related word pair from the given alternatives.
Iraq: Baghdad : : ? : ?

(a) Saudi Arabia : Abu Dhabi

(b) United Arab Emirates : Riyadh

(c) Syria : Damascus

(d) Afghanistan : Islamabad

Answer: (c)

5. If in a certain language, TRIANGLE is coded as "34821659". How is 'REALIGN' coded in that code?

(a) 9425861

(b) 2946851

(c) 4925816

(d) 4925861

Answer: (d)

6. In a company, Suresh's position is seventy five from the right end and eleventh from the left end, how many employees are there in that company?

(a) 82

(b) 83

(c) 85

(d) 86

Answer: (c)

7. Six persons Rahul, Pankaj, Praveen, Puneet, Rajat and Pawan are sitting in a row of office at different positions, and each got different salary i.e. - 20000, 10000, 8000, 50000, 45000and30000 not necessarily in the same order. Rajat got 45000 salary. Praveen has neither got 8000 nor 30000 salary. The one who gets salary 8000 does not sit at the extreme end of the row. Rajat is sitting between Puneet and Pankaj. Praveen is second to the left of Puneet. Rahul is sitting at the left end of the row and got 50000 salary. Pawan sits near Praveen and gets 10000 salary.
How much salary did Pankaj get?

(a) 30000

(b) 8000

(c) 20000

(d) 20000 or 30000

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:
No road is traffic.
Some traffic are licence.
Conclusions:
(I) Some licence are road.
(II) No licence are road.

(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:
No lake are river.
All river are valleys.
Some valley are hills.
Conclusions:
(I) Some hills are rivers
(II) Some rivers are valleys.

(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 radio are moon.
Some moon are sun.
Some sun are ocean
Conclusions:
(I) Some moon are ocean.
(II) No moon are ocean.
(III) Some radio are sun.

(a) Only I follow

(b) Only I and II follows

(c) Either I or II follows

(d) None follows

Answer: (c)

11. Select the set of numbers that is similar to the following set of numbers.
(6, 36, 63)

(a) 7, 49, 98
(b) 8, 64, 46
(c) 9, 84, 45
(d) 11, 111, 84

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:
$Q > R > S \geq P$
Conclusions:
I. $S > P$
II. $S = P$

(a) Either I or II follows
(b) Both I and II follow
(c) Neither I nor II follows
(d) Only II follows

Answer: (a)

13. In the following question, select the missing number from the given series.
48, 24, 36, 90, ?

(a) 215
(b) 315
(c) 115
(d) 415

Answer: (b)

General Awareness

21. Ramman is a religious festival of which state?

(a) Jharkhand
(b) Uttarakhand
(c) Bihar
(d) Uttar Pradesh

Answer: (b)

22. Which of the following monuments are not in the state of Gujarat?

(a) Somnath temple
(b) Sunehri Mahal
(c) Palitana
(d) Lakhpat

Answer: (b)

23. Which of the following festival is also known as Gokulashtami?
    (a) Ramnavami
    (b) Guru Nanak Jayanti
    (c) Janmashtami
    (d) Rakshabandhan

    Answer: (c)

24. The term 'Googly' is used in which sport?
    (a) Football
    (b) Baseball
    (c) Hockey
    (d) Cricket

    Answer: (d)

25. Who was the first Indian to be awarded the 'Rajiv Gandhi Khel Ratna' award?
    (a) Abhinav Bindra
    (b) Vishwanathan Anand
    (c) Vinesh Phogat
    (d) Manika Batra

    Answer: (b)

26. Which of the following awards did not get Mahen Singh Dhoni?
    (a) Padma Shri
    (b) Padma Bhushan
    (c) Padma ViBhushan
    (d) Rajiv Gandhi Khel Ratna

    Answer: (c)

27. Who was The first Women External Affair Minister of India?
    (a) Mrs Indira Gandhi
    (b) Mrs Pratibha Patil
    (c) Mrs Sonia Gandhi
    (d) Mrs Jayalalitha

    Answer: (a)

29. What was the period of the 11th five-year plan of India?
    (a) 2012 to 2017
    (b) 2007 to 2012
    (c) 2002 to 2007
    (d) 2017 to 2022

    Answer: (b)

30. _____ is the security which lenders demand against loan.
    (a) Collateral
    (b) Cheque
    (c) Draft
    (d) Letter
    Answer: (a)

32. Which is the oldest political party of India?
    (a) Communist Party
    (b) Bharatiya Janta Party
    (c) Indian National Congress
    (d) All India Anna Dravida Munnetra Kazhagam
    Answer: (c)

33. The mode of nutrition found in mushrooms is _____.
    (a) Parasitic
    (b) Symbiotic
    (c) Saprophytic
    (d) Holozoic
    Answer: (c)

34. Which one of the following fossil fuels is consider environment friendly?
    (a) Natural Gas
    (b) Coal
    (c) Petroleum
    (d) Kerosene
    Answer: (a)

35. The finest quality of iron ore is _____.
    (a) Siderite
    (b) Hematite
    (c) Magnetite
    (d) Limonite
    Answer: (c)

36. The _____ is a collection of 1,028 hymns divided into 10 mandalas.
    (a) Samaveda
    (b) Rigveda
    (c) Yajurveda
    (d) Atharvaveda
    Answer: (b)

37. Dr. Annie Besant and Lokmanya Tilak set up the _____ in the country modeled on the Irish movement to spread awareness.

(a) Satyagraha
(b) Indian National Congress
(c) Home Rule league
(d) Gadar Party

Answer: (c)

38. The Axis powers of the second world war were Germany ,Italy and _____.

(a) France
(b) Japan
(c) Poland
(d) Austria

Answer: (b)

39. Name the Padma Shri awardee Dogri writer and poet who passed away recently.

(a) Sridhar vembu
(b) Padma Sachdev
(c) Birubala rabha
(d) Rangaswamy kashyap

Answer: (b)

40. Who is the present Union Minister for Science & Technology?

(a) Jitendra Singh
(b) Smriti Irani
(c) Piyush goyal
(d) Jyotiraditya scindia

Answer: (a)

Arithmetic Ability

44. What is the greatest number that will divide 209 and 347 leaving remainder 5 and 7 respectively?

(a) 19
(b) 16
(c) 17
(d) 23

Answer: (c)

47. A person spends 35 percent of his total salary in Food, 30 percent he invests in a scheme and remaining amount he saves. If his savings is Rs.4340, then how much amount he invests?

(a) Rs.2680
(b) Rs.4320
(c) Rs.3720
(d) Rs.2840

Answer: (c)

48. By selling an article, a shopkeeper incurs a loss of 16 percent but if he increases the selling price by Rs.140, there would be a profit of 24 percent.
Calculate the cost price of the article.

(a) Rs.280
(b) Rs.440
(c) Rs.610
(d) Rs.350

Answer: (d)

49. Mr. Ganguly purchased 50000 mangoes at 8 each. He found that 20 percent of those were spoilt and hence were found unfit to be sold. At what price should he sell each of the remaining mangoes so as to get an overall profit of 30 percent?

(a) 12
(b) 13
(c) 10
(d) 15

Answer: (b)

50. In a colony, the ratio of two-wheelers to four-wneelers is 11 : 9. Among the four-wheelers, one-fourth are petrol and the remaining 81 are diesel.
How many two-wheelers are there in the colony?

(a) 99
(b) 88
(c) 132
(d) 121

Answer: (c)

51. Ratio of milk and water in a mixture is 5 : 4 and 45 litres of mixture are taken out and 15 litres water is added. Now, quantity of milk in the mixture becomes 4 litres more than that of water, then what is the initial quantity of mixture?

(a) 172 litres
(b) 213 litres
(c) 216 litres
(d) 190 litres

Answer: (c)

52. The difference between compound interest (annually) and simple interest on a certain sum at 10 percent per annum for 2 years is Rs.42. What is the sum?

(a) Rs.5200
(b) Rs.4200
(c) Rs.8400
(d) Rs.2100

Answer: (b)

53. A boat goes 48 km upstream and 56 km downstream in 12 hours. It goes 60 km upstream and 42 km downstream in 13 hours. Find the speed of boat in still water (in kmph)?

(a) 14
(b) 10
(c) 20
(d) 24

Answer: (b)

54. A beats B by 125 m in a kilometer race. Find B's speed if A's speed is 16 m/sec.

(a) 21 m/sec
(b) 7 m/sec
(c) 14 m/sec
(d) 18 m/sec

Answer: (c)

55. Three pipes can fill a tank of 900 liters in 1hour. e rate of the first pipe is 3 liters per minute and the ratio of the rate of the second pipe the d pipe is 3 : 1. What is the time to fill an empty tank of 1500 liters when the first pipe and sec pe, work together?

(a) 125 min
(b) 80 min
(c) 150 min
(d) 90 min

Answer: (a)

56. If 10 persons can do a job in 20 days. Then 20 persons with the twice efficiency can do the same job in:

(a) 10 days
(b) 12 days
(c) 5 days
(d) 15 days

Answer: (c)

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 Delhi Government and the students has contended that the single judge's decision was based on incorrect facts.

(a) The Delhi Government and the students has
(b) contended that the single judge's decision
(c) was based on incorrect facts
(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'.
A quick analysis suggests that the sources that contribute to poor urban air quality are constant.

(a) A quick analysis suggests that
(b) The sources that contribute to poor
(c) Urban air-quality are constant
(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 gave the countryman (what few money I had) in my pocket, for the timely assistance he had afforded me.

(a) the few money I had
(b) what less money I had
(c) what little money I had
(d) No Improvement.

Answer: (c)

65. Select the most appropriate option to fill in the blank.
Emperors need more resources _____ kings because empires are larger than kingdoms.

(a) of
(b) than
(c) as
(d) for

Answer: (b)

66. Select the most appropriate option to fill in the blanks.
The higher faculty is a _____ insight or intuition that _____ us experience the ocean of Consciousness.

(a) deep, help
(b) deeply, helping
(c) deep, helps
(d) deeply, helps

Answer: (c)

67. Baroque temple _____ by the Scottish architect

(a) designed

(b) conducted

(c) rewarded

(d) crowded

Answer: (a)

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

(a) Cheerful

(b) Gloomy

(c) Bluff

(d) Peevish

Answer: (b)

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

(a) Complain

(b) Compliment

(c) Dangle

(d) Calamity

Answer: (b)

71. Select the INCORRECTLY spelt word.

(a) Pageant

(b) Pamphlet

(c) Persevere

(d) Potraite

Answer: (d)

72. Select the CORRECTLY spelt word.

(a) Administratur

(b) Administrater

(c) Administrator

(d) Aministretor

Answer: (c)

73. In the following question, out of the four given options, select the one which best expresses the meaning of the idiom/phrase.
Once in a blue moon.

(a) Occasionally

(b) Very rarely

(c) Frequently

(d) Incessantly

Answer: (b)

74. In the following question, out of the four given options, select the one which best expresses the meaning of the idiom/phrase.
An eye opener

(a) A shocking revelation

(b) A small opening

(c) A difficult task

(d) A tough decision

Answer: (a)

75. Select the word which means the same as the following group of the words.
Open refusal to obey orders.

(a) Obedience

(b) Adherence

(c) Defiance

(d) Compliance

Answer: (c)

78. Arthur Plummer was born in Canada but he grew up in -

(a) Mongolia

(b) Quebec

(c) Toronto

(d) Hong Kong

Answer: (b)

79. Mr. Arthur Plummer played many histor[illegible] cha[illegible]ters. In which movie he played the role of Commodus?

(a) The Fall of the Roman Empire.

(b) The Man Who Would Be King.

(c) The Insider.

(d) All the Money in the World.

Answer: (a)

80. Arthur Christopher Orme Plummer was a person whose career spanned -

(a) Five decades.

(b) Seven decades.

(c) Six decades.

(d) Four decades.

Answer: (b)

Discipline1

101. Which of the following is/are the law/s of reflection in case of a light ray reflected by a smooth surface?
1. The angle of incidence is equal to the angle of reflection
2. The incident ray and the reflected ray are not co-planar
3. The incident ray, the reflected ray and the normal to the reflecting surface at the point of incidence are co-planar

(a) 1 only
(b) 1 and 2 only
(c) 1 and 3 only
(d) 3 only

Answer: (c)

102. Sun radiates about _____ joule of energy every second.

(a) 3.92 × 10 28
(b) 3.92 × 10 26
(c) 3.92 × 10 30
(d) 3.92 × 10 32

Answer: (b)

104. An optical fibre is a very thin fibre made of _____.
1. Glass
2. Copper
3. Plastic

(a) 1 only
(b) 1 and 2 only
(c) 1, 2 and 3
(d) 1 and 3 only

Answer: (d)

105. SI unit of power of lens is:

(a) m
(b) m -1
(c) m -2
(d) m -3

Answer: (b)

106. The curvature of the lens of an eye is altered by _____.

(a) Cornea
(b) Retina
(c) Ciliary muscle
(d) Vitreous humour

Answer: (c)

107. A wave of wavelength 0.50 cm is produced in air and it travels at a speed of 250 ms -1 . What will be the frequency of the sound?

(a) 40,000 Hz
(b) 50,000 Hz
(c) 60,000 Hz
(d) 70,000 Hz

Answer: (b)

108. The waves with the frequency below the audible range are called –

(a) Infrasonic waves
(b) Ultrasonic waves
(c) Hypersonic waves
(d) Supersonic waves

Answer: (a)

109. Who of the following devised barometer?

(a) Archimedes
(b) Torricelli
(c) Bernoulli
(d) Pascal

Answer: (b)

110. Which of the following statements is/are true?
1. The intermolecular forces are less in liquids in co arison to solids.
2. The shape of liquid can easily be chang
3. The volume of a given mass of liquid can e changed.
4. The volume of a given mass of liquid is not so easy to change.

(a) Only 1 and 2
(b) Only 1, 2 and 3
(c) Only 1, 2 and 4
(d) Only 1 and 4

Answer: (c)

111. Which of the following law/principle has/have been applied to form the principle of hydraulic lift used to raise heavy loads?

(a) Newton's third law of motion
(b) Pascal's law
(c) Archimedes Principle
(d) Both Pascal's law and Archimedes Principle

Answer: (b)

112. Which of the following statements is/are true?
1. If a body does not change its position as time passes it is at rest.
2. There is no meaning of rest or motion without the viewer.
Choose the correct code.

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

Answer: (c)

113. The dimension of speed is-

(a) LT -1
(b) LT -2
(c) LT
(d) LT -3

Answer: (a)

114. For an object moving along a straight line without changing its direction the-

(a) distance travelled > displacement
(b) distance travelled < displacement
(c) distance travelled = displacement
(d) distance is not zero but displacement is zero

Answer: (c)

115. A rifle having a mass of 8 kg fires a bu[illegible]t a [illegible]ed of 300 ms -1 . If the rifle recoil with a velocity of 1.5 ms -1 then find the mass of the

(a) 25 g
(b) 30 g
(c) 35 g
(d) 40 g

Answer: (d)

116. A current of 1.0 A is drawn by a filament of an electric bulb for 4th part of an hour. Find the amount of electric charge that flows through the circuit.

(a) 720 C
(b) 810 C
(c) 900 C
(d) 960 C

Answer: (c)

118. If we hang a bar-magnet with a string, it will always rest in the direction of-

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

Answer: (c)

119. Which of the following rules is used to determine the direction of force in the electric motor?

(a) Fleming's Left-Hand Rule
(b) Fleming's Right-Hand Rule
(c) Palmer's Left-Hand Rule
(d) Palmer's Right-Hand Rule

Answer: (a)

Discipline2

121. Which of the following gases makes 75 percent of bio-gas?

(a) Ammonia
(b) Urea
(c) Methane
(d) Butane

Answer: (c)

122. Which of the following countries is known as t' country of the 'winds'?

(a) France
(b) India
(c) Denmark
(d) Germany

Answer: (c)

123. Which of the following statements is incorrect about biofuel?
1. It is an important fuel produced from leftover food products like vegetable oils and animal fats.
2. It can be made when large amounts of crops high in sugar or starch content are grown, and then fermented with yeast to produce ethyl alcohol or ethanol.
Choose the correct code.

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

Answer: (d)

124. Which of the following is emitted when hydrogen is burned?

(a) Carbon dioxide

(b) Methane

(c) Water-vapour

(d) Both methane and water-vapour

Answer: (c)

125. Which of the following types of coal has the highest calorific value?

(a) Anthracite

(b) Peat

(c) Lignite

(d) Sub-bituminous

Answer: (a)

126. For generating wind energy, the wind speed should be higher than _____ to maintain the required speed of the turbine.

(a) 5 km/h

(b) 8 km/h

(c) 15 km/h

(d) 10 km/h

Answer: (c)

127. The commonly used unit of power, Horse-power is equal to-

(a) 440 W

(b) 760 W

(c) 746 W

(d) 842 W

Answer: (c)

128. Which of the following have a tendency to maintain their shape when subjected to outside force?

(a) Liquids

(b) Solids

(c) Gases

(d) Aerosols

Answer: (b)

129. Which of the following is true?
1. The rate of diffusion of liquids is higher than that of solids.
2. Gases are highly compressible as compared to solids and liquids.
Choose the correct code.

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

Answer: (c)

130. Solid carbon dioxide is known as dry ice because:
1. It is stored under extreme low pressure to solidify it.
2. It gets converted directly to gaseous state on decrease of pressure to 1 atm without coming into liquid state.
Choose the correct code:

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

Answer: (b)

131. The plasma state of matter consists of :

(a) Extremely energetic and excited form of ionise gases
(b) Extremely stable and uncharged neutrons of veral gases
(c) Extremely charged particles of gase under ry low temperature
(d) Extremely stable particles of a liquid a. ged particles of a noble gas under extremely low temperature

Answer: (a)

132. The melting point of ice is:

(a) 237.51 K
(b) 473.15 K
(c) 373 K
(d) 273.15 K

Answer: (d)

133. Which of the following is known as the law of definite proportions as stated by Proust?

(a) In a chemical substance the elements are always present in definite proportions by volume.
(b) In a chemical substance the elements are always present in definite proportions by heat.
(c) In a chemical substance the elements are always present in definite proportions by mass.
(d) In a chemical substance the elements are always present in definite proportions by density.

Answer: (c)

134. Which of the following is not a postulate of Dalton's atomic theory?

(a) All matter is made of very tiny particles called atoms.

(b) Atoms of a given element are identical in mass and chemical properties.

(c) Atoms combine in the ratio of small real numbers to form compounds.

(d) The relative number and kinds of atoms are constant in a given compound.

Answer: (c)

135. In 1961 for a universally accepted atomic mass unit, _____ isotope was chosen as the standard reference for measuring atomic masses.

(a) carbon-12

(b) hydrogen-2

(c) oxygen-6

(d) carbon-1

Answer: (a)

136. The number of atoms constituting a molecule is known as its:

(a) Atomic mass

(b) Atomicity

(c) Atomic number

(d) Atomic weight

Answer: (b)

137. According to Thomson's model of an atom:
1. An atom consists of a positively charged sphere and the electrons are embedded in it.
2. The negative and positive charges are not always equal in magnitude. So, the atom as a whole is not always electrically neutral.
Choose the correct code:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (a)

138. It was found that the Law of Octaves was applicable only upto _____.

(a) Nitrogen

(b) Magnesium

(c) Calcium

(d) Iron

Answer: (c)

139. Mendeleev's Periodic Law states that:

(a) The properties of elements are the periodic function of their atomic numbers.

(b) The properties of elements are the periodic function of their ions.

(c) The properties of elements are the periodic function of their atomic masses.

(d) The properties of elements are the periodic function of their atomicity.

Answer: (c)

140. What is the atomic radius of hydrogen atom?

(a) 37 pm

(b) 37 nm

(c) 47 mm

(d) 23 nm

Answer: (a)

Discipline3

142. Which of the following reacts vigorously with water to produce slaked lime releasing a large amount of heat?

(a) Calcium oxide

(b) Calcium

(c) Sulfuric Acid

(d) Calcium bromide

Answer: (a)

143. Which of the following is not an exam[illegible] ermic reaction?

(a) Burning of natural gas

(b) Decomposition of vegetable matter into compost

(c) Respiration

(d) Ammonium chloride dissolves in water

Answer: (d)

144. Acid + Metal → Salt + _____
Which of the following is needed to complete the reaction above?

(a) Hydrogen gas

(b) Nitrogen gas

(c) Oxygen gas

(d) Ozone gas

Answer: (a)

145. An alkali is a base which is -

(a) highly basic in pH

(b) soluble in water

(c) highly reactive

(d) never stable

Answer: (b)

146. Which of the following is false?

(a) Acidic nature of a substance is due to the formation of OH - (aq) ions in solution

(b) Acidic solutions in water conduct electricity because they produce hydrogen ions.

(c) When a base reacts with a metal, the salt formed has a negative ion composed of the metal.

(d) Water of crystallisation is the fixed number of water molecules present in one formula unit of a salt.

Answer: (a)

147. Which of the following is the most ductile metal?

(a) Gold

(b) Silver

(c) Platinum

(d) Copper

Answer: (a)

148. All metals except _____ exist as solids at room temperature.

(a) Gallium

(b) Caesium

(c) Iodine

(d) Mercury

Answer: (d)

149. Which of the following general properties for ionic compounds is true?

(a) Ionic compounds are very flexible and never break easily when pressure is applied.

(b) Ionic compounds are easily soluble in solvents like kerosene and petrol.

(c) Ionic compounds conduct electricity in solid state.

(d) Ionic compounds have higher melting and boiling points.

Answer: (d)

150. Compounds of carbon, which are linked by only single bonds between the carbon atoms are called _____ compounds.

(a) Unsaturated

(b) Saturated

(c) Neutral

(d) Unstable

Answer: (b)

151. The _____ of elements is explained as their tendency to attain a completely filled outer shell.

(a) weight

(b) reactivity

(c) pressure

(d) density

Answer: (b)

152. Acetic acid (CH COOH) has a melting point of:
3

(a) 290 K
(b) 209 K
(c) 156 K
(d) 90 K

Answer: (a)

153. Which of the following products consists of a mixture of potassium chlorate and antimony trisulphide bound together by glue?

(a) Soaps
(b) Detergents
(c) Matchstick heads
(d) Candles

Answer: (c)

155. Which of the following products is available from Hevea brasiliensis?

(a) Natural rubber
(b) Nylon
(c) Rayon
(d) PET

Answer: (a)

156. Outer solid crust of earth is known as-

(a) Hydrosphere
(b) Lithosphere
(c) Stratosphere
(d) Mesosphere

Answer: (b)

157. Scurvy is caused due to deficiency of:

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

Answer: (c)

158. Goitre is caused due to deficiency of:

(a) Fluorine
(b) Iodine
(c) Iron
(d) Vitamin K

Answer: (b)

159. Which of the following is an example of conventional non-renewable energy sources?

(a) Natural gases

(b) Biogas

(c) Solar energy

(d) Geothermal energy

Answer: (a)

160. Which of the following is an incorrect option regarding universal rules of nomenclature?

(a) Biological names are generally in Latin and written in italics

(b) The first word in a biological name represents the genus

(c) Both the words in a biological name, when handwritten, are separately underlined

(d) First word denoting the genus starts with a small letter while the specific epithet starts with a capital letter

Answer: (d)

Discipline4

161. Mark the incorrect statement regarding Autotrophic nutrition.
1. Carbon and energy requirements of the autotrophic organism are fulfilled by photosynthesis 2. It is the process by which autotrophs take in substances from the outside and convert them into stored forms of energy.
3. Substances are taken in the form of carbon dioxide and methane which is converted into fats in the presence of sunlight and chlorophyll.

(a) Only 2

(b) Only 3

(c) 2 and 3 only

(d) 1 and 3 only

Answer: (b)

162. Movement in plants that occurs in response to light intensity is known as-

(a) Photo philia

(b) Photonasty

(c) Photo sensitivity

(d) Photo motorism

Answer: (b)

163. Which of the following organs if get damaged will cause visual impairment?
1. Pupil
2. Retina
3. Optic nerve

(a) 1 only

(b) 1 and 3 only

(c) 2 and 3 only

(d) 1, 2 and 3

Answer: (d)

164. Oxygen is found in the elemental form in the atmosphere to the extent of:

(a) 96 percent
(b) 21 percent
(c) 33 percent
(d) 80 percent

Answer: (b)

165. The upward and downward growth of shoots and roots, respectively, in response to the pull of earth or gravity is known as:

(a) phototropism
(b) geotropism
(c) hydrotropism
(d) chemotropism

Answer: (b)

166. The roots of plants have an important role in preventing:

(a) soil erosion
(b) humidity
(c) earthquake
(d) pests

Answer: (a)

167. Fusion of gametes is not involved in –

(a) sexual reproduction
(b) asexual reproduction
(c) amphimixis
(d) isogamy

Answer: (b)

168. Which of the following organism reproduces asexually by spore formation?
1. Mucor
2. Penicillium
Choose the correct code–

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

Answer: (c)

170. If the tails of mice are removed by surgery in each generation, do these tailless mice have tailless progeny?

(a) No, because removal of the tail cannot change the genes of the germ cells of the mice.

(b) Yes, because removal of the tail can change the genes of the germ cells of the mice

(c) The length of the tail reduces with each generation and eventually gets lost.

(d) Yes, there will be change in sex choromosomes

Answer: (a)

171. Wings of bats are skin folds stretched mainly between elongated fingers. But the wings of birds are a feathery covering all along the arm. The designs of the two wings, their structure and components, are thus very different. They look similar because they have a common use for flying, but their origins are not common. Which type of characteristic/s is this?
1. Homologous characteristic
2. Analogous characteristic

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Either 1 or 2

Answer: (b)

172. The ability of the eye lens to adjust its focal length is called _____.

(a) Power

(b) Accommodation

(c) Refraction

(d) Reflection

Answer: (b)

173. If one wants to donate his/her eye, then after how much time after death, eyes should be removed from body?

(a) 4-6 hrs

(b) 6-12 hrs

(c) 7-8 hrs

(d) 12-24 hrs

Answer: (a)

174. Why presbyopia occurs?
1. Due to gradual weakening of ciliary muscles 2. Diminishing flexibility of eye lens

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

175. Ganga action plan was initiated to reduce:
(a) Pollution load
(b) Construction of dams
(c) Oil exploration
(d) Flooding
Answer: (a)

176. Which of the following should not be included in Volatile organic compounds (VOCs)?
(a) Methane
(b) Benzene
(c) Toulene
(d) Glycerol
Answer: (d)

177. What is the temperature at which the water vapour begins to change into water drops?
(a) Freezing point
(b) Dew point
(c) Frost point
(d) Crystallisation point
Answer: (b)

178. Which of the following statements is incorrect?
(a) Fertilizers and pesticides can destroy the soil structure.
(b) Earthworms are a major contributor to formation of humus.
(c) The biodiversity in an area is determine quality of topsoil largely.
(d) Humus causes the soil to become less porous.
Answer: (d)

179. What do the plants convert the nitrates and nitrites into after they fix the atmospheric nitrogen?
(a) Methane
(b) Urea
(c) Nitric acid
(d) Amino acid
Answer: (d)

180. Which of the following is a fodder crop?
(a) Oats
(b) Castor
(c) Sesame
(d) Lentil
Answer: (a)

Discipline5

181. Why is dwarfness desired in cereals?

(a) It requires less sunlight.

(b) Its quality is enhanced.

(c) Less nutrients are consumed.

(d) These crop-varieties are very tasty.

Answer: (c)

182. Which of the following problems arise if excessive fertilisers are used?
1. Water pollution
2. Destruction of soil fertility
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

183. Which of the following has the highest percentage of fats?

(a) Milk (Cow)

(b) Egg

(c) Meat

(d) Fish

Answer: (b)

184. Which of the following fish varieties is not a marine fish variety?

(a) Mackerel

(b) Tuna

(c) Catla

(d) Pomphret

Answer: (c)

185. Which of the following is a Zaid crop?

(a) Arhar

(b) Tobacco

(c) Gourd

(d) Lahi

Answer: (c)

186. Cerocen and Agrocen are used for-

(a) treatment of seeds

(b) increasing the soil-fertility

(c) growth hormones in cattle

(d) eliminating weeds

Answer: (a)

187. Bos Indicus is a/an-

(a) Indian cow

(b) Indian buffalo

(c) Indian honeybee

(d) Indian hen

Answer: (a)

188. When boiled water is allowed to cool, heavy impurities collect at the bottom and dissolved salts form a thin layer on the surface called-

(a) Impurities

(b) Waste

(c) Slug

(d) Scum

Answer: (d)

189. Which of the following is the practice of control the establishment, growth, composition, health, and quality of tree to meet diverse needs ar alues?

(a) Reforestation

(b) Afforestation

(c) Silviculture

(d) Horticulture

Answer: (c)

190. Apis florae is a type of _____.

(a) Flower

(b) Hen

(c) Bee

(d) Cow

Answer: (c)

Teaching Methodology

191. Who out of the following had developed the theory of trial and error learning?

(a) E.L.Thorndike

(b) B. F. Skinner

(c) E. C. Tolman

(d) J. B. Watson

Answer: (a)

192. In which of the following teaching methods the whole class is divided into different homogeneous small sections on the basis of abilities so that teacher can remove their difficulties by giving them individual guidance?

(a) Lecture method

(b) Demonstration method

(c) Question-answer method

(d) Tutorial method

Answer: (d)

193. Which of the following types of home-assignement can be given to the students?
1. Informational
2. Study type
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

194. Which of the following sections of the Right to Education Act, 2009 provides for the Right to transfer to other school?

(a) 5

(b) 6

(c) 7

(d) 8

Answer: (a)

195. In which of the following stages should science be introduced as separate disciplines with emphasis on experiments/technology and problem solving?

(a) Primary stage

(b) Upper primary stage

(c) Secondary stage

(d) Higher secondary stage

Answer: (d)

196. In which year was EDUSAT launched?

(a) 2000

(b) 2001

(c) 2004

(d) 2007

Answer: (c)

199. Who has said, “Scientific method consists of systematic observation, classification and interpretation of data”?

(a) Lundberg

(b) Pearson

(c) Koils

(d) Jobs

Answer: (a)

200. What is the full-form of CCE?

(a) Continuous and Cumulative Education

(b) Continuous and Comprehensive Evaluation

(c) Complete and Comprehensive Education

(d) Continuous and Cumulative Evaluation

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

General Awareness

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

Arithmetic Ability

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

General English

61	**(a)**	62	**(d)**	64	**(c)**	65	**(b)**	66	**(c)**	67	**(a)**	69	**(b)**	70	**(b)**
71	**(d)**	72	**(c)**	73	**(b)**	74	**(a)**	75	**(c)**	78	**(b)**	79	**(a)**	80	**(b)**

Discipline1

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

Discipline2

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

Discipline3

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

Discipline4

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

Discipline5

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

Teaching Methodology

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