PREVIOUS YEAR PAPER

DSSSB TGT Natural Science (Female) 2021 — 25 September 2021, Shift 3

DSSSB TGT · 25 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 25 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-female-25-sep-shift-3/

General Ability

1. Find the wrong term in the letter-cluster series given below:
UFVE, YJRA, CNNW, GRKS, KVFO

(a) YJRA
(b) CNNW
(c) GRKS
(d) KVFO

Answer: (c)

2. Find the missing term in the following letter-clust eries given below:
SAG26, VGP29, YMY35, ? , EYQ56

(a) BSH45
(b) BTH44
(c) BSH44
(d) CSH44

Answer: (c)

3. Select the related letters from the given alternatives.
NZP : GMH : : XTL : ?

(a) QME
(b) LJF
(c) JLF
(d) JFL

Answer: (b)

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

(a) Red chilli
(b) Salt
(c) Black Pepper
(d) Cinnamon

Answer: (b)

5. If in a certain language, LECTURER is coded as “85329656”. How is ‘ULCER’ coded in that code?

(a) 38316

(b) 98321

(c) 98356

(d) 88316

Answer: (c)

6. In a class of fifty students, Geeta's rank is thirty-two from the left end. What is her rank from the right end?

(a) 17

(b) 18

(c) 19

(d) 20

Answer: (c)

7. Six friends Aman, Raman, Deepu, Lalit, Aditya and Shivam likes different colors i.e. Pink, Yellow, White, Green, Red and Violet, but not necessarily in the same order. Each of them studies in a different college. i.e. A, B, C, D, E and F, but not necessarily in the same order.
Lalit likes Green but does not study in college A or E. Aditya studies in college F but does not like pink. Shivam does not study in college D or E. Deepu likes Violet and studies in college C. Aman studies in college B and likes white. The one who like red and studies in college E.
Who likes redcolor?

(a) Raman

(b) Shivam

(c) Aditya

(d) Deepu

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 gates are farm.
Some farm are not crop.
Conclusions:
(I) No gate is crop.
(II) Some farm are gate.

(a) Only I follow

(b) Only II follows

(c) Both I and II follow

(d) Neither I nor II follows

Answer: (b)

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:
Atleast some fishes are snake.
Few snakes are crocodile.
Few crocodile are ants.
Conclusions:
(I) Some crocodile are not fish.
(II) Few crocodile are snakes.

(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:
All vehicles are ticket.
Some tickets are metro.
All metro are highway.
Conclusions:
(I) Some highway are metro.
(II) Some ticket are vehicles.
(III) Some metro are highway.

(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.
11 : 119 :: 15 : ?

(a) 154

(b) 223

(c) 233

(d) 152

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:
G > A = N < K ≥ B
Conclusions:
I. B > A
II. A = K

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

Answer: (d)

13. In the following question, select the missing number from the given series.
57, 61, 70, ?, 111, 147

(a) 100
(b) 94
(c) 105
(d) 86

Answer: (d)

General Awareness

21. The paintings at Ajanta depict stories of the ____ .

(a) Ramayana
(b) Mahabharat
(c) Panchatantra
(d) Jatakas

Answer: (d)

23. _____ is the oldest form of composition of the Hindustani vocal music.

(a) Gazal
(b) Thumri
(c) Dhrupad
(d) Tappa

Answer: (c)

24. _____ was known as the 'Flying Sikh of India'.

(a) Fauja Singh
(b) Harbhajan Singh
(c) Budhia Singh
(d) Milkha Singh

Answer: (d)

25. _____ is the fourth highest civilian award in the Republic of India.
    (a) Bharat Ratna
    (b) Padma Vibhushan
    (c) Padma Shri
    (d) Padma Bhushan
    Answer: (c)

26. Which woman mountaineer recorded "world's fastest ascent of Everest by a woman"?
    (a) Tsang Yin-hung
    (b) Bachendri Pal
    (c) Premlata Agrawal
    (d) Santosh Yadav
    Answer: (a)

27. _____ has been conferred with the "Green Urja Award" for being the Leading Public Institution in the Financing Institution for Renewable Energy this year.
    (a) Larsen & Toubro Limited(LNT)
    (b) Indian Renewable Energy Development Agency Ltd. (IREDA)
    (c) Sálim Ali Centre for Ornithology and Natural History (SACON)
    (d) Bombay Natural History Society (BNHS)
    Answer: (b)

28. Which are the two sectors in terms of ownership assets or services?
    (a) Public and Private
    (b) Open and Close
    (c) Direct and Indirect
    (d) Primary and Secondary
    Answer: (a)

29. Removing barriers or restrictions set by the government on trade is known as _____.
    (a) Globalisation
    (b) Liberalisation
    (c) Privatisation
    (d) Arbitration
    Answer: (b)

30. In _____ Nepal adopted an interim Constitution.
    (a) 2006
    (b) 2009
    (c) 2007
    (d) 2005
    Answer: (c)

31. The _____ party's symbol is flowers and grass.
    (a) Bahujan Samaj Party
    (b) All India Trinamool Congress
    (c) Communist Party of India
    (d) Nationalist Congress Party

    Answer: (b)

32. What is the number of isotopes of hydrogen?
    (a) 1
    (b) 5
    (c) 3
    (d) 7

    Answer: (c)

34. What is the population of rural India as per 2011 Census?
    (a) About 833 million
    (b) About 733 million
    (c) About 933 million
    (d) About 783 million

    Answer: (a)

35. Tidal energy is energy obtained through _____.
    (a) Sunlight
    (b) Wind
    (c) Oceanic tides
    (d) Biomass

    Answer: (c)

36. Monazite sand does not contain _____.
    (a) Thorium
    (b) lanthanum
    (c) Cerium
    (d) Actinium

    Answer: (d)

37. Who founded the Ramakrishna Mission in 1896 to carry on humanitarian relief and social work?
    (a) Swami Ramakrishna Paramhansa
    (b) Swami Vivekananda
    (c) Swami Dayanand Saraswati
    (d) Gopal Krishna Gokhale

    Answer: (b)

38. During which Viceroy's tenure was the Simon Commission appointed?
    (a) Lord Wellesley
    (b) Lord Irwin
    (c) Lord Chelmsford
    (d) Lord Wellington
    Answer: (b)

39. When was the second battle of Panipat fought?
    (a) 1757
    (b) 1556
    (c) 1526
    (d) 1572
    Answer: (b)

40. Who won the Presidency of the 76th Session of the United Nations General Assembly (UNGA)?
    (a) Abdulla Samar Abbas
    (b) Abdulla Moin
    (c) Abdulla Shafiq
    (d) Abdulla Shahid
    Answer: (d)

Arithmetic Ability

44. A number 1a2b3c is exactly divisible by 11. Wha e the possible values for (a, b, c)?
    (a) (4, 0, 2)
    (b) (4, 5, 3)
    (c) (5, 2, 7)
    (d) (5, 3, 6)
    Answer: (a)

45. In a six days 20 – 20 cricket tournament, a player makes different runs on all six days. The average runs scored by him in first five days are 55 and the average runs scored by him in last five days are 66. On sixth day, he scored 50 percent more runs than scored on first day. What are the runs scored by him on sixth day?
    (a) 150
    (b) 165
    (c) 140
    (d) 125
    Answer: (b)

46. Adam purchased 20 percent more chocolates than Baali. The price of each chocolate purchased by Baali is 50 percent more than the price of each chocolate purchased by Adam. Money spends by Baali is what percent more than that of Adam on chocolates?

(a) 22.5 percent

(b) 25 percent

(c) 30 percent

(d) 15 percent

Answer: (b)

47. The percentage of loss incurred in selling an article for Rs.6,800 is equal to the percentage of gain earned by selling the same article for Rs.7,450.
What could be the selling price of the same article if the profit percentage is 16 percent?

(a) Rs.8,265

(b) Rs.7,460

(c) Rs.7,685

(d) Rs.8,480

Answer: (a)

48. In a certain store, the profit is 250 percent of the cost price. If the cost price increases by 20 percent but the selling price remains constant, approximately what percentage of the selling price is the profit?

(a) 75 percent

(b) 66 percent

(c) 60 percent

(d) 56 percent

Answer: (b)

49. By selling 45 laddus for Rs. 40, a man loses 20 percent. How many laddus should he sell for Rs. 24 to gain 20 percent?

(a) 16

(b) 20

(c) 18

(d) 15

Answer: (c)

50. There were 46 students in a boys hostel. Due to the admission of eight new students the expenses of the hostel mess were increased by Rs.42 per day while the average expenditure per head diminished by Rs 1. What was the original expenditure of the hostel mess?

(a) Rs.572

(b) Rs.544

(c) Rs.552

(d) Rs.652

Answer: (c)

51. The ratio of the ages of Dev and his son is 4 : 1 respectively. After 11 years, their ages will be in the ratio 13 : 6 respectively. What was Dev's age when his son was born?

(a) 25 years
(b) 21 years
(c) 24 years
(d) 23 years

Answer: (b)

52. What is the difference between simple interest and compound interest on a sum of Rs.1200 for one year at 10 percent per annum, compounded half yearly?

(a) Rs.30
(b) Rs.3
(c) Rs.60
(d) Rs.6

Answer: (b)

53. A boat can cover 84 km upstream and 252 km downstream in 15 hours. If the speed of the boat in still water is thrice the speed of stream, then find the time taken by the boat to cover 126 km upstream.

(a) 7 hours
(b) 8 hours
(c) 9 hours
(d) 6 hours

Answer: (c)

54. In how much time will a car cover a distance of 000 meter with a speed of 90 kmph.?

(a) 0.1 Hour
(b) 0.2 Hour
(c) 0.3 Hour
(d) 0.4 Hour

Answer: (a)

55. Arihant starts doing a certain work. After 4 days, Arun who is half efficient as Arihant starts working on the same work. As a result, the work gets completed in 9 more days. What is the time to complete the work if Arun does it alone?

(a) 32 days
(b) 35 days
(c) 38 days
(d) 39 days

Answer: (b)

56. A, B and C can do a work in 6, 8 and 12 days respectively. Doing that work together they get an amount of total Rs. 1350, the share of B in that amount is:

(a) Rs. 450

(b) Rs. 440

(c) Rs. 400

(d) Rs. 430

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'.
If we release the fishes on the water surface, they will being eaten by bigger fishes.

(a) If we release the

(b) fishes on the water surface

(c) they will being eaten by bigger fishes

(d) No error

Answer: (c)

62. One part of the sentence below may contain an error. Identify the part. If there is no error, choose 'No error'.
How can the governments achieve a state of a clean environment in cities in future?

(a) How can the governments achieve

(b) a state of a clean environment

(c) in cities in future

(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'.
The teacher asked me to (do away) my assignment and submit it to her before the weekend.

(a) do up

(b) do over

(c) do away with

(d) No Improvement

Answer: (b)

65. Select the most appropriate option to fill in the blank.
Different strategies have been used to _____ awareness about education.

(a) spreading

(b) had spread

(c) have spread

(d) spread

Answer: (d)

66. Select the most appropriate option to fill in the blanks.
To _____over past misfortunes can only bring sadness.

(a) dwell
(b) dwelt
(c) dwelling
(d) dwelled

Answer: (a)

67. Select the most appropriate option to fill in the blanks.
Remember to _____from making any negative remarks about the project.

(a) abstain
(b) refrain
(c) keep up
(d) going

Answer: (b)

68. The question consists of four statements labelled P, Q, R, and S which when logically arranged form a coherent passage. Choose the option that represents the most logical order.
P. with advanced tool and technology,
Q. unlike today's simpler and easier life
R. the early human beings lived differently
S. making best gadgets and facilities available easily

(a) PQRS
(b) RQPS
(c) RSPQ
(d) RPSQ

Answer: (b)

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

(a) Demean
(b) Expression
(c) Soften
(d) Assault

Answer: (c)

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

(a) Principle
(b) Doubt
(c) Justice
(d) Optional

Answer: (b)

71. Select the INCORRECTLY spelt word.

(a) Amateur

(b) Harrasment

(c) Climactic

(d) Definitely

Answer: (b)

72. Select the CORRECTLY spelt word.

(a) Piognant

(b) Poignant

(c) Poegnant

(d) Poignent

Answer: (b)

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

(a) Overwhelmed by what is happening in the moment.

(b) Keep something away.

(c) To share information that was previously concealed.

(d) In a confused or befuddled state of mind.

Answer: (a)

74. In the following question, out of the four given o ons, select the one that best expresses the meaning of the idiom/phrase.
Zip up your lip.

(a) To reveal a secret.

(b) To be quiet.

(c) To be friendly.

(d) To hold grudges.

Answer: (b)

75. Select the word which means the same as the following group of the words.
Power of reading others' thoughts.

(a) Teleportation

(b) Telekinesis

(c) Telepathy

(d) Antipathy

Answer: (c)

77. Which one of the following is the first short film of Alfonso Cuaron?

(a) Fallen Angels

(b) Sólo con tu pareja

(c) A Little Princess

(d) Vengeance Is Mine

Answer: (d)

78. Director Sydney Pollack hired Cuarón to direct an episode of Fallen Angels, a series of neo-noir stories produced for the Showtime premium cable network in 1993. The following were the co-directors in the series, except...

(a) Steven Soderbergh

(b) Claudia Ramírez

(c) Peter Bogdanovich

(d) Jonathan Kaplan

Answer: (b)

Discipline1

102. An electric iron of resistance 15Ω takes a current of 3A. Calculate the heat developed in 5 minutes.

(a) 4.50 × 10 4 J

(b) 4.05 × 10 5 J

(c) 4.50 J

(d) 40.5 kJ

Answer: (d)

103. On which of the following does the resistance of a wire not depend?

(a) Length of the wire

(b) Thickness of the wire

(c) Width of the wire

(d) Humidity of the wire

Answer: (d)

104. What is the shape of the electromagnet that is used in an electric-bell?

(a) Bar-shaped

(b) Cylindrical shaped

(c) Ring-shaped

(d) U-shaped

Answer: (d)

105. Which of the following is correct regarding Fleming's left-hand rule?

(a) If the first finger shows the direction of the current flow and the middle one the direction of magnetic field, then the thumb shows the direction of force 'F' acting on the current carrying conductor.

(b) If the first finger shows the direction of the magnetic field and the middle one the direction of force 'F' acting on the current carrying conductor, then the thumb shows the direction of current flow.

(c) If the first finger shows the direction of the magnetic field and the middle one the direction of current flow, then the thumb shows the direction of force 'F' acting on the current carrying conductor.

(d) If the first finger shows the direction of the current flow and the middle one the direction of force 'F' acting on the current carrying conductor, then the thumb shows the direction of magnetic field.

Answer: (c)

106. Which of the following is not a limitation of using hydroelectric power?

(a) The hydroelectric power plants cannot be sited at a place of our choice.

(b) Dams can be very expensive to build.

(c) There needs to be a sufficient, and continuously strong water current, or water head, to produce energy.

(d) Water used for hydro power can't be reused for other purposes/like irrigation etc.

Answer: (d)

107. Why is ocean energy regarded as being more pr rable over wind energy?
1. Tides are constant and predictable.
2. Fewer turbines are required in ocean en to duce the same amount of wind power.
Choose the correct code.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

108. Which of the following statements is incorrect?

(a) Hydrogen is one of the most abundant elements in the universe.

(b) Hydrogen as a gas is not found naturally on Earth.

(c) The same amount of hydrogen will take a fuel-cell car at least twice as far as a car running on gasoline.

(d) It costs a small amount of money to run a hydrogen vehicle.

Answer: (d)

109. Which of the following statements regarding natural gas is wrong?

(a) Natural gas is a fossil fuel.

(b) It doesn't produce carbon dioxide while burning

(c) It is a finite source

(d) Methane is a common gas found in swamps and is also the byproduct of animals' digestive system.

Answer: (b)

110. The effect of the weak forces is experienced inside _____.
1. Proton
2. Neutron
Choose the correct code

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

111. Nuclear forces are _____ and are _____.
1. Largely attractive
2. Largely repulsive
3. Short ranged
4. Long ranged
Choose the correct code

(a) Only 1 and 3

(b) Only 2 and 3

(c) Only 1 and 4

(d) Only 2 and 4

Answer: (a)

112. SI unit of pressure is -

(a) Nm -1

(b) Nm -2

(c) Nm -3

(d) Nm

Answer: (b)

113. If pressure at one point of the liquid is increased, then _____

(a) The pressure at all other points of the liquid will increase by the same amount

(b) The pressure at all other points of the liquid will increase by reduced amount

(c) The pressure at all other points of the liquid will remain unchanged

(d) The pressure at all other points of the liquid will not increase by the same

Answer: (a)

114. A pressure of _____ of mercury is one atmospheric pressure.

(a) 80 cm

(b) 76 cm

(c) 70 cm

(d) 71 cm

Answer: (b)

115. Which of the following is not true about flotation?
1. When a solid body is dipped in to a fluid, the fluid exerts an upward force of buoyancy on the solid.
2. The solid remains in equilibrium if the force of buoyancy is less than the weight of the solid.
Choose the correct code

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (b)

117. Find the work done by the force of gravity during the time a particle of mass 50 gm goes up on being thrown vertically upwards with a speed of 10 m/s.

(a) -2.0 J

(b) -25 J

(c) -2.5 J

(d) -3.0 J

Answer: (c)

118. Which of the following is/are conservative force/s?
1. Force of gravity
2. Coulomb force
3. Force of spring
Choose the correct code

(a) Only 1

(b) Only 1 and 3

(c) Only 2 and 3

(d) 1, 2 and 3

Answer: (d)

Discipline2

121. The appearance of sound to a human ear is subjectively characterized by which of the following parameters?
1. Pitch
2. Loudness
3. Quality
Choose the correct code

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

Answer: (d)

122. Sound waves constitute _____ pulses travelling in the medium.

(a) Rarefaction
(b) Compression
(c) Random rarefaction and compression
(d) Alternate compression and rarefaction

Answer: (d)

123. What will be the refractive index of water if the critical angle for water is 48.2 o ?

(a) 2.34
(b) 1.34
(c) 0.34
(d) 3.34

Answer: (b)

124. The front portion of eye is covered by a transparent protective membrane called the -

(a) Iris
(b) Pupil
(c) Cornea
(d) Retina

Answer: (c)

125. The retina of an eye contains millions of receptors called _____.
1. Rods
2. Cones
Choose the correct code

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

Answer: (c)

128. Which of the following is called lime or quick lime?

(a) Calcium oxide

(b) Calcium Carbonate

(c) Ferrous Sulphate

(d) Ferric Oxide

Answer: (a)

130. Which of the following reactions produce insoluble salts?

(a) Oxidation

(b) Decomposition

(c) Reduction

(d) Precipitation

Answer: (d)

131. _____ solution is a purple dye, which is extracted from lichen, a plant belonging to the division Thallophyta, and is commonly used as an indicator.

(a) Litmus

(b) Phenolpthalein

(c) Methyl orange

(d) Iodine

Answer: (a)

133. The natural source of Oxalic acid is:

(a) Nettle sting

(b) Lemon

(c) Tamarind

(d) Tomato

Answer: (d)

134. Amphoteric oxides are known as:

(a) Metal oxides which react with both acids as well as bases to produce salts and water

(b) Metal oxides which do not react with bases to produce salts and water

(c) Metal oxides which react with neither acids nor bases to produce salts and water

(d) Metal oxides which react with only acids to produce salts and water

Answer: (a)

135. Most metal oxides are insoluble in water but some of these dissolve in water to form :

(a) Hydrogen

(b) Alkalis

(c) Acid

(d) Non-metal oxides

Answer: (b)

136. Which among the following is the most reactive metal?

(a) K
(b) Hg
(c) Pb
(d) Al

Answer: (a)

137. Which of the following is most commonly formed from reaction of an acid and an alcohol?

(a) Water
(b) Salts
(c) Esters
(d) Charcoal

Answer: (c)

138. Which of the following salt is produced when ethanoic acid (CH COOH) reacts with carbonates and hydrogencarbonates?
3

(a) Sodium acetate
(b) Potassium bicarbonate
(c) Sulphur oxide
(d) Carboxylic ester

Answer: (a)

139. What is denatured alcohol?

(a) The mixing of colour and methanol [illegible] for the purpose of industrial use
(b) It is formed when alcohol reacts with oxy[illegible]
(c) The product of ethanol reacting with concentrated sulphuric acid
(d) The product of alcohol reacting with sodium

Answer: (a)

140. The term atomic size refers to the _____of an atom.

(a) Radius
(b) Diameter
(c) Circumference
(d) Point of tangency

Answer: (a)

Discipline3

141. According to the modern periodic table, which of the following is not a metalloid or semi-metal?

(a) Boron
(b) Silicon
(c) Arsenic
(d) Sulphur

Answer: (d)

142. The atomic radius decreases in moving from _____ along a period due to an increase in nuclear charge which tends to pull the electrons closer to the nucleus and reduces the size of the atom.

(a) Right to left

(b) Left to right

(c) Up to down

(d) Down to up

Answer: (b)

143. The states of matter are inter-convertible and can be changed by changing temperature or _____.

(a) Pressure

(b) Density

(c) Mass

(d) Solubility

Answer: (a)

144. Which of the following is the change of solid state directly to gaseous state without going through liquid state?

(a) Deposition

(b) Evaporation

(c) Sublimation

(d) Boiling

Answer: (c)

145. Which of the following is true?

(a) Latent heat of vaporisation is the heat energy required to change 1 kg of a liquid to gas at atmospheric pressure at its boiling point.

(b) Latent heat of fusion is the heat energy required to change 1 kg of a liquid to gas at atmospheric pressure at its boiling point

(c) Latent heat of vaporisation is the heat energy required to change 1 kg of a solid to gas at atmospheric pressure at its boiling point

(d) Latent heat of vaporisation is the heat energy required to change 1 kg of a solid to liquid at atmospheric pressure at its boiling point

Answer: (a)

146. The forces of attraction between the particles are minimum in _____.

(a) Gases

(b) Solids

(c) Liquids

(d) Plasmas

Answer: (a)

147. Which of the following statements is incorrect about alloys?

(a) They are mixtures of two or more metals

(b) They are mixtures of metal and a non-metal

(c) They can be separated into their components by physical methods

(d) An alloy is considered as a mixture because it shows the properties of its constituents

Answer: (c)

148. Clusters of atoms that act as an ion are called :

(a) Polyatomic ions

(b) Monoatomic ions

(c) Diatomic ions

(d) Triatomic ions

Answer: (a)

149. The chemical formula of a molecular compound is determined by the _____ of each element.

(a) Valency

(b) Mass

(c) Molar mass

(d) Avogadro constant

Answer: (a)

150. Atoms of carbon-12 isotopes are assigned a relative atomic mass of _____ and the relative masses of all other atoms are obtained by comparison with the mass of a carbon-12 atom.

(a) 6

(b) 8

(c) 12

(d) 16

Answer: (c)

151. The Avogadro constant is :

(a) 6.22 × 10 23

(b) 6.022 × 10 23

(c) 3.022 × 10 23

(d) 6.022 × 10 34

Answer: (b)

152. Calculate the mass of the following:
0.7 mole of N gas (mass from mole of molecule) 2

(a) 14 g

(b) 15.6 g

(c) 19.6 g

(d) 7 g

Answer: (c)

153. Mark the correct statement.

(a) Polymer does not occur in nature

(b) Cotton is a polymer

(c) Cellulose is made up of a large number of hydrogen units

(d) Polymer word comes from 2 latin words

Answer: (b)

154. Which of the following was the first fully synthetic fibre?

(a) Rayon

(b) Cotton

(c) Wool

(d) Nylon

Answer: (d)

155. Polycot is a mixture of:

(a) Polyester and Cotton

(b) Polyester and wool

(c) Polyester and nylon

(d) Polyester and silk

Answer: (a)

156. Which of the following statement is correct abou[illegible]ronic disease?

(a) Diseases last for very short period of time ar[illegible]ronic disease

(b) Chronic diseases are always communicable

(c) Ailments that lasts for lifetime or a lo[illegible]e known as chronic disease

(d) Common cold is an example of chronic disease

Answer: (c)

157. Which of the following is an example of infectious disease?

1. Diabetes
2. High blood pressure

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (d)

158. Leishmania is a:

(a) Bacteria

(b) Protozoa

(c) Virus

(d) Fungi

Answer: (b)

159. What will be the symptom of a disease if the targeted organ is lungs?

(a) Cough and breathlessness

(b) Jaundice

(c) Headaches only

(d) Fits or unconsciousness only

Answer: (a)

160. What are the functions of thyroxine?
1. Regulates carbohydrates metabolism in the body 2. Regulates proteins and fat metabolism in the body

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

Discipline4

161. Which of the following endocrine glands are present in human body?
1. Pineal gland
2. Thyroid gland
3. Thymus
4. Pancreas

(a) Only 2 and 3

(b) Only 3 and 4

(c) Only 1 and 3

(d) 1, 2, 3 and 4

Answer: (d)

162. Touch-me-not is a plant of _____ family.

(a) Mimosa

(b) Liliaceae

(c) Malvaceae

(d) Cruciferae

Answer: (a)

163. Which part of the peripheral nervous system comprises the whole complex of nerves, fibres, ganglia, and plexuses?

(a) Visceral nervous system

(b) Sympathetic neural system

(c) Parasympathetic neural system

(d) Central neural system

Answer: (a)

164. What is the function of synapses?

(a) It's a junction from which nerve impulse is transmitted from one neuron to another

(b) It's a juice which aids liver to digest protein

(c) It's a hormone that regulates anxiety

(d) It's a part of kidney which helps to remove toxic bacteria from the body

Answer: (a)

165. Which of the following is not contained by forebrain?

(a) Cerebrum

(b) Medulla

(c) Thalamus

(d) Hypothalamus

Answer: (b)

166. In aquatic plants, large air cavities are present in parenchyma to give buoyancy to the plants to help them float. Such a parenchyma type is called _____.

(a) Windochyma

(b) Oxychyma

(c) Aerenchyma

(d) Floatachyma

Answer: (c)

167. Which plant tissue has the thinnest walls?

(a) Collenchyma

(b) Parenchyma

(c) Sclerenchyma

(d) Meristematic

Answer: (b)

168. Which of the following belongs to genus Felis?

(a) Leopard

(b) Cat

(c) Tiger

(d) Lion

Answer: (b)

169. Given below Taxonomic categories showing hierarchial arrangement in ascending order.
Species → Genus → Class → Order
Which of the following is incorrectly placed in the arrangement?

(a) Species

(b) Genus

(c) Class

(d) Order

Answer: (c)

170. _____ belongs to Poaceae family and Monocotyledonae class.

(a) Wheat

(b) Mango

(c) Peas

(d) Oranges

Answer: (a)

171. How many phases of growth are there in the Sigmoid Growth Curve of a plant or plant-part?

(a) 2

(b) 3

(c) 4

(d) 5

Answer: (b)

172. Which of the following is a small blind pouch at the junction of small and large intestine?

(a) Caecum

(b) Duodenum

(c) Jejunum

(d) Ileum

Answer: (a)

173. Digestion functions are taken care of by the gast glands present in the wall of the stomach. These release hydrochloric acid, a protein digesting zyme called pepsin, and mucus. What is the function of mucus?

(a) It protects the inner lining of the sto h fr the action of the acid under normal conditions

(b) It creates an acidic medium which facili the action of the enzyme pepsin

(c) It aids the liver in extracting juices from it

(d) It increases the size of stomach while digesting food

Answer: (a)

174. Mark the incorrect statement regarding Dental caries.

(a) Dental caries or tooth decay causes gradual softening of enamel and dentine

(b) It begins when bacteria acting on sugars produce acids that softens or demineralises the enamel

(c) Masses of bacterial cells together with food particles stick to the teeth to form dental plaque

(d) In this saliva reach the tooth surface and neutralise the acid

Answer: (d)

176. Which of the following statements is NOT true?
1. The Ozone Hole is located over the equator of the earth.
2. 2019 Ozone Hole is the smallest on record since its discovery in 1982 for the first time.
Choose the correct code.

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

Answer: (a)

177. Following is an ecosystem of water-body, showing the concentration of DDT in each trophic-levels.
Water → Algae → Fish → Pelican bird
1700 ppm → 500-600 ppm → 77 ppm → 0.2 ppm
Which of the following feature is incorrect if the above is to represent biomagnification?

(a) Algae should not be present. It should be bacteria instead
(b) Fishes don't eat algae. Instead of fish it should be bacteria and then fish
(c) The concentration of DDT should increase as we go to higher trophic-levels
(d) There are no incorrect features in the above representation

Answer: (c)

178. A mixture of oxygen and _____ is used as anesthesia in surgical operations.

(a) Sulphurous oxide
(b) Hydrogen monoxide
(c) Nitrous oxide
(d) Hydrogen

Answer: (c)

179. Which of the following do not need oxygen?

(a) Aerobic metabolism
(b) Combustion
(c) Nitrogen fixation
(d) Plants' respiration

Answer: (c)

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

(a) Vegetables
(b) Soyabean
(c) Rice
(d) Spices

Answer: (c)

Discipline5

181. Which of the following is a micronutrient for plants?

(a) Magnesium
(b) Iron
(c) Nitrogen
(d) Phosphorus

Answer: (b)

182. Which of the following should be a parameter for inter-cropping practices?

(a) Their nutrient requirements should be different
(b) Their species should be similar
(c) Their maturity-duration should be different
(d) They should grow in different climates

Answer: (a)

183. Which of the following is an example of indigenous variety of poultry?
1. Aseel
2. Leghorn
Choose the correct code.

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

Answer: (a)

184. Which of the following fishes feed on [illegible]

(a) Catlas
(b) Rohus
(c) Mrigals
(d) Grass Carps

Answer: (d)

185. Which of the following can NOT be used as a plant growth regulator?

(a) Auxin
(b) Gibberllins
(c) Peroxyacetyl nitrate
(d) Cytokinin

Answer: (c)

186. How many macro-nutrients are essential for plants?

(a) 4
(b) 5
(c) 6
(d) 7

Answer: (c)

187. Green Revolution began in India in -

(a) 1957

(b) 1968

(c) 1975

(d) 1982

Answer: (b)

189. Apis mellifera is bee that has been brought to India from _____.

(a) Russia

(b) Italy

(c) France

(d) UK

Answer: (b)

190. If we start heating water from 0 o C, then till what temperature does it contract?

(a) 2 o C

(b) 3 o C

(c) 4 o C

(d) 5 o C

Answer: (c)

Teaching Methodology

191. In which of the following academic sessions w ne system of alternate courses was discontinued?

(a) 1972-73

(b) 1975-76

(c) 1984-85

(d) 1989-90

Answer: (c)

192. Which of the following should be the criteria for selection of resources for teaching?
1. Usefulness
2. Clarity
3. Simplicity
Use 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)

193. Which of the following sections of the Right to Education Act, 2009 provides for the duties of teachers and redressal of grievances?

(a) 18
(b) 20
(c) 22
(d) 24

Answer: (d)

194. Who out of the following is not one of the chief exponents of the trait theory of personality?

(a) G.W. Allport
(b) R.B. Cattell
(c) R. K. Pritchett
(d) H.J. Eysenck

Answer: (c)

195. Which of the following doesn't belong to the Projective Techniques of methods of assessing personality?

(a) Children Apperception Test
(b) BG Test
(c) Graphology
(d) Aptitude Test

Answer: (d)

196. Which of the following age range is known as e y childhood?

(a) 1-6 years
(b) 2-6 years
(c) 3-7 years
(d) 4-8 years

Answer: (b)

197. Which of the following sections of the Right to Education Act, 2009 provides for the monitoring of child's right to education?

(a) 31
(b) 32
(c) 33
(d) 34

Answer: (a)

198. Which of the following can be one of the sources and forms of gender discrimination?
1. Textbooks
2. Laws and rules
Choose the correct code.

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

Answer: (c)

199. Which of the following teaching methods assumes that the whole group can give more ideas than a person?

(a) Brain Storming
(b) Home assignment method
(c) Discovery method
(d) Project method

Answer: (a)

200. Which of the following is not a function of a teacher?
1. Evaluating the achievement of pupils.
2. Preparation of progress-reports.
Choose the correct code.

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

Answer: (d)

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

General Awareness

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

Arithmetic Ability

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

General English

61	**(c)**	62	**(d)**	64	**(b)**	65	**(d)**	66	**(a)**	67	**(b)**	68	**(b)**	69	**(c)**
70	**(b)**	71	**(b)**	72	**(b)**	73	**(a)**	74	**(b)**	75	**(c)**	77	**(d)**	78	**(b)**

Discipline1

102	**(d)**	103	**(d)**	104	**(d)**	105	**(c)**	[illegible]	**(d)**	107	**(c)**	108	**(d)**	109	**(b)**
110	**(c)**	111	**(a)**	112	**(b)**	113	[illegible]	[illegible]4	**(b)**	115	**(b)**	117	**(c)**	118	**(d)**

Discipline2

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

Discipline3

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

Discipline4

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

Discipline5

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

Teaching Methodology

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