CBSE Board

C

SCSS-ST-SB-22
PCB

Question Booklet Sr. No.

Date : 10/04/2022 Time : **2.30 Hrs.** **Marks** : Section-A = 30 + Section-B = 320 = 350

Important Instructions :

1. Immediately fill the particulars on this page of the Test Booklet as well as Answersheet with Black or Blue Ball Pen. ***Use of pencil is strictly prohibited.***
2. Do not open this Test Booklet until you are asked to do so.
3. This Test Booklet contains of **110** questions.
4. There are two sections in the question paper i.e. **Section–A** and **Section–B**.
5. The **Section–A** contains three parts i.e. Part-I, Part–II and Part-III.
6. The **Part-I** contains **10** questions of **English.**
7. The **Part-II** contains **10** questions of **Mental Ability.**
8. The **Part-III** contains **10** questions of **Basic Mathematics.**
9. In **Section–A**, each question carries **ONE** mark. There is no negative marking system.
10. The **Section–B** contains **THREE** parts i.e. Part–I, Part–II and Part-III.
11. The **Part-I** contains **20** questions of **Physics.**
12. The **Part-II** contains **20** questions of **Chemistry.**
13. The **Part-III** contains **40** questions of **Biology.**
14. In the **Section–B**, each question carries **4** marks. There is negative marking system. For each wrong answer **1** mark will be deducted.
15. There are four choices for every question, out of which only one choice is most correct.
16. Filling up more than one responses in any question will be treated as wrong response and marks for this will be deducted according to negative system.
17. No candidates is allowed to carry any printed or written textual material, bits of papers, cell phone and any other electronic devices.
18. Rough work is to be done on the space provided in the Test Booklet only.
19. On completion of the test, the candidate must hand over the Answer Sheet to the Invigilator on duty. ***However, candidates are allowed to take away this Question Paper with them.***
20. **Do not fold or make any stray marks on the Answer Sheet.**

Name of the Candidate (in Capital letters) : _____

Seat No : In figures | | | | | | | |

SECTION - A :

Part–I – English

Instruction :

01. Select from the answer choices given under the sentence to form grammatically correct sentence :
   1) An one-eyed person was seen roaming about the streets.
   2) A one-eyed person was seen roaming about the streets.
   3) The one-eyed person was seen roaming about the streets.
   4) One-eyed person was seen roaming about the streets.

Instruction : Identify the part that contains an error.

02. Neither (A) / Rakesh nor (B) / Suresh, presented their (C)/papers before the deadline for doing so (d).
   1) A 2) B
   3) C 4) D

Instruction : Choose the one which best replaces the underlined words.

03. Why did you not threw the bag away ?
   1) did you threw 2) had you not threw
   3) did you not throw 4) no change

Instruction : Find the word that conveys the same meaning.

04. NOSTALGIA
   1) aroma 2) sea sickness
   3) home sickness 4) cure-all

Instruction : Select the word that is opposite in meaning.

05. METICULOUS
   1) careless 2) particular
   3) calculated 4) planned

Instruction : Select the pair of words to replace the qustion mark.

06. Synthesis : Construction : : ? : ?
   1) Artificial : True 2) Dissection : Analysis
   3) Excuse : Denial 4) Inductive : Logical

Instruction : Choose the one that can be substituted for the given phrase :

07. Easy to carry over long distance.
   1) fixed 2) manageable
   3) portable 4) convenient

Instruction : Find out the correct meaning of the Idiomatic expression :

08. To take heart
   1) to become hopeful 2) to love everyone
   3) to take matter seriously 4) to take interest

Instruction :

09. Choose the correctly spelt word :
   1) acquaintence 2) acquantance
   3) acquentence 4) acquaintance

Instruction : Choose the correct alternative out of the four choices to complete the sentence.

10. As soon as ———— with an arial salt, water is formed.
   1) a base will react 2) a base reacts
   3) a base is reacting 4) the reaction of a base

Part–II – Mental Ability

11. Complete the given series by finding the missing terms.
10000,11000,9900,10890,9801, ?
1) 10241 2) 10423
3) 10781 4) 10929

12. Which term will replace the question mark in the series:
ABD, DGK, HMS, MTB, SBL,?
1) ZKW 2) ZKU
3) ZAB 4) XKW

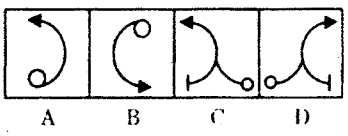
13. In following question there is a certain relation between two given words on one side of : : and one word is given on another side of : : while another word is to be found from the given altrernatives, having the same relation with this word as the words of the given pair bear. Choose the best alternative.
Fog : Visibility : : AIDS : ?
1) Health 2) Resistance
3) Virus 4) Death

14. In a certain code language, BEAT is written as YVZG, then what will be the code of MILD ?
1) ONRW 2) NOWR
3) ONWR 4) NROW

15. If 'P + Q' means 'P is the father of Q', 'P x Q' means 'P is the brother of Q; 'P–Q' means 'P is the mother of Q' then which of the following is deffinitely true about C – A + B ?
1) B is the son of A 2) A is the son of C
3) B is the father of A 4) C is the mother of B

16. Six students A, B, C, D, E and F are sitting in the field. A and B are from Delhi while the rest are from Bangalore. D and F are tall while others are short. A , C and D are girls while others are boys. Which is the tall girl from Bangalore ?
1) C 2) D
3) E 4) F

17. Following question consists four figures marked A,B,C and D which constitute the problem set followed by four other figures marked 1,2,3 and 4 which constitute the answer set. Figures A and B are related in a particular manner. Establish a similar relationship between figures C and D by choosing a figure from the answer set that would best substitute figure D in the problem set.



1)  2)  3)  4) 

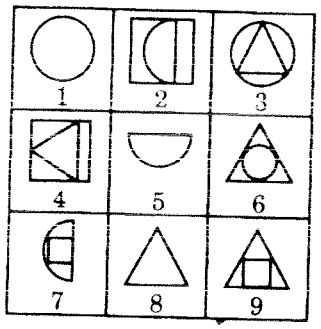
18. Two buses start from the opposite points of a main road, 150 km apart. The first bus runs for 25 km and takes a right turn and then runs for 15 km. It then turns left and runs for another 25 km and takes the direction back to reach the main road. In the meantime, due to a minor breakdown, the other bus has run only 35 km along the main road. What would be the distance between the two buses at this point ?

1) 65 km 2) 75 km
3) 80 km 4) 85 km

19. If '+' means 'minus' x means 'divided by', '÷' means 'plus' and '–' means 'multiplied by', then which of the following will be the value of the expression 252 x 9 – 5 + 32 ÷ 92 ?

1) 95 2) 168
3) 192 4) 200

20. Group the following figures into three classes on the basis of identical properties.



1) 1,5,8 ; 3,4,7; 2,6,9 2) 1,3,6 ; 4,5,9 ; 2,7,8
3) 1,3,6 ; 2,5,7 ; 4,8,9 4) 6,7,8; 1,3,7 ; 2,4,9

Part–III – Basic Mathematics

21. $a = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ and $b = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ then value of $a^2 + b^2$ is

1) 89 2) 88
3) 98 4) 95

22. The diameter of a car wheel is 42 cm. The number of complete revolutions it will make in moving 132 km is

1) 10^4 2) 10^5
3) 10^6 4) 10^3

Space For Rough Work

23. If θ is an acute angle and $\tan\theta + \cot\theta = 2$ then value of $\sin^3\theta + \cos^3\theta$ is

1) 1 2) 1/2

3) $\frac{\sqrt{2}}{2}$ 4) $\frac{\sqrt{3}}{2}$

24. If $\log_x y = 100$ and $\log_2 x = 10$, then value of y is

1) 2^{1000} 2) 2^{10}

3) 2^{100} 4) 2^{10000}

25. In a ΔABC , $\angle A = x^0$, $\angle B = (3x-2)^0$, $\angle C = y^0$.
Also $\angle C - \angle B = 9^0$ then sum of the greatest and the smallest angle of this triangle is

1) 107^0 2) 135^0

3) 155^0 4) 145^0

26. A right angle triangle ΔABC with sides 5 cm, 12 cm and 13 cm is revolved about the side 12 cm, then volume of solid so obtained is

1) 10π cm^3 2) 100π cm^3

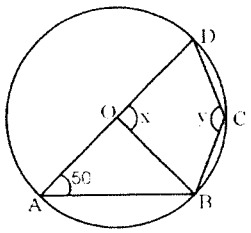
3) $\pi/100$ cm^3 4) π cm^3

27. If O(0,0) is centroide of the triangle ΔABC where A(a,b), B(b,c), C(c,a) then value of $a^3+b^3+c^3$ is

1) 3 abc 2) abc

3) $(a+b+c)^2$ 4) a+b+c

28. In the given figure , O is the centre of the circle and $\angle DAB = 50^0$. Then value of y – x is



1) 130
2) 100
3) 70
4) 30

29. The volume of the largest circular cone that can be cut of a cube whose edge is 8 cm is

1) 131.09 cm^3 2) 132.09 cm^3

3) 133.09 cm^3 4) 134.09 cm^3

30. If the radius of a sphere is doubled, then its volume is increased by

1) 100 % 2) 200 %

3) 700 % 4) 800 %

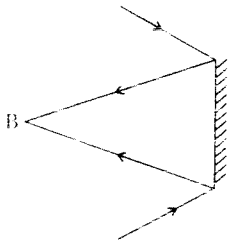
Space For Rough Work

SECTION B :

Part –I – Physics

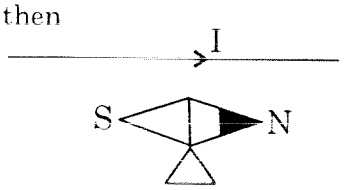
31. For magnification m = +1 for a plane mirror. Choose the correct significance of that
   1) The size of image is equal to the size of the object
   2) The image distance is not equal to the distance of the object from the mirror
   3) –ve sign of 'm' signifies that the image formed is virtual and erect
   4) +ve and –ve sign has no significance

32. Identify the object / image formed at 'B' due to the plane mirror



   1) Real image
   2) Virtual image
   3) Real object
   4) Virtual object

33. In the figure shown a magnetic needle is just supended below the current (I) carrying wire, then



   1) South pole goes away from us
   2) South pole doesnot move anywhere
   3) North pole moves towards us
   4) North pole moves away from us

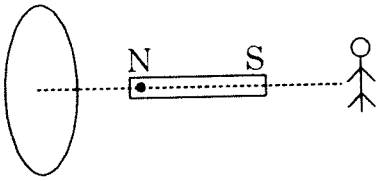
34. A cricket ball of mass 100 g moving with a speed of 50 m/s is brought to rest by a player in 0.2 sec. find the average force applied by the player
   1) 50 N
   2) 500 N
   3) 25 N
   4) 250 N

35. An object of mass 'm' is thrown in upward direction with initial velocity 'u'. What is velocity and acceleration at the hightest point of its motion ?
   1) 0 m/s, 0 m/s^2
   2) u m/s, 0 m/s^2
   3) 0 m/s, g m/s^2
   4) u m/s, g m/s^2

36. 1 kWh = ... J
   1) 3.6×10^8
   2) 3.6×10^6
   3) 3.6×10^7
   4) 3.6×10^7

Space For Rough Work

37. The north pole of the bar magnet is moving away along the axis of a circular conducting ring, then the magnetic pole that is likely to induce in the ring as seen by the observer is



1) N north
2) No pole
3) S south
4) Can't say

38. The resistance of a wire of length 4m and area of cross–section 0.02 cm^2, can be (resistivity of the material of the wire is $\rho = 6 \times 10^{-4}\ \Omega m$)

1) 2200 Ω
2) 1400 Ω
3) 1200 Ω
4) 1100 Ω

39. Select the correct combination of matching of physical quantities with their corresponding units

A)	Current	i)	volt
B)	Potential	ii)	coulomb
C)	Emf	iii)	coulomb per second
D)	Charge	iv)	joule per coulomb

1) A → i, B → ii, C → i,ii D → iv
2) A → iii, B → i, iv, C → i, iv, D → ii
3) A → iv, B → ii,iii C → iii, D → iv
4) A → ii, B → i, C → iv, D → iii,iv

40. A ball is dropped from a certain height of a tower. Its velocity after covering a distance of 19.6 m is

1) 9.8 m/s
2) 19.6 m/s
3) 10 m/s
4) 20 m/s

41. An object of mass 9.8 kg is dropped from a cell tower of height 49m. After falling freely for 2 second if the gravitational field of the earth suddenly disappears, the object

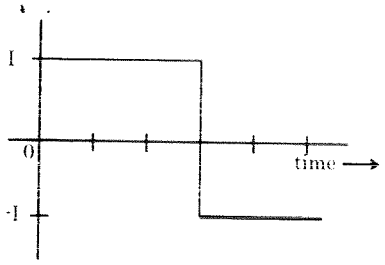
1) falls with acceleration 9.8 ms^{-2}
2) stops
3) falls with uniform velocity 19.6 ms^{-1}
4) falls with decreasing velocity 19.6 ms^{-1}

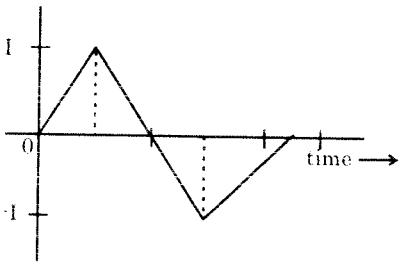
42. It takes 10 sec for a girl A to climb up the staires while girl B takes 30 sec for the same job.
Find : i) Ratio of work done
ii) Ratio of power spent by them (Both girls have same mass)

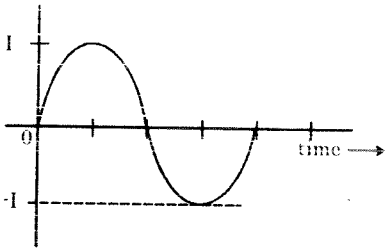
1) 1 : 1 and 3 : 1
2) 3 : 1 and 1 : 1
3) 1 : 3 and 1 : 1
4) 3 : 1 and 1 : 3

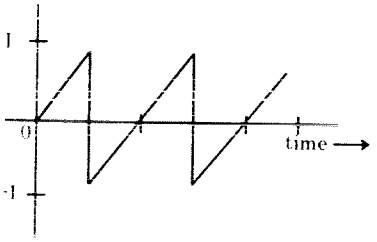
Space For Rough Work

43. Choose the option representing alternating current only (on x– axis time is taken and on y– axis current is taken)

1) 

2) 

3) 

4) 

44. A square cross–sectional conductor of length L, has a side 'a' and resistivity σ, has a square shaped bore of side 'b', such that (b < a), then its resistance between the either ends along the length can be

1) $\frac{\sigma L}{b^2 - a^2}$

2) $\frac{\rho L}{a^2 - b^2}$ with 'ρ' is conductivity

3) $\frac{\sigma L}{a^2 - b^2}$

4) $\frac{L}{\sigma(a^2 - b^2)}$

45. The property of inertia is more in

1) A car
2) A truck
3) A train
4) A horse cart

46. A cyclist takes 90 sec to complete one round of the circular track. If the radius of the circular track is 90 metre, then calculate his speed ($\pi = 22/7$)

1) $\frac{22}{7}$ m

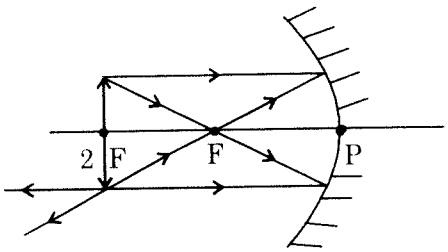
2) $\frac{44}{7}$ m

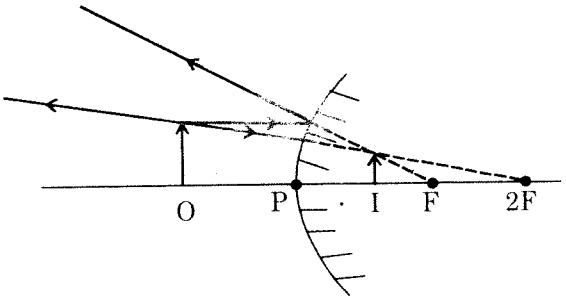
3) $\frac{11}{7}$ m

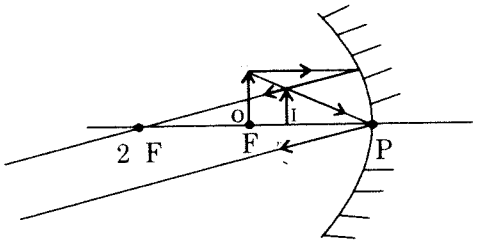
4) $\frac{33}{7}$ m

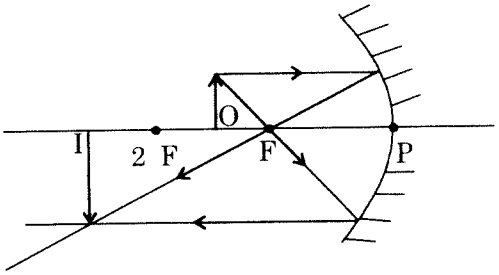
Space For Rough Work

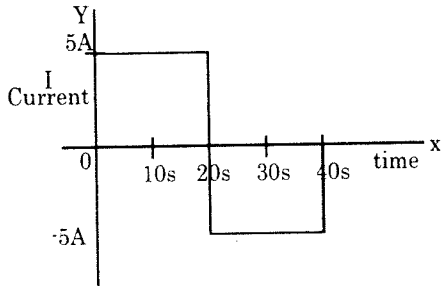
47. Choose the incorrect ray diagram

1) 

2) 

3) 

4) 

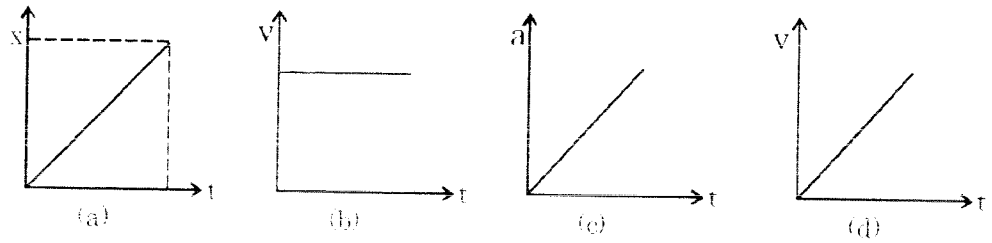
48. 

the current strength versus time graph is as shown in the figure. Choose the wrong statement regarding the graph

1) the current has same magnitude and direction upto 20 second
2) the current has same magnitude and direction upto 40 second
3) the current versus time graph has area enclosed with time axis is equal to the amount of charge flowing
4) the total charge flown across the cross-section within the time 0s to 40s is zero

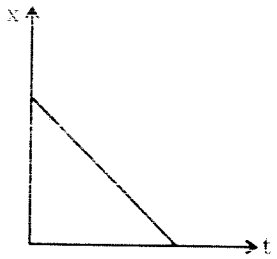
Space For Rough Work

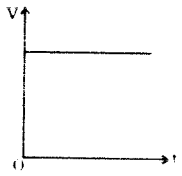
49. Which of the following graph represents uniformly accelerated motion ?

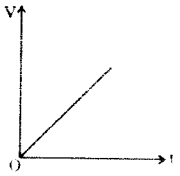


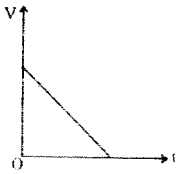
1) a
2) b
3) c
4) d

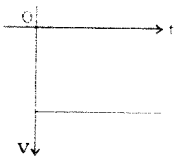
50. For the given displacement– time graph find the corresponding velocity– time graph



1) 

2) 

3) 

4) 

Space For Rough Work

Part II – Chemistry

51. Which one of the following is not a cause of Air pollution?
1) Burning of fossil fuel
2) Smokes from motor vehicles
3) Volcano eruption
4) Respiration in plants and animals

52. If chlorine atom is available in the form of, say, two isotopes $^{35}_{17}Cl$ (75%) ard $^{37}_{17}Cl$ (25%). Calculate the average atomic mass of chlorine.
1) 35 2) 37
3) 36 4) 35.5

53. In the following unbalanced equations, solve the following problem

$KClO_3(s) \xrightarrow{\Delta} KCl(s) + O_2(g)$
$Al(s) + O_2(g) \longrightarrow Al_2O_3(s)$

one mole of $KClO_3(s)$ thermally decomposed and excess of Al is burnt in the gaseous product. How many mol of Al_2O_3 are formed?
1) 1 2) 1.5
3) 2 4) 3

54. The decreasing correct order of reactivity of metals.
1) Fe > Zn > Al > Mg
2) Mg > Zn > Al > Fe
3) Mg > Fe > Zn > Al
4) Mg > Al > Zn > Fe

55. How many 109°28′ bond angles are in methane (CH_4) molecule?
1) 4 2) 5
3) 6 4) 8

56. Which oxide has the highest melting point?
1) H_2O(solid) 2) NO_2(gas)
3) SO_2(gas) 4) SiO_2(solid)

57. The general ideal gas equation is
1) $\frac{P}{T} = constant$ 2) $\frac{V}{T} = constant$
3) PV = constant 4) PV = nRT

Space For Rough Work

58. Find the moles of CO_2 formed by combustion of 60 moles of Butane.

1) 60 2) 120
3) 180 4) 240

59. What colour change would you observe when few drops of phenolphthalein is added to aluminium hydroxide solution?

1) Red to blue 2) Pink to yellow
3) Pink to colourless 4) Colourless to pink

60 Match the following from coloumn-I and coloumn–II

	Column–I Compounds		**Column–II Hybridisation**
a)	Diamond	p)	sp^2
b)	Graphite	q)	sp^3
c)	Charcoal	r)	sp^3d
d)	Phosphorous pentachloride (g)	s)	Not defined

1) a–p, b–q, c–r, d–s 2) a–q, b–p, c–s, d–r
3) a–q, b–s, c–r, d–p 4) a–s, b–r, c–q, d–p

61. The half life period of a radioactive element is 100 days. After 400 days, one gm of the element will be redued to _____ gm

1) 1/2 2) 1/4
3) 1/8 4) 1/16

62. Which one of the following does not increase while moving down the group of the periodic table

1) Atomic radius
2) Number of valence electrons
3) Metallic Character
4) Basic nature of oxides

63. Which of the following reactions will not take place?

1) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$ 2) $2KBr + Cl_2 \rightarrow 2KCl + Br_2$
3) $Zn + MgSO_4 \rightarrow ZnSO_4 + Mg$ 4) $Mg + FeSO_4 \rightarrow MgSO_4 + Fe$

64. Which among the following is a acidic flux

1) Fe_2O_3 2) SiO_2
3) $MgCO_3$ 4) $CaCO_3$

Space For Rough Work

65. $CH_3 - CH = CH_2 + Br_2 \rightarrow CH_3CH(Br) - CH_2(Br)$

The type of the above reaction is

1) Addition 2) Substitution
3) Elimination 4) Decomposition

66. When ethanoic acid reacts with sodium metal, the gas formed is

1) oxygen 2) hydrogen
3) chlorine 4) nitrogen

67. Classify the following compounds and select the correct pair of its homologous series

A. Butanone B. Ethanamine
C. Ethanol D. Ethyne

1) Butanone–Ester 2) Ethanamine–Amides
3) Ethanal–Aldehyde 4) Ethyne–Alkene

68. Name the parent acid and alcohol of the $CH_3COOC_2H_5$

1) $CH_3COOH + C_2H_5OH$ 2) $C_2H_5COOH + CH_3OH$
3) $CH_3COOH + CH_3OH$ 4) $C_2H_5COOH + C_2H_5OH$

69. Name of functional group present in $CH_3OCH_2CH_3$ is

1) Ether 2) Ester
3) Ketone 4) Carboxylic acid

70. Match the following :

	Column–I		Column–II
A)	C_6H_5–CH = CH_2	i)	Acrylonitrile
B)	CH_2=CH–Cl	ii)	Tetrafluro ethylene
C)	CH_2 = CH–CN	iii)	Styrene
D)	$CF_2 = CF_2$	iv)	Vinyl chloride

1) A–(iv); B–(ii); C–(iii); D–(i) 2) A–(iii); B–(iv); C–(ii); D–(i)
3) A–(i) ; B–(ii) ; C–(iii); D–(iv) 4) A–(iii); B–(iv); C–(i); D–(ii)

Space For Rough Work

Part III – Biology

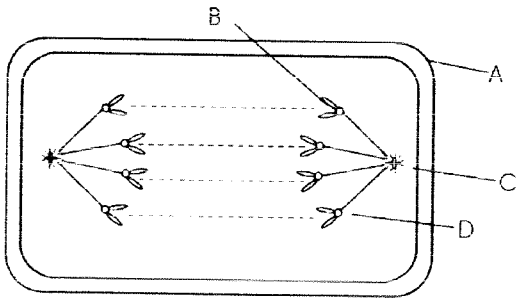
71. Naked seed bearing plants included under
1) Pteridophytes 2) Gymnosperms
3) Bryophytes 4) Angiosperms

72. Match the column –I with column II

	Column I		Column II
1)	Algae	i)	*Sargassum*
2)	Bryophyta	ii)	*Cedrus*
3)	Pteridophyta	iii)	*Marchantia*
4)	Gymnosperm	iv)	*Lycopodium*
		v)	*Spirogyra*
		vi)	*Funaria*
		vii)	*Pinus*

	1	2	3	4
1)	i,v	iii,vi	iv	ii, vii
2)	ii	iv	iii,v	i, vi
3)	iii,vi	ii	i,v	iv
4)	iv	i,v	ii,vi	iii, vii

73. To identify A,B,C,D from the given digram?



	A	B	C	D
1)	Centrosome	Centrioles	Chromosome	Cell wall
2)	Cell wall	Chromosome	Centrosome	Centromere
3)	Cell wall	Centrosome	Chromosome	Centromere
4)	Chromosome	Centrosome	Centriole	Cell wall

74. Reserve/stored food material in plants and animals are respectively
1) Starch, Starch 2) Glycogen, Glycogen
3) Glycogen, Starch 4) Starch, Glycogen

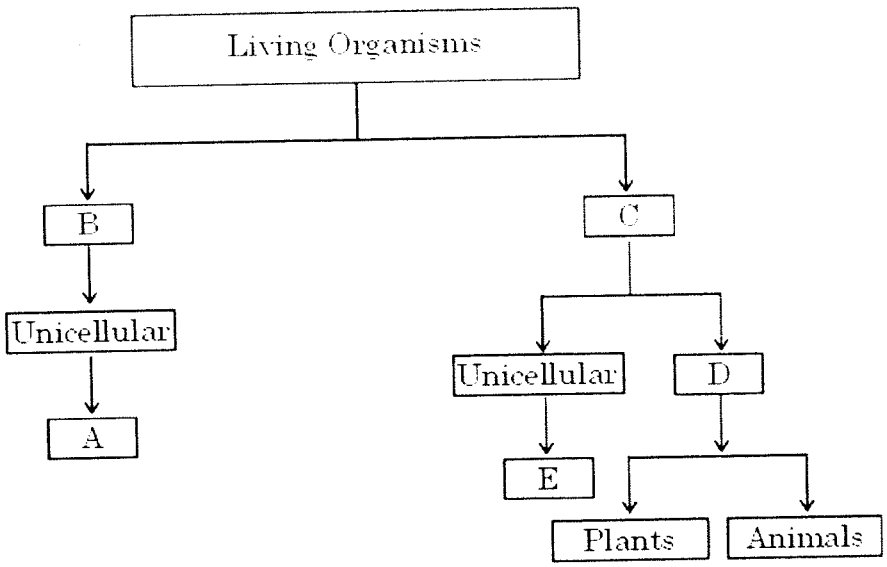
75. If a cell having 14 chromosomes in G_1 phase then what will be the number of chromosomes before and after **S** phase of interphase respectively?
1) 14, 14 2) 28,14
3) 7,7 4) 14,28

76. If male parent is tetraploid and female gamete is diploid, what will be the ploidy of zygote after fusion?
1) Diploid 2) Triploid
3) Tetraploid 4) Hexaploid

77. Which type of sugar is present in DNA molecule?
1) Ribose
2) Deoxyribose
3) Both 1 and 2
4) Triose

78. Complete the given chart of five kingdom method of classification by using

Prokaryotes, Eukaryotes, Multicellular, Unicellular, Protista, Animals, Plants, Fungi, Bacteria etc.



	A	B	C	D	E
1)	Eukaryotes	Plants	Protista	Multicellular	Unicellular
2)	Bacteria	Eukaryotes	Multicellular	Unicellular	Protista
3)	Bacteria	Prokaryotes	Eukaryotes	Multicellular	Protista
4)	Prokaryotes	Bacteria	Multicellular	Eukaryotes	Fungi

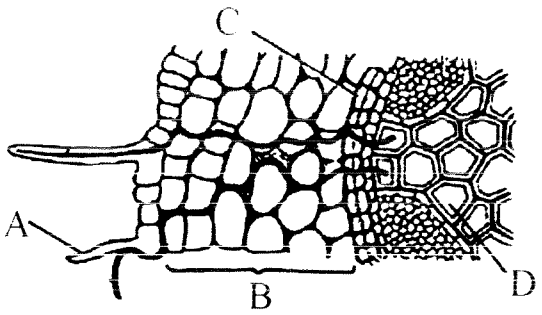
79. Rahul is a smart student having one bag which contain **Mushroom, *Chlamydomonas Chlorella, Euglena, Volvox, Paramecium, Aspergillus, Penicillium, Vibrio*** etc. how many from the given list are unicellular & multicellular respectively?
1) 6 and 3
2) 3 and 6
3) 5 and 4
4) 7 and 2

80. Find INCORRECT statement with respect to photosynthesis
1) Energy is stored in food
2) Carbohydrates are synthesized
3) The dry weight of the plant increases
4) CO_2 and water do not used but oxygen is evolved

81. **Statement I**– DNA sequence of each person is unique as that of the fingerprints
Statement II– DNA fingerprinting is mainly useful in forensic science
1) Statement I and II both are correct
2) Statement I is correct but II is incorrect
3) Statement I is Incorrect but II is correct
4) Statement I and II both are incorrect

82. Find INCORRECT statement with respect to shapes of chromosomes
1) Telocentric – Centromere at the proximal end
2) Acrocentric – Centromere at one end but slightly below the normal position
3) Submetacentric – Centromere almost at the middle position
4) Metacentric – Centromere almost at the middle position

83. Identify A,B, C and D in the given diagram



	A	B	C	D
1)	Cortex	Root hair	Xylem	Endodermis
2)	Root hair	Cortex	Endodermis	Xylem
3)	Root hair	Cortex	Pericycle	Xylem
4)	Endodermis	Xylem	Root hair	Cortex

84. Match the column I with column II

	Column I (Phenotype)		Column II (Genotype)
A)	Yellow Wrinkled	i)	9
B)	Round & Green	ii)	3
C)	Wrinkled & Green	iii)	3
D)	Round and yellow	iv)	1

1) A–ii,B–iii, C–iv,D–i
2) A–iii,B–iv, C–ii,D–i
3) A–i,B–ii, C–iv,D–iii
4) A–i,B–ii, C–iii,D–iv

85. Following one is NOT character of Yeast.
1) Unicellular fungus
2) Unicellular bacteria
3) Eukaryotic type of cell
4) Reproduced by budding

86. A sheep 'Dolly' was born in ——— by cloning technique on 5th july ———.
1) Scotland, 1996
2) England, 1996
3) Ireland, 1996
4) Thiland 1995

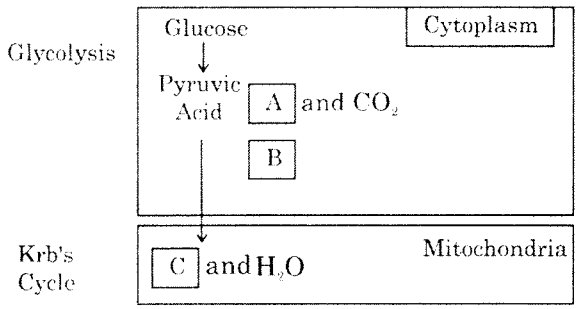
87. Match the column I with column II

	Column I		Column II
A)	Gaseous cycle	a)	Phosphorus cycle
B)	Sedimentary cycle	b)	Nitrogen cycle
		c)	Carbon cycle
		d)	Oxygen cycle

	A	B		A	B
1)	a,b	b,c,d	2)	b,c,d	a
3)	a,c	b,d	4)	a,d	b,c

88. Find INCORRECT pair from the following
1) Lactic acid bacteria – Coagulation of milk proteins
2) *Rhizobium* – Nitrogen fixation
3) Penicillin – Antibotic obtained from *Penicillium*
4) *Clostridium* – Milk convert into curd

89. Find out the A,B and C in the given chart



	A	B	C
1)	Ethanol	Lactic acid	CO_2
2)	CO_2	Ethanol	H_2O
3)	H_2O	Lactic Acid	CO_2
4)	Ethanol	Acetic acid	$C_6H_{12}O_6$

90. **Assertion** – Xylem consists of tracheids, vessels, xylem parenchyma and xylem fibres
Reason – Phloem is made up of four types of elements i.e. sieve tubes, Companion cells, phloem fibres and phloem parenchyma
1) Assertion and reason are true & reason is current explanation of Assertion.
2) Assertion and reason are true but reason is not correct explanation of Assertion
3) Assertion is true but reason is false
4) Both assertion and reason are false

91. Find out the INCORRECT statement.
1) Lamarckism based on the principle of use or disuse of organs
2) Geographical and reproductive isolation are key points for speciation
3) Organs similar in origin but different in function are analogous organs
4) Aves and mammals evolve in Cenozoic era

92. Theory of inheritance of acquired characters given by
1) Darwin 2) Lamarck
3) Hugo de vries 4) Edward Tatum

93. The given symptoms are related to disease
a- Enlargment of legs and arms, b- Blocked lymph nodes
c- Abdominal pain d- High fever and headache
1) Malaria 2) Sleeping sickness
3) AIDS 4) Filariasis

94. Match the column I and Column II

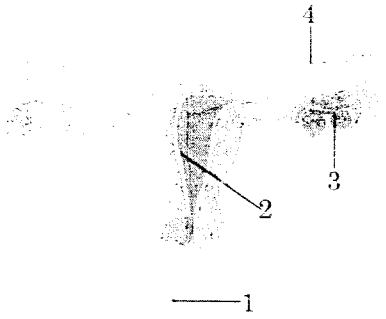
Column I	Column II
A– Aurelia	i) Devil fish
B– Lepisma	ii) Jelly Fish
C– Octopus	iii) Silver Fish
D– Asterias	iv) Star fish

1) A–i,B–ii,C–iii,D–iv 2) A–ii,B–iii,C–iv,D–i
3) A–ii,B–iii,C–i,D–iv 4) A–iii,B–iv,C–ii,D–i

95. Acid rain caused by the accumulation of ——— in atmosphere
1) Carbon dioxide 2) Carbon monoxide
3) Nitrogen oxide 4) Sulphur oxide

96. Which one is not renewable resources of energy
1) Solar energy 2) Wind energy
3) Tidal energy 4) Petrolium energy

97. Find out the correct meaning of symbol **1-4** in the given figure



1) 1–Ovary, 2–Uterus, 3–Vagina, 4–Oviduct
2) 1–Oviduct, 2–Uterus, 3–Ovary, 4– Vagina
3) 1–Vagina, 2–Uterus, 3–Ovary, 4–Oviduct
4) 1–Uterus, 2–Ovary, 3–Oviduct, 4– Vagina

98. The given symptoms related to respiratory disease

Headache, Breathlessness, Dizziness, Vomiting, Loss of hearing, Lack of muscular co-ordination

1) Asphyxiation 2) Emphysema
3) Hypoxia 4) Mountain sickness

99. Math column I with column II

	Column I		Column II
a)	Pashmina	i)	Pig meat
b)	Egg layers	ii)	Wool
c)	Murrah	iii)	Rhode Island reds
d)	Porks	iv)	Buffaloes

1) a–i,b–ii,c–iii,d–iv 2) a–ii,b–i,c–iv,d–iii
3) a–ii,b–iii,c–iv,d–i 4) a–iv,b–ii,c–i,d–iii

100. **Assertion** – Gigantism is cherecterised by abnormal height and long bones
Reason – Gigantism is due to hypersecretion of growth hormone from pituitary gland in childhood.
1) Both assertion and reason are true and reason is correct explanation of assertion
2) Both assertion and reason are true but reason is not correct explanation
3) Assertion is true but reason is false
4) Both assertion and reason are false

101. ***"OMNIS CELLULA E CELLULA"*** slogan given by
1) M.J. schleiden 2) T. schwann
3) Rudolf Virchow 4) Robert Hooke

102. Find out the **mismatch** pair
1) Vaccination – Edward jenner
2) Antibiotic – Alexander Fleming
3) Salk's vaccine – Cholera
4) Antibody – Acquired immunity

103. An animal has body divided into
Head, Foot,Visceral mass, Body covered by a hard Calcarious shell.
The given character related to phylum
1) Arthropoda
2) Annelida
3) Mollusca
4) Echinodermata

104. The phase of life when body undergoes changes leading to sexual maturity is called
1) Puberty
2) Adolescence
3) Menpause
4) Menarche

105. **Assertion** – Myopia is an eye defect in which the person can see nearby things clearly but distant things are blurred.
Reason – Myopia is corrected by using concave lens.
1) Both assertion and reason are true and reason is correct explanation of assertion
2) Both assertion and reason are true but reason is not correct explanation
3) Assertion is true but reason is false
4) Both assertion and reason are false

106. In the given combination, the group of **sensory** cranial nerve are
1) Olfactory, Occulomotor, Facial
2) Occulomotor, Trochlear, Facial
3) Olfactory, Optic, Auditory
4) Optic, Trigeminal, Trochlear

107. In a family father has blood group AB and mother has blood group B. What will be the blood group of children in that family?
1) A and B
2) A and AB
3) B and AB
4) All except blood group 'O'

108. Match column I with column II

Column I (Digestive gland)	**Column II (Enzymes)**
a– Salivary gland	i– Pepsin
b–Pancreas	ii - Ptyalin
c– Liver	iii-Trypsin
d– Stomach	iv-Bile

1) a–i,b–ii,c–iii,d–iv
2) a–ii,b–iii,c–iv,d–i
3) a–ii,b–iii,c–i,d–iv
4) a–iii,b–iv,c–ii,d–i

109. Read the given statements about **HCl** and find out **correct** answer
P – Kills the microbes swallowed along with the food
Q – Makes medium acidic
R – Activates gastric enzymes
S – Deactivates enzyme rennin
Code:-
1) P,Q correct and R,S incorrect
2) P,R correct and Q,S incorrect
3) Q,S correct and P,R incorrect
4) P,Q,R correct and S incorrect

110. Gout is disease caused in ——due to deposition of ——— crystals.
1) Kidney, Adenine
2) Liver, Bile
3) Joints, Uric acid
4) Urinary bladder, Uric acid

IMPORTANT DATES

ONLY For 10th Maharashtra State Board Students

(Except CBSE, ICSE And Other Board Students)

SCREENING TEST - 2022 (OFFLINE MODE ONLY)	10 April 2022
Copy of candidate responses to be available on the website	14 Apr. 2022 (13:00 IST)
Online display of provisional answer keys	14 Apr. 2022 (13:00 IST)
Feedback and comments on provisional answer keys from the candidates	14 Apr. 2022 (13:00 IST) 15 Apr. 2022 (13:00 IST)
Online declaration of final answer keys	16 Apr. 2022 (11:00 IST)
Result of SCREENING TEST 2022	16 Apr. 2022 (15:00 IST) (On Candidate Indivisual Login)
Parent's Meet (PCM GROUP)	17 Apr. 2022 (11:00 IST) (For Selected and Wait List Candidate)
Parent's Meet (PCB GROUP)	17 Apr. 2022 (14:00 IST) (For Selected and Wait List Candidate)
Admissions : First List	18 Apr. 2022 (11:00 IST) 21 Apr. 2022 (17:00 IST)
Admissions : Second List	22 Apr. 2022 (11:00 IST) 25 Apr. 2022 (17:00 IST)

Space For Rough Work