

B

SCSS-ST-23
PCM

Question Booklet Sr. No.

212836

Date : 02/04/2023

Time : 2.30 Hrs.

Marks : Section-A = 30 + Section-B = 240 = 270

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 **90** 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 **Basic Mathematics**.
8. The *Part-III* contains **10** questions of **Mental Ability**.
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 **Mathematics**.
12. The *Part-II* contains **20** questions of **Physics**.
13. The *Part-III* contains **20** questions of **Chemistry**.
14. In the **Section-B**, each question carries **4** marks. There is **negative** marking system. For each wrong answer **1 mark will be deducted from obtained marks**.
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

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SCSS-ST-PCM-23

Space For Rough Work

Section - A : (Part-I – English)

Instruction :

01. Choose the one that can be substituted for the given phrase :

One who sacrifices his life for a specific cause

- | | |
|------------|------------------|
| 1) soldier | 2) revolutionary |
| 3) patriot | 4) martyr |

Instruction :

02. Find the word that conveys the same meaning.

HALLOWED

- | | |
|--------------|--------------|
| 1) favourite | 2) precious |
| 3) sacred | 4) respected |

Instruction :

03. Select the word that is opposite in meaning.

DISPLAY

- | | |
|----------------|------------|
| 1) demonstrate | 2) conceal |
| 3) exhibit | 4) show |

Instruction :

04. Select the pair of words to replace the question mark.

Carbohydrates : Obesity :: ? : ?

- | | |
|--------------------------|---------------------|
| 1) Pressure : Extrusion | 2) Hostility : War |
| 3) Aversion : Regression | 4) Sugar : Cavities |

Instruction :

05. Select from the answer choices given under the sentence to form grammatically correct sentence :

Such people **never have and never will be trusted** .

- 1) never have and will be trusted
- 2) never have been trusted and never will be trusted
- 3) never have had anyone trust them and never will have anyone
- 4) never have and never will be trust

Instruction :

06. Find out the correct meaning of the Idiomatic expression :

Under a cloud

- | | |
|--------------------------------|-----------------------------|
| 1) under suspicion | 2) under observation |
| 3) experiencing cloudy weather | 4) enjoying favourable luck |

Instruction :

07. Choose the word that best completes the sentence.

In last year's economic survey, the weakness _____ to availability and quality of services data were highlighted.

- | | |
|------------|----------------|
| 1) related | 2) approximate |
| 3) beside | 4) nearly |

51. Make a match

A-Group	B-Group
1) Fluid	a) Higher pressure
2) Blunt knife	b) Atmospheric pressure
3) Sharp needle	c) Specific gravity
4) Relative density	d) Lower pressure
5) Hecto pascal	e) Same pressure in all directions

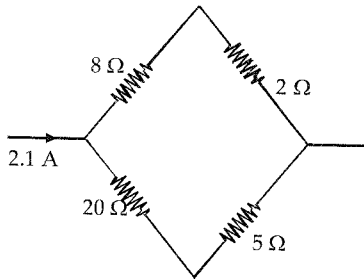
1) 1-e, 2-c, 3-a, 4-b, 5-d 2) 1-c, 2-a, 3-b, 4-e, 5-d
3) 1-e, 2-d, 3-a, 4-c, 5-b 4) 1-b, 2-c, 3-a, 4-e, 5-d

52. Complete the following tables.

Mass (kg)	Volume (m ³)	Density (kg/m ³)
a) 350	100	-----
b) -----	120	4

- 1) a) → 35 b) → 48 2) a) → 35×10^3 b) → 30
3) a) → 3.5 b) → 480 4) a) → 0.35 b) → 4.8

53. In the circuit shown in figure, the current flowing through 5Ω resistance is



- 1) 0.5 A 2) 0.9 A
3) 0.6 A 4) 1.5 A
54. A wire of resistance R is stretched to twice of it's original length, it's new resistance will be
- 1) 4R 2) R/4
3) 2R 4) R/2
55. A thermally insulated pot has 150 g ice at temperature 0°C. How much steam of 100°C has to be mixed to it, so that water of temperature 50°C will be obtained. $L_f = 80 \text{ cal/g}$
 $L_v = 540 \text{ cal/g}$, $C_w = 1 \text{ cal/g}^\circ\text{C}$
- 1) 33 kg 2) 3.3 g
3) 3.3 kg 4) 33 g
56. A convex lens is in contact with concave lens. The magnitude of the ratio of their focal length is $2/3$. Their equivalent focal length is 30 cm. What are their individual focal lengths?
- 1) -75, 50 2) 10, -15
3) 75, 50 4) -10, 15

71. The orbital with highest energy is
 1) 3p
 2) 4s
 3) 4d
 4) 5s
72. Milk is
 1) Colloid
 2) Solution
 3) Suspension
 4) both 1 and 3
73. The number of basic and acidic radicals among the following are
 $\text{Ag}^+, \text{Cu}^{2+}, \text{Cl}^-, \text{I}^-, \text{SO}_4^{2-}, \text{Ca}^{2+}, \text{NO}_3^-, \text{S}^{2-}, \text{NH}_4^+, \text{K}^+, \text{MnO}_4^-, \text{Mg}, \text{Cl}$
 1) 6, 6
 2) 6, 5
 3) 5, 6
 4) 7, 7
74. Covalent bond formed due to ?
 1) Transfer of electron
 2) Gain of electron
 3) Loss of electron
 4) Sharing of electron
75. When sodium hydroxide is added to ammonium carbonate salt and then a glass rod dipped in dilute hydrochloric acid is brought near the test tube, we observe
 1) Brisk efflorescence
 2) Dense white fumes
 3) Yellowish green vapours
 4) Reddish brown gas
76. At 25°C the pH of pure water is 7. The ratio of $[\text{H}^+]$ and $[\text{OH}^-]$ ions concentration is
 1) 0.1
 2) 1.0
 3) 0.2
 4) 1.2
77. Which of the following represent a chemical change ?
 1) Extraction of copper from copper pyrites
 2) Distillation of water
 3) Melting of wax
 4) Dissolution of salt in water
78. The ozone layer lies in
 1) Stratosphere
 2) Troposphere
 3) Ionosphere
 4) Mesosphere
79. To which class a dyes does phenolphthalein belong ?
 1) Azo dyes
 2) Nitro dyes
 3) Triphenyl methane dyes
 4) Phthalein dyes
80. Match the following compound.
- | I | II |
|-----------------------------|-----------------|
| a) CaO | i) Table salt |
| b) $\text{Ca}(\text{OH})_2$ | ii) Slaked lime |
| c) CaCO_3 | iii) Quick lime |
| d) NaCl | iv) Lime stone |
- 1) a-iii, b-ii, c-iv, d-i
 2) a-ii, b-iii, c-iv, d-i
 3) a-i, b-ii, c-iii, d-iv
 4) a-iv, b-iii, c-ii, d-i
81. Match the compound with its nature.
- | Column-I | Column-II |
|-------------------|------------|
| i) CO | p) Acidic |
| ii) CO_2 | q) Neutral |
| iii) CaO | r) Basic |
- 1) i-r, ii-p, iii-q
 2) i-p, ii-q, iii-r
 3) i-q, ii-p, iii-r
 4) i-p, ii-r, iii-q

82. Which among the following are unsaturated hydrocarbons ?
- i) $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_3$ ii) $\text{CH}_3\text{-C}\equiv\text{C-CH}_3$
- iii) $\text{CH}_3\text{-}\underset{\text{CH}_3}{\text{CH}}\text{-CH}_3$ iv) $\text{CH}_3\text{-}\underset{\text{CH}_3}{\text{C}}=\text{CH}_2$
- 1) i and iii 2) ii and iv
 3) ii and iii 4) iii and iv
83. Match the following compounds with their mass ratio of carbon and hydrogen.
- A) CH_4 i) 12 : 1
 B) C_2H_6 ii) 3 : 1
 C) C_2H_2 iii) 4 : 1
 D) CH_2O iv) 6 : 1
- 1) A-i, B-iii, C-ii, D-iv 2) A-ii, B-iii, C-iv, D-i
 3) A-ii, B-iii, C-i, D-iv 4) A-i, B-iv, C-ii, D-iii
84. First member of ester homologous series is
- 1) Methyl ethanoate 2) Methyl methanoate
 3) Methyl acetate 4) Acetic acid
85. Which of the following is liquid at room temperature ?
- 1) Methane 2) Ethane
 3) Butane 4) Heptane
86. Which one of the following has highest ionisation energy ?
- 1) Li 2) K
 3) Na 4) Rb
87. What will be the pressure in atmosphere if one mole of gas occupies 10 L volume at 200 K temperature ? (Given $R = 0.0821 \text{ L atm K}^{-1} \text{ mol}^{-1}$)
- 1) 16.42 atm 2) 0.1642 atm
 3) 1.642 atm 4) 2.461 atm
88. A pre-weighed vessel was filled with H_2 at STP and weighed. It was then evacuated and filled with O_2 at the same temperature and pressure and again weighed. The weight of O_2 will be
- 1) 16 times that of H_2 2) Half of that of H_2
 3) One fourth of that of H_2 4) One sixteenth of that of H_2
89. The amount of calcium hydroxide formed when with 18 gram of water reacts with 28 gram of calcium oxide
- 1) 74 g 2) 56 g
 3) 37 g 4) 28 g
90. The mass of one mole of electrons is (Given $1 e^-$ weighs $9.1 \times 10^{-31} \text{ kg}$)
- 1) $8 \times 10^{-25} \text{ g}$ 2) $8.4 \times 10^{-26} \text{ kg}$
 3) $4.8 \times 10^{-8} \text{ g}$ 4) $5.48 \times 10^{-4} \text{ g}$

IMPORTANT DATES

SCREENING TEST (Shahu) - 2023 (OFFLINE MODE ONLY)	<u>02 Apr. 2023</u>
Online display of provisional answer keys	02 Apr. 2023 : 06 PM
Last Date Feedback and comments on Provisional Answer Keys from Candidates	04 Apr. 2023 : 06 PM
Online declaration of final answer keys	05 Apr. 2023 : 06 PM
Copy of candidate responses to be available on the website	07 Apr. 2023 After 02 PM
Result of SCREENING TEST 2022 (Individual Login)	07 Apr. 2023 After 02 PM
Parent's Meet (PCM GROUP)	09 Apr. 2023 at 02-30 PM
Parent's Meet (PCB GROUP)	09 Apr. 2023 at 11-00 AM
Admissions : First List	09 Apr. 2023 to 13 Apr. 2023 UPTO 06 PM
Admissions : Second List	15 Apr. 2023 to 18 Apr. 2023 UPTO 06 PM

वरील तारखांमध्ये काही बदल होऊ शकतो विद्यार्थी आणि पालकांनी अधिक माहितीसाठी वेबसाईट पाहणे.