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Educating for better tomorrow

Academic Session: 2021-22

SAMPLE TEST PAPER

ResoNET-2021

(Resonance National Entrance Test for Admission in PCCP Classroom Contact Programmes-PCCPs)

FOR STUDENTS MOVING IN CLASS- VI_IN 2021-2022
(PRESENTLY STUDYING IN CLASS – V_IN 2020-2021)

COURSE NAME : PHOTON   **COURSE CODE : PV**

Duration: 1½ Hours | Max. Marks: 210

Name : _____   **Application Form Number :** _____

Please read the next & last page of this booklet for the instructions.

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GENERAL INSTRUCTIONS

1. This booklet is your Question Paper.
2. Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form are not allowed to be used.
3. Write your **Name** & **Application Form Number** in the space provided in the first page of this booklet.
4. No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.
5. No query related to question paper of any type is to be put to the invigilator.

INSTRUCTIONS FOR OPTICAL RESPONSE SHEET (ORS)

➢ Darken the appropriate bubbles on the original by applying sufficient pressure.
➢ The original is machine-gradable and will be collected by the invigilator at the end of the examination.
➢ Do not tamper with or mutilate the ORS.
➢ Write your name, Application form number and the name of the examination centre and sign with pen in the space provided for this purpose on the original. **Do not write any of these details anywhere else**. Darken the appropriate bubble under each digit of your roll number.
➢ Before answering the paper, fill up the required details in the blank space provided in the Objective Response Sheet (ORS).
➢ Do not forget to mention your paper code and **Application Form Number** neatly and clearly in the blank space provided in the Objective Response Sheet (ORS) / Answer Sheet.
➢ Use a **BLACK BALL POINT** to darken the bubbles in the upper sheet.
➢ Darken the bubble **COMPLETELY.**
➢ Darken the bubble **ONLY** if you are sure of the answer.
➢ The correct way of darkening a bubble is as shown here : ●
➢ There is **NO** way to erase or "un-darkened bubble.
➢ The marking scheme given at the beginning of each section gives details of how darkened and **not darkened** bubbles are evaluated.

   Marks distribution of questions is as follows.

Reso NET 2021-22

S.No.	Subject	Nature of Questions	No. of Questions	Correct	Wrong	Total
			Marks to be awarded			
1 to 25	PART-I (Maths)	Single Choice Questions (SCQ)	25	3	0	75
26 to 35	PART-II (Physics)	Single Choice Questions (SCQ)	10	3	0	30
36 to 45	PART-III (Chemistry)	Single Choice Questions (SCQ)	10	3	0	30
46 to 55	PART-IV (Biology)	Single Choice Questions (SCQ)	10	3	0	30
56 to 70	PART-V (Mental Ability)	Single Choice Questions (SCQ)	15	3	0	45
		Total	**70**			**210**

Zero marks '0' If none of the options is chosen (i.e. the question is unanswered).

Syllabus of Class-V_ Reso NET

MATHEMATICS :

- ❖ Number and number names
- ❖ Simplification
- ❖ Fractions

- ❖ Operation on large number
- ❖ Factors & multiples
- ❖ Decimals

PHYSICS :

- ❖ Motion and measurement of distances
- ❖ Simple machine

CHEMISTRY :

- ❖ Air around us & water
- ❖ States of matter

BIOLOGY :

- ❖ Nervous system
- ❖ Reproduction in plants

- ❖ Life styles in animals
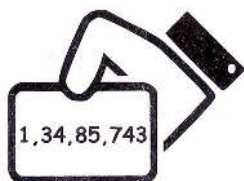
MENTAL ABILITY

- ❖ Number series
- ❖ Missing term in figures
- ❖ Alphabet test
- ❖ Analogy

- ❖ Alphabet series
- ❖ Mathematical operations
- ❖ Direction sense test

1. What is the value of 1260 ÷ 15 ÷ 7
   (A) 12   (B) 58
   (C) 122   (D) 588

2. Find the place value of 8 in 812890
   (A) 800000   (B) 800
   (C) 80   (D) both (A) and (B)

3. (50 − 14) ÷ 6 + 2 − 1 × 4 = ?
   (A) 4   (B) 0
   (C) 5   (D) 3

Direction(4-6)
   Look at the card below and use it to answer the following questions

1,34,85,743

4. Round off to the nearest ten lakhs
   (A) 1,35,00,000   (B) 1,37,00,000
   (C) 1,30,00,000   (D) 1,40,00,000

5. Round off to the nearest lakh
   (A) 1,35,00,000   (B) 1,33,000
   (C) 1,34,00,000   (D) 1,34,50,000

6. Round off to the nearest crore
   (A) 1,50,00,000   (B) 1,00,00,000
   (C) 2,00,00,000   (D) 0

7. The reciprocal of $\frac{1}{2}$ ÷ the reciprocal of $\frac{1}{3}$ is

   (A) $\frac{3}{2}$ (B) $\frac{2}{3}$

   (C) 6   (D) $\frac{1}{6}$

8. Convert 600 in Roman numerals
   (A) XD   (B) DC
   (C) DMC   (D) CCCC

9. The greatest factor of a number is
   (A) number × 0   (B) number × 2
   (C) number × 3   (D) number itself

10. A bird makes $\frac{3}{7}$ of it's nest in a day, the fraction of the part of left is _____

    (A) $\frac{3}{7}$ (B) $\frac{5}{7}$

    (C) $\frac{4}{7}$ (D) 1

11. What is the value of 9 × 120 ÷ 15 − 14 × 2
    (A) 90   (B) 120
    (C) 44   (D) None of these

12. 5345 + _____ = 6000
    (A) 633   (B) 655
    (C) 654   (D) 565

13. The HCF of 18,45, 54, 60 is
    (A) 9   (B) 6
    (C) 18   (D) 3

Direction (14-17)
   The image below shows the menu and rate list of a school cafeteria. Use it to answer the following questions (31 - 33).

Items	Price	Items	Price
Chips	Rs. 20	Ice-cream	Rs. 25
Muffin	Rs. 35	Water bottle	Rs. 15
Sandwich	Rs. 18	Cold Drink	Rs. 15
Rajma Chawal	Rs. 45	Chowmein	Rs. 50
Maggi	Rs. 30	Pasta	Rs. 46

14. Pulkit gave the cashier Rs. 175. If he bought only Maggi, the number of plates of Maggi he bought and the change left is
    (A) 5, Rs. 25   (B) 4, Rs. 25
    (C) 5, Rs.0   (D) 6, Rs. 15

(Space For Rough Work)

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15. Gaursha gave a treat to her friends on her birthday. She bought 2 muffins, 2 ice-creams, one plate rajmaachawal,3 packets of chips and one cold drink. On giving the money, the cashier returned Rs. 20 to her. The money paid by her initially is
(A) Rs. 190   (B) Rs. 260
(C) Rs. 280   (D) Rs. 220

16. Ria ate a portion of pasta and sandwich but realised she had only Rs. 50 with her. Anika offered to pay the rest. The money paid by Anika is
(A) Rs. 16   (B) Rs. 24
(C) Rs. 14   (D) Rs. 13

17. The cost of one colour box is Rs. 25.72 , the cost of 20 such colour boxes is
(A) Rs. 544.40   (B) Rs. 257.20
(C) Rs. 1028.80   (D) Rs. 514.40

18. $(48 - 12) \div 4 + 6 \times 2 = ?$
(A) 20   (B) 21
(C) 9   (D) 30

19. Mrs . Gupta cooked $\frac{3}{8}$ of the spinach she bought . She had 0.48 kg of spinach left . Find the mass , in g, of spinach bought by her.
(A) 720   (B)768
(C) 1200   (D) 1280

20. Arrange the following numbers in descending order of place value of 7 in them:
The correct order is

| A | 3473968 | C | 3497386 | E | 3926873 |
| B | 3749368 | D | 3498867 | | |

(A) ABCDE   (B) BACED
(C) BACDE   (D) BAECD

21. Add : 3.859 and 2.643
(A) 6.234   (B) 62.323
(C) 5.232   (D) 6.502

22. $5\frac{3}{5} \div 7 =$ _____
(A) $\frac{4}{5}$ (B) $1\frac{4}{5}$
(C) $2\frac{1}{5}$ (D) $\frac{8}{7}$

23. The smallest number of 4- digits exactly divisible by 12,15, 20 and 35 is
(A) 1000   (B) 1160
(C) 1260   (D) 1360

24. What is the value of $10 \times 10 - 10 + 20 \div 10$?
(A) 29   (B) 78
(C) 92   (D) 97

25. Which denominator makes the fraction $\frac{2}{9}$ and $\frac{6}{\Box}$ equivalent ?
(A) 27   (B) 3
(C) 54   (D) 81

26. The S.I unit of length is :
(A) centimetre.   (B) foot.
(C) metre.   (D) kilometre.

27. One centimeter is equal to :
(A) 10 km.   (B) 0.00001km.
(C) 0.01 km.   (D) 0.001km.

28. The instrument used to measure the volume of milk is :
(A) metre scale.   (B) vernier caliper.
(C) measuring cylinder.   (D) stop watch.

29. The layer of atmosphere where airplane flies is
(A) Stratosphere   (B) Ionosphere
(C) Troposphere   (D) Hydrosphere

30. _____ is measured in litres and millimeters.
(A) Time   (B) Volume
(C) Temperature   (D) Length

(Space For Rough Work)

31. One minute = _____ seconds.
(A) 90   (B) 120
(C) 60   (D) 24

32. We measure a line drawn on a paper with the help of :
(A) Meter rod   (B) Ruler
(C) Measuring type   (D) None of these

33. Which is not an example of lever of first order ?
(A) Scissor   (B) Sea-saw
(C) Bottle opener   (D) Pliers

34. A simple machine is to do :
(A) less work
(B) more work
(C) work more conveniently
(D) work less conveniently

35. A third order lever has .... in the middle.
(A) fulcrum   (B) effort force
(C) resistance force   (D) pivot point

36. The molecules of a gas are .... packed :
(A) closely   (B) loosely
(C) compactly   (D) randomly

37. A .... has a definite volume and shape :
(A) gas   (B) liquid
(C) solid   (D) all of these

38. An example of a gas is :
(A) Chocolate syrup   (B) a rock
(C) Pencils   (D) Helium

39. Particles of matter that move faster (like in a gas) have more of what ?
(A) Energy   (B) Mass
(C) Colour   (D) Weight

40. .... makes the salt highly pure :
(A) Decantation   (B) Filtration
(C) Evaporation   (D) sublimation

41. The smallest particle into which a substance may be broken is a/an .... :
(A) molecule   (B) atom
(C) crystal   (D) element

42. The percentage of nitrogen gas in the air is :
(A) 76%   (B) 79%
(C) 81%   (D) 80%

43. Air has weight, so it exerts .... :
(A) pressure   (B) space
(C) both (A) and (B)   (D) none of these

44. The gas which is called green house gas is ?
(A) Oxygen   (B) Nitrogen
(C) Carbon dioxide   (D) Air

45. Air is a/an :
(A) element   (B) mixture
(C) compound   (D) none of these

46. If you were a gardener, what would you plant to grow a new plant of potato ?
(A) Root   (B) Tuber
(C) Leaf   (D) Seed

47. The dried and powdered bark of the Cinchona tree was used to make a medicine for :
(A) Malaria   (B) Cholera
(C) Typhoid   (D) Jaundice

48. During germination _____ in the cotyledons are used for growth.
(A) Water stored   (B) Pollen stored
(C) Food stored   (D) None of these

49. The tiny part of a seed that can grow into a plant is the–
(A) Pistil   (B) Spore
(C) Fruit   (D) Embryo

50. Plants use sunlight to make sugar in the process of
(A) Oxidation   (B) Reproduction
(C) Photosynthesis   (D) Fertilization

51. Animals that live in or on the bodies of other animals.
(A) Parasites   (B) Carnivores
(C) Omnivores   (D) Saprophytes

(Space For Rough Work)

52. The young one of a frog.
(A) Nymph (B) Tadpole
(C) Caterpillar (D) Larvae

53. These animals feed on flesh of dead animals:
(A) omnivores (B) carnivores
(C) herbivores (D) frugivores

54. The back teeth of herbivores are:
(A) broad and strong (B) pointed and sharp
(C) long and narrow (D) blunt and weak

55. Lizards and frogs have:
(A) sharp teeth
(B) long, sticky tongue
(C) Both
(D) None

56. What is the value of $116 + 92 \div 46 - 28 \div 7$
(A) 120 (B) 116
(C) 112 (D) 114

Directions : (57 to 60) Find the missing term

57. ABD, DGK, HMS, MTB, SBL, ?
(A) ZKW (B) ZKU
(C) ZAB (D) XKW

58. MHZ, NIW, OKT, PNQ,?
(A) RRN (B) QRN
(C) QRM (D) QQN

59. 12,13,17,26,42,?
(A) 50 (B) 54
(C) 60 (D) 67

60.

3	5	16
7	9	32
11	13	(?)

(A) 48 (B) 54
(C) 60 (D) 67

61. **'Bird'** is related to **'Nest'** in the same way as **'Bees'** is related to _____ .
(A) Aquarium (B) Hive
(C) Aviary (D) Tree

62. Going 40m to South of her house, Manisha turns left and goes another 10m. Then, turning to the North, she goes 20m and then starts walking to her house. In which direction is she walking now?
(A) North-west (B) North
(C) Sourth-east (D) East

63. If **water** is called **food**, **food** is called **tree**, **tree** is called **sky**, **sky** is called **wall** on which of the following does a 'fruit' grow ?
(A) Water (B) Food
(C) Tree (D) Sky

64. If in a certain code **MANISH** is written as **NZMRHS**, then how will **RANJITA** be written in the same code ?
(A) IZMQRGZ (B) IZMPRGZ
(C) IZMQRHZ (D) IZMQRIZ

Direction (65 to 67) : Find the missing term.

65.

5	4
20	9

3	8
24	11

9	4
?	13

(A) 117 (B) 36
(C) 32 (D) 26

66. 4, 9, 19, 34, 54, ?
(A) 66 (B) 75
(C) 79 (D) 84

67. 2, 5, 7, 12, 19, 31, ?
(A) 41 (B) 50
(C) 60 (D) 71

68. Raj walked 20 metre towards South. Then he turned to his left and walked 25 metre. He then turned to his left and walked 20 metre. He again turned to his right and walked 10 metre. At what distance is he from the starting point and in which direction ?
(A) 35 metre, East (B) 35 metre, North
(C) 40 metre, East (D) 60 metre, East

(Space For Rough Work)

69. **Boat** is related to **Oar** in the same way as **Bicycle** is related to

(A) Road   (B) Wheel

(C) Seat   (D) Paddle

70. If A denotes +, B denotes ×, C denote – and D denotes ÷ then what is the value of

5 B 9 A 7 C 9 D 3 A 6

(A) 55   (B) 54

(C) 45   (D) 50

ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	A	D	A	C	A	B	B	B	D	C	C	B	D	A	B
Ques.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	C	D	B	B	B	D	A	C	C	A	C	B	C	A	B
Ques.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	C	B	C	C	B	B	C	D	A	C	B	B	A	C	B
Ques.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	B	A	C	D	C	A	B	B	A	B	D	A	B	D	A
Ques.	61	62	63	64	65	66	67	68	69	70					
Ans.	B	A	D	A	B	C	B	A	D	A					