

Academic Session: 2021-22

ResoNET-2021

SAMPLE PAPER

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

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

COURSE NAME : PRECIOUS

COURSE CODE : PW

Duration: 1 Hours | Max. Marks: 210



Name : _____

Application Form Number : _____

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

Resonance Eduventures Limited

REGISTERED & CORPORATE OFFICE : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph.No. : 0744-2777777, 0744-2777700 | **Toll Free :** 1800 258 5555 | **FAX No. :** +91-022-39167222 | 73400 10333

Website : www.resonance.ac.in | **E-mail :** contact@resonance.ac.in | **CIN:** U80302RJ2007PLC024029

IMPORTANT INSTRUCTIONS

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	Marks to be awarded			
			No. of Questions	Correct	Wrong	Total
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).

1. MATHEMATICS

Straight Objective Type

This section contains 25 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

- Pavan gave a number 9842975 to Akash and asked him to find the difference between the numbers 2 and 7 in it based on place value. What would this difference be.
(A) 1915 (B) 1940 (C) 1930 (D) 1935
- Starting from the least positive even whole number, write the sum of the first four even numbers.
(A) 20 (B) 12 (C) 28 (D) 18
- What least value should be given to * so that the number $653*47$ is divisible by 11?
(A) 9 (B) 6 (C) 2 (D) 1
- The number of negative integers between -6 and 6 is
(A) 5 (B) 6 (C) 11 (D) 12
- Find the fraction representing the total number of natural number in the collection of number $-3, -2, -1, 0, 1, 2, 3$. What fraction will it be for whole number?
(A) $\frac{4}{7}, \frac{3}{7}$ (B) $\frac{1}{7}, \frac{4}{7}$ (C) $\frac{3}{7}, \frac{6}{7}$ (D) $\frac{3}{7}, \frac{4}{7}$
- What is the value of 108 thousandth multiplied by 15 ones?
(A) 1.62 (B) 15.108 (C) 108.0 (D) 16.20
- Sumit secured 10 marks more than Priya. If Priya secured 'x' marks, then the marks secured by Sumit is _____.
(A) $x - 10$ (B) $10 - x$ (C) $x + 10$ (D) $x \times 10$
- How many numbers are there containing 3-digits?
(A) 999 (B) 899 (C) 900 (D) 800
- Manisha makes 8 gift packs containing biscuits for diwali. She puts 12 chocolate biscuits, 14 coconut biscuits and 8 butter cookies in each pack. With the help of which property, can you calculate the total number of biscuits in 8 packs?
(A) Commutative property (B) Associative property
(C) Distributive property (D) None of these
- The least number which when divided by 6, 15 and 18 leaves a remainder 5 in each case is
(A) 100. (B) 95. (C) 90. (D) 80.
- All integers between 0 and 3 are
(A) 0, 1, 2, 3. (B) 1, 2. (C) $-1, -2$. (D) 1, 2, 3.

Space for Rough Work



12. Which of the following fraction is the greatest?
 (A) $\frac{5}{7}$ (B) $\frac{5}{6}$ (C) $\frac{5}{9}$ (D) $\frac{5}{8}$
13. Rishab had a Rs.1000 note. He bought a geometry box for Rs.64.75, a packet of pencil colours for Rs. 52.89 and 2 books for Rs. 300 each. How much amount was left with him?
 (A) Rs.285.86 (B) Rs.582.36 (C) Rs.588.56 (D) Rs. 282.36
14. The sum of four consecutive positive integers is 'x'. In terms of 'x', what is the sum of second and third integers?
 (A) $\frac{x}{2}$ (B) $\frac{x-12}{4}$ (C) $\frac{x-6}{2}$ (D) $2x + 6$
15. Find the value of CXVI + XIII + VI + CCLXV - XVI
 (A) CD (B) CCCLXXXIV (C) CCCLXXXV (D) M
16. Between any two consecutive whole numbers, there is/are
 (A) no whole number. (B) one whole number.
 (C) two whole numbers. (D) infinite whole numbers.
17. Product of two numbers is 2160 and their H.C.F is 12. The L.C.M of these numbers is
 (A) 1030. (B) 720. (C) 320. (D) 180.
18. Fill in the blanks in $7 + \dots = 0$
 (A) -8. (B) $|-7|$ (C) 0. (D) -7 .
19. Mohan had 49 pencils. Shyam had 70 pencils. Mohan used his 21 pencils and Shyam used his 35 pencils. Fraction of pencils used by:
 (A) Shyam was larger. (B) Mohan was larger. (C) both were equal. (D) Shyam was lesser.
20. A piece of cloth 4 m in width and 5 m in length has to be covered by square block prints. If each side of the square block is 0.2 m in length. How many such squares can be printed on the cloth?
 (A) 700 (B) 690 (C) 806 (D) 500
21. Which of the following statement is correct?
 (A) $m + m = 3m$ (B) $mm = m$ (C) $2m + 6 = 6 + 2m$ (D) $m + 5m + 6 = 11m$
22. A lady parked her car on the 6th floor and took a lift up 17 floors to the finance Department. She then went down 9 floors to the Tax Department. On which floor would you find the lady?
 (A) 14th (B) 15th (C) 23rd (D) 26th
23. Number of whole numbers lying between -5 and 5 is
 (A) 10 (B) 3 (C) 4 (D) 5

Space for Rough Work

24. In a farm, there were 3c cows, 5p pigs and 11 d ducks. Express in terms of c, d and p, the total number of legs of the remaining animals if 3 cows, 2 pigs and 4 ducks were sold.
 (A) $20c + 22p + 12d - 28$ (B) $20c + 20p + 22d - 28$
 (C) $20c + 15p + 20d - 32$ (D) $12c + 20p + 22d - 28$
25. A man spends $\frac{4}{15}$ of his monthly income on house rent, $\frac{1}{2}$ on food and $\frac{1}{5}$ on other items. He saves Rs. 800 in the end. What was his monthly income?
 (A) Rs.24,000 (B) Rs. 22,000 (C) Rs. 25,000 (D) Rs. 20,000

2. PHYSICS

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

26. The revolution of moon around the earth is an example of
 (A) non-periodic. (B) curvilinear motion.
 (C) periodic motion. (D) oscillatory motion.
27. Which of the following force is not electromagnetic in nature?
 (A) Tension on a string (B) Weight of a body
 (C) Elastic force in spring (D) Force of friction
28. A first order lever always has in the middle.
 (A) fulcrum (B) effort force (C) resistance force (D) mechanical advantage
29. The S.I unit of length is
 (A) centimetre. (B) foot. (C) metre. (D) kilometre.
30. Which of the following is responsible for the flow of water in rivers?
 (A) Magnetic force (B) Electrostatic force (C) Force of friction (D) Gravitational force
31. A third order lever has in the middle.
 (A) fulcrum (B) effort force (C) resistance force (D) pivot point
32. Motion of light is called
 (A) non periodic motion (B) periodic motion. (C) circular motion. (D) rectilinear motion.
33. A force can :
 (A) change the direction of a moving body
 (B) change the state of rest or of uniform motion of a body
 (C) change the shape of a body
 (D) all of the above

Space for Rough Work

34. Scissor is an example of which type of lever?
(A) First (B) Second (C) Third (D) All type
35. A body is in translatory equilibrium if:
(A) resultant force on it is zero (B) it is at rest
(C) it is in uniform motion (D) all are correct

3. CHEMISTRY

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

36. Solid-solid mixture can be separated by:
(A) handpicking (B) sieving (C) filtration (D) evaporation
37. Twisting of silk is called:
(A) Throwing (B) shredding (C) shearing (D) none
38. After rubbing with sand paper, which of following will shine:
(A) copper (B) aluminium (C) plastic (D) Both A and B
39. Decantation is limited to:
(A) solid-solid heterogeneous mixture
(B) solid-liquid or liquid-liquid heterogeneous mixture
(C) solid-liquid homogeneous mixture
(D) liquid-liquid homogeneous mixture
40. What are the properties of cotton fibre?
(A) fluffy nature (B) white colour (C) moisture absorbent (D) all of these
41. The substance, which catches fire easily is:
(A) wet cloth (B) green leaves (C) wet paper (D) wood
42. The strainer used to remove tea leaves from tea is an example of a:
(A) filtration (B) decantation (C) loading (D) sedimentation
43. Silk thread woven by silkworm around its larva is made up of :
(A) carbohydrates (B) fat (C) protein (D) oil
44. Metals often lose their shine and appear dull due to:
(A) action of air (B) action of moisture
(C) Action of air & moisture (D) action of CO₂
45. Which of the following will float on water?
(A) feather (B) coin (C) iron nail (D) none

Space for Rough Work

4. BIOLOGY

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

46. When a flower has all the sets of whorls it is described as _____ flower.
(A) Complete (B) Incomplete (C) Zygomorphic (D) Actinomorphic
47. Honeybee makes honey from
(A) Pollen (B) Petals (C) nectar (D) bud
48. Earthworm breathe through their
(A) skin (B) gill (C) lungs (D) stomata
49. Store food in leaves, stems and fruits in the form of _____
(A) Starch (B) Glycogen (C) Cellulose (D) Glucose
50. Undigestible material present in food is known as
(A) Vitamins (B) Water (C) Roughage (D) Protein
51. Place where living beings live is called their -
(A) Habitat (B) Adaptation (C) Acclimatiation (D) None
52. When the pollination occurs within the same flower it is known as :-
(A) Cross-Pollination (B) Self-Pollination (C) Both (A) and (B) (D) None of these
53. Mineral which is required for keeping our bones healthy
(A) Calcium (B) Phosphorus (C) Both (A) and (B) (D) None
54. Process of Producing energy by the break down of food is called
(A) Respiration (B) Excretion (C) Nutrition (D) None
55. Egg yolk is rich in _____ and egg albumin is rich in _____
(A) Fat, Protein (B) Carbohydrate, protein
(C) Protein, fat (D) Protein, carbohydrate

5. MENTAL ABILITY

Straight Objective Type

This section contains 15 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

Directions : (56 to 57) Find the missing numbers.

56. 3, 1, 4, 5, 9, 14, 23, ?
(A) 32 (B) 37 (C) 41 (D) 28

Space for Rough Work

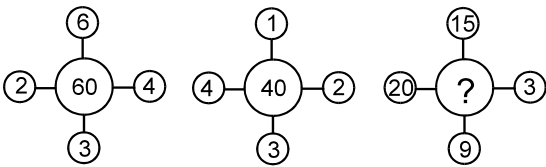


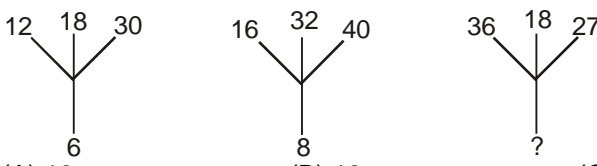
57. 3, 6, 18, 72, 360, ?
 (A) 720 (B) 1080 (C) 1600 (D) 2160

Directions : (58 to 59) Find the missing term.

58. LRX, DJP, VBH, NTZ, ?
 (A) ELS (B) FMR (C) GKS (D) FLR
59. MAD, OBE, SCH, YDM, ?
 (A) HET (B) HES (C) GET (D) UAE

Directions : (60 to 61) Find the missing term in the given figure.

60. 
 (A) 235 (B) 141 (C) 144 (D) 188

61. 
 (A) 18 (B) 12 (C) 9 (D) 6

62. Arrange the words in the alphabetical order and tick the one that comes second.
 (A) Explosion (B) Emergency (C) Ecstasy (D) Eager

Directions : (63) In each of the following questions, a group of letters is given which are numbered 1, 2, 3, 4, 5 and 6. Below are given four alternatives containing combinations of these numbers. Select that combination of numbers so that letters arranged accordingly, form a meaningful word.

63. C E L S M U
 1 2 3 4 5 6
 (A) 4, 6, 3, 5, 2, 1 (B) 5, 6, 4, 1, 3, 2 (C) 4, 6, 5, 2, 3, 1 (D) 5, 2, 3, 1, 6, 4
64. If rains is called pink, pink is called cloud, cloud is called water, water is called breeze, and breeze is called moon, what do you wash your hands with?
 (A) Water (B) Rain (C) Breeze (D) Moon
65. 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

Space for Rough Work

66. Amar travels one km due East, then 5 km due South, then 2 km due East and finally 9 km due North. How far is from the starting point?
 (A) 16 km (B) 8 km (C) 6 km (D) 5 km
67. Amit walks 2 km South, turned right and walked 1 km, again turned North and walked 5 km, turned East and walked 5 km. How far is he from the starting point?
 (A) 3 km (B) 7 km (C) 5 km (D) 6 km

Directions : (68) Study the following information carefully and answer the questions given below it.

- (i) Eleven students A, B, C, D, E, F, G, H, I, J and K are sitting in a row of the class facing the teacher.
 (ii) D, who is to the immediate left of F, is second to the right of C.
 (iii) A, is second to the right of E, who is at one of the ends.
 (iv) J is the immediate neighbour of A and B and third to the left of G.
 (v) H is to the immediate left of D and third to the right of I.

68. Which of the following groups of friends is sitting to the right of G?
 (A) IBJA (B) ICHDF (C) CHDF (D) CHDE
69. If **x** stands for **addition**, **<** for **subtraction**, **+** stands for **division**, **>** for **multiplication**, **–** stands for **equal to**, **÷** for **greater than** and **=** stands for **less than**, state which of the following is true?
 (A) $3 \times 2 < 4 \div 16 > 2 + 4$ (B) $5 > 2 + 2 = 10 < 4 \times 2$
 (C) $3 \times 4 > 2 - 9 + 3 < 3$ (D) $5 \times 3 < 7 \div 8 + 4 \times 1$
70. If 'P' means '+', 'R' means 'x', 'S' means '-', 'T' means '÷' then what is the value of
 $5 R 9 P 7 S 9 T 3 P 6 = ?$
 (A) 54 (B) 128 (C) 59 (D) 55

Space for Rough Work

ANSWER KEY_CLASS – VII

SAMPLE PAPER

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

Space for Rough Work