SCHOLARSHIP *Cum* ADMISSION TEST

Sunday,
31st December 2023

RPS GROUP OF SCHOOLS
Under the aegis of RPS Education Society, M/Garh

For Grades **III** to **XI**

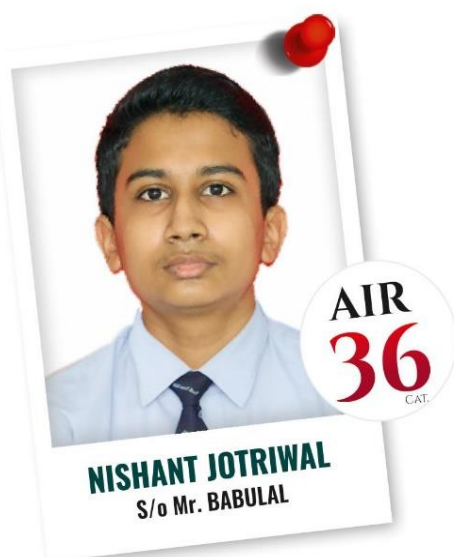## Appearing for Class VII

Scholarship Aspirants Today
Victors in Life Tomorrow !

At **RPS** *Excellence is a* **HABIT**

JEE ADVANCED-2023

AIR 36 CAT.

NISHANT JOTRIWAL
S/o Mr. BABULAL

NEET -2023

700 MARKS

SHRUTI
D/o Ms. SUNITA
& Mr. KANWAL SINGH

SUPER ACHIEVEMENTS OF **RPS** GROUP OF SCHOOLS
Session: 2023-24

450+ STUDENTS **NEET**

472+ STUDENTS **IIT-JEE** Main

125+ STUDENTS **IIT-JEE** Advanced

59+ STUDENTS **CLAT**

145+ STUDENTS **NDA**

39 STUDENTS **CA**

(Space for rough work)

(Space for rough work)

RPS GROUP OF SCHOOLS
under the aegis of RPS Education Society, M/Garh

EXCELLENCE THROUGH FAITH & COMMITMENT
RPSGOS

BRITISH COUNCIL

25
YEARS OF EXCELLENCE IN EDUCATION

APPEARING FOR CLASS VII

| Science: 1-20 | Maths: 21-40 | Social Science: 41-60 | English: 61-80 |

TIME: 90 Minutes   **M.M. 80**

Student's Name: ……………….…..   Father's Name : …..….…....   Mobile No.: …………….……

Address …..…………………………………………………………………………………...……….

Present School: …..……………………………………………………………………...………...

General Instructions:

1. *Duration of Test is 90 minutes and Question Paper contains 80 Questions with maximum 80 marks.*
2. *Use of gadgets is not allowed.*
3. *Student should abide by the instructions issued during the examination by the invigilator or the centre incharge.*
4. *Before attempting the question paper ensure that it contains all the pages and that no question is missing.*
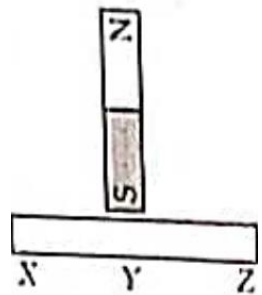5. *There is No Negative marking.*

Correct Method

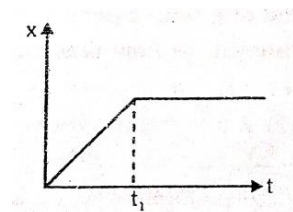Wrong Method

Physics (07 Marks)

1. When sunlight falls on a red rose, it appears red because

    (a) It is a red rose   (b) Rose absorbs red colour of the light and reflects remaining colours

    (c) Rose reflects red colour and absorbs the remaining colours of the light.

    (d) The wavelength of red light increases after being reflected from rose while the wavelengths
        of remaining colours remain same.

2. A car travels a distance from A to B at a speed of 40 km/h and returns to A at a speed of 30 km/h.
    What is the average speed for the whole journey ?

    (a) 10 km/h   (b) 34.3 km/h   (c) 1200 km/h   (d) 70 km/h

3. The diagram shows a magnet being used to pick up a steel bar. The S- pole of the magnet is close
    to the centre Y of the steel bar as shown. What are the poles induced in the steel bar at X, Y and
    Z ?

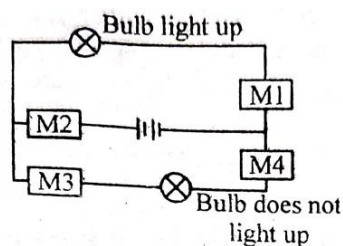 | | Pole induced at x | Pole induced at Y | Pole induced at Z |
    |-----|-------------------|-------------------|-------------------|
    | (a) | N | N | N |
    | (b) | N | S | N |
    | (c) | S | N | S |
    | (d) | S | S | S |

4. The figure shows the displacement – time graph of a particle moving along the x- axis. Which of
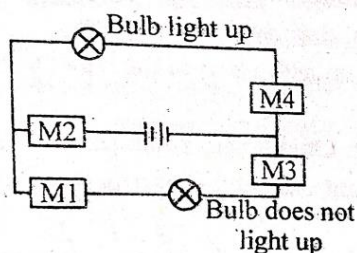   the following statement will describe the motion of the particle correctly ?

    (a) The particle is moving continuously.

    (b) The particle is at rest.

    (c) The velocity of the particle increases upto time t_1 and then become constant.

    (d) The particle moves with a constant velocity upto time t_1 and then stops.

5. Two lamps X and Y are connected in series. The lamp X glows less bright than Y. Then

    (a) Then resistance of X is greater than the resistance of Y.

    (b) The resistance of X is lesser than the resistance of Y.

    (c) The resistance of X is equal to the resistance of Y.

    (d) There is no relation between the resistances of X and Y.

6. In the diagram shown below, four materials, M_1, M_2, M_3 and M_4, are connected in a circuit to find out which material is a conductor of electricity.
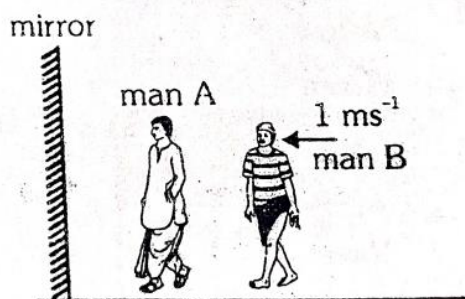

Bulb light up

M1

M2

M4

M3

Bulb does not light up

The material are then rearranged in the same circuit to find out which material is a conductor of electricity.

Bulb light up

M4

M2

M3

M1

Bulb does not light up

What conclusion can be made from the above results ?

(1) M1 is conductor of electricity   (2) M2 is insulator of electricity

(3) M3 is insulator of electricity   (4) M4 is conductor of electricity

(a) 1 and 4   (b) 2 and 3   (c) 1, 2 and 4   (d) 1, 3 and 4

7. Man A is facing a plane mirror while man B is running towards him from behind. If man B is running at a speed of 1 ms^{-1}, how fast does man B seem to be running towards man A ?

mirror

man A

1 ms^{-1}

man B

(a) 2 ms^{-1} (b) 1 ms^{-1} (c) 0.5 ms^{-1} (d) 2.2 ms^{-1}

Chemistry (07 Marks)

8. An object that sinks in water :-

(a) Wax   (b) Crystals   (c) any oil   (d) none of these

9. A liquid that mixes well in water is :

(a) Vinegar   (b) oil   (c) wax   (d) none of these

10. The yarn is wound on big reels which are called :

(a) bailing   (b) bobbins   (c) retting   (d) none of these

11. The ratio of nitrogen to oxygen in the air is :

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

12. _____ air is used to inflate tyres of vehicles.

    (a) Compressed   (b) Heavy   (c) Condensed   (d) Liquid

13. A mixture of iodine and sand can be separated by :

    (a) Decantation   (b) Centrifugation   (c) Filtration   (d) Sublimation

14. The grains which are fall vertically down on the ground –

    (a) Heavier   (b) lighter   (c) stronger   (d) None of these

Biology (06 Marks)

15. How many occipital condyles do humans possess ?

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

16. Which of the adaptive radiation is used by poikilotherms to protect against extreme heat ?

    (a) Migration   (b) Cooling   (c) Aestivation   (d) Hibernation

17. What is the first step in the process of plant growth ?

    (a) Seed fermentation   (b) Seed desiccation

    (c) Seed germination   (d) Seed dormancy

18. Which gas is generated on the decomposition of the organic matter present in sanitary landfill ?

    (a) Oxygen   (b) Methane   (c) Nitrogen   (d) Hydrogen

19. Starch can be tested by using

    (a) Iodine solution   (b) Caustic soda

    (c) Copper sulphate   (d) Fehling's solution

20. 'X' is a plant which is an autotroph as well as a heterotroph. What could 'X' be –

    (a) Pitcher plant   (b) Algae   (c) Cuscuta   (d) Fungi

Mathematics (20 Marks)

21. What will be the sum of the prime factors of 1729 ?

    (a) 39   (b) 32   (c) 34   (d) 38

22. Which of the following number in roman numerals is incorrect ?

    (a) LLX   (b) XXI   (c) LXXX   (d) LX

23. Ajay stays in a hotel that charges Rs. 200 for room, Rs. 60 for breakfast and Rs. 80 for lunch per day. He stayed there for 10 days, how much will be his total bill amount while checkout ?

    (a) Rs. 2700   (b) Rs. 4000   (c) Rs. 3400   (d) Rs. 3900

24. How many times does the digit 2 occur between 1 and 100 ?

(a) 12   (b) 20   (c) 9   (d) 10

25. Circumference of a circular disc is 88 cm. Its radius is

(a) 8 cm   (b) 11 cm   (c) 14 cm   (d) 44 cm

26. Given two whole numbers a and b, which of the following may not always be whole numbers.

(a) a – b   (b) 2a + b   (c) a × b   (d) a + b

27. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

(a) 95   (b) 180   (c) 90   (d) 185

28. Which of the following statement is false ?

(a) $23 + (-31) = 8$ (b) Every negative integer is less than 5

(c) $|-18| > |-13|$ (d) $-20 - (-5) = -15$

29. Which of the following statement is true ?

(a) $(-8) - 3 = (-3) - (-8)$ (b) $-5 - 4 > -12 + 2$

(c) $(-15) - (-22) < (-22) - (-15)$ (d) $-13 > -8 - (-6)$

30. What fraction of the natural numbers from 2 to 12 are prime numbers ?

(a) $\dfrac{1}{11}$ (b) $\dfrac{10}{11}$ (c) $\dfrac{5}{11}$ (d) $\dfrac{6}{11}$

31. What is the mean of first 10 composite numbers ?

(a) 10.2   (b) 11.3   (c) 11.2   (d) 11.4

32. 0.7499 lies between

(a) 0.74992 and 0.75   (b) 0.749 and 0.75

(c) 0.759 and 0.799   (d) 0.7 and 0.74

33. What will be the cost of tiling a rectangular plot of area 800 sq. m, if the cost of tiling 100 sq. m is Rs. 600.

(a) Rs. 14   (b) Rs. 48   (c) Rs. 4800   (d) Rs. 900

34. A regular polygon having n sides and perimeter m units, then length of each side of polygon is

(a) $\dfrac{m}{n} - 1$ (b) $\dfrac{n}{m}$ (c) mn   (d) none of these

35. The diameter of a circle whose radius is $\dfrac{r}{2}$ is equal to

(a) $\dfrac{r}{4}$ (b) r^2 (c) r   (d) 2r

36. Two numbers are in the ratio 3 : 5. If the sum of numbers is 144, then the smaller number is

(a) 72   (b) 90   (c) 54   (d) 48

37. The ratio of the number of sides of a square and the number of edges of a cube is

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

38. Which of the following is correct :

(a) 3 : 5 = 2 : 5   (b) 3 : 5 = 15 : 25   (c) 7 : 3 = 12 : 3   (d) 5 : 15 = 8 : 20

39. If a : b = 5 : 9 and b : c = 4 : 7, then a : b : c is

(a) 5 : 36 : 7   (b) 20 : 36 : 63   (c) 5 : 9 : 63   (d) None of these

40. What is the value of $\dfrac{2013 \times 2.013}{201.3 \times 20.13}$?

(a) 0.01   (b) 0.1   (c) 1   (d) 10

Social Science (20 Marks)

41. Who was the adviser of Chandragupta Maurya ?

(a) Buddha   (b) Tansen   (c) Kautilya   (d) Birbal

42. Who could not participate in the assemblies of ganas ?

(a) Women   (b) Dasas   (c) Kammakaras   (d) All of these

43. Which were the two words used to describe the people or the community as a whole ?

(a) Jana and Vish   (b) Aryas and Dasas   (c) Both (a) and (b)   (d) None of these

44. Inamgaon was situated on the river Ghod which was the tributary of –

(a) Bhima   (b) Ravi   (c) Indus   (d) Ganga

45. The Great Bath was found in ……...

(a) Ganweriwala   (b) Harappa   (c) Rakhi garhi   (d) Mohenjodaro

46. Name the crops which were first grown by early humans ?

(a) Wheat and Rice   (b) Cotton and Barley

(c) Wheat and Barley   (d) Rice and Cotton

47. Which is the most recognizable constellation ?

(a) The Saptarishi   (b) The Moon   (c) The Sun   (d) The Mars

48. In which ocean are Tonga Islands situated ?

(a) Indian Ocean   (b) Atlantic Ocean   (c) Pacific Ocean   (d) None of these

49. The circle that divides the day from night on the globe is called …………
(a) Prime Meridian   (b) Tropic of Capricorn
(c) Tropic of Cancer   (d) Circle of Illumination

50. Maps showing the distribution of forests are …………
(a) Physical map   (b) Thematic map   (c) Political map   (d) Distributaries map

51. Which gas is the major constituent of the atmosphere by percentage ?
(a) Oxygen   (b) Carbon dioxide   (c) Carbon monoxide   (d) Nitrogen

52. The Indian Islands in the Arabian sea are known as

(a) Andaman and Nicobar Islands   (b) Maldives

(c) Lakshadweep   (d) None of these

53. Who coined the phrase "Unity in Diversity" ?

(a) Mahatma Gandhi   (b) Dr. B. R. Ambedkar

(c) Jawahar Lal Nehru   (d) Indira Gandhi

54. Dr. B. R Ambedkar belonged to which caste ?

(a) Mahar   (b) Nair   (c) Brahmin   (d) Ezhava

55. In which type of government do the kings or queens not have to explain their action or decision they take ?

(a) Democracy   (b) Monarchy   (c) Both (a) and (b)   (d) None of these

56. Zila Parishad works at ……….

(a) District level   (b) Block level

(c) Village level   (d) None of these

57. Land records at the village level are taken care of by the _____

(a) Chaukidars   (b) Tehsildar   (c) District Collector   (d) Patwari

58. Onam festival is mainly celebrated in ………

(a) Punjab   (b) Gujarat   (c) Kerala   (d) Bihar

59. Mathura became the second capital of

(a) Pandyas   (b) Kushanas   (c) Pallavas   (d) Guptas

60. What was the capital of Chalukyas ?

(a) Aihole   (b) Mathura   (c) Kanchipuram   (d) Madurai

English (20 Marks)

Give appropriate answer :

61. We have _____ university in our city.

(a) a   (b) an   (c) the   (d) no article

62. _____ sugar is bad for your health.

(a) The   (b) A   (c) An   (d) no article

63. **Time** is money.

(a) Noun   (b) Pronoun   (c) Verb   (d) Adjective

64. Have you got _____ apple in your bag ?

(a) some   (b) any   (c) many   (d) none of these

65. How much _____ do you need ?

(a) bananas   (b) oranges   (c) eggs   (d) sugar

66. On the left, you can see Simon. _____ is my brother.

(a) That   (b) He   (c) It   (d) Him

67. This photo was taken by me. (pick pronoun)

    (a) This   (b) was   (c) by   (d) me

68. Kelvin was _____ mathematician.

    (a) excellent   (b) more excellent   (c) most excellent (d) an excellent

69. This dress is mine. (Pick adjective)

    (a) This   (b) dress   (c) mine   (d) none of these

70. He was sleeping upstairs. (Tell the kind of adverb)

    (a) Manner   (b) Place   (c) Time   (d) Frequency

71. The bride was _____ dressed.

    (a) beautiful   (b) beauty   (c) beautifully   (d) as beautiful as

72. I have been _____ (try) to bake a perfect cake since morning.

    (a) tries   (b) try   (c) trying   (d) tried

73. He was _____ (bite) by a snake.

    (a) bitten   (b) bite   (c) biting   (d) bit

74. She _____ (get) the mail last week.

    (a) gets   (b) gotten   (c) get   (d) got

75. The food was distributed _____ the children.

    (a) among   (b) between   (c) in   (d) of

76. The man died _____ heavy fever.

    (a) with   (b) at   (c) of   (d) in

77. Work hard lest you ………….. fail.

    (a) could   (b) should   (c) might   (d) need

78. If I were a judge, I _____ do fair justice.

    (a) will   (b) shall   (c) would   (d) should

79. Many a girl _____ joined computer classes.

    (a) have   (b) has   (c) were   (d) none of these

80 The major, with all his soldiers _____ killed in the explosion.

    (a) was   (b) were   (c) are   (d) none of these

(Space for rough work

RPSians Add Another Glorious Chapter to the Spectacular Saga of

JEE ADVANCED-2023

NISHANT JOTRIWAL
S/o Mr. BABULAL
AIR 36 CAT.

VIVEK
S/o Mr. SHAILENDER
AIR 56 CAT.

CLAT-2023

KABIR DABLA S/o
Mr. SUKHBIR SINGH & Ms. VANDANA
HARYANA RANK 1 CAT.

JATIN S/o
Mr. KULDEEP & Ms. DIVYA
HARYANA RANK 2 CAT.

NEET -2023

SHRUTI
D/o Ms. SUNITA & Mr. KANWAL SINGH
700 MARKS

TANIYA SINGHAL
D/o Ms. MANJU SINGHAL & Mr. SUNIL KUMAR
690 MARKS

RIYA SHARMA
D/o Ms. KAVITA SHARMA & Mr. MAHENDRA SHARMA
690 MARKS

RAHUL
S/o Ms. SHASHI & Mr. KRISHAN KUMAR
690 MARKS

AAYUSH GARG
98.4% MARKS
S/o Mr. SANJAY GARG
Ms. REKHA
Class XII Topper

CBSE Class XII -2023	
97% & ABOVE — 37+ STUDENTS	95% & ABOVE — 144+ STUDENTS
90% & ABOVE — 484+ STUDENTS	80% & ABOVE — 1316+ STUDENTS

CBSE Class X -2023	
97% & ABOVE — 96+ STUDENTS	95% & ABOVE — 311+ STUDENTS
90% & ABOVE — 918+ STUDENTS	85% & ABOVE — 1429+ STUDENTS

DEEKSHA YADAV
99% MARKS
D/o Mr. HEMANT K. YADAV
Ms. SARITA
Class X Topper

SPORTS ACHIEVEMENTS

1st Position
CBSE Cluster XV Athletics

2nd Position
CBSE Volleyball Cluster

2nd Position (Girls)
CBSE Basketball Cluster

SUPER ACHIEVEMENTS OF RPS GROUP OF SCHOOLS
Session: 2023-24

| 450+ STUDENTS NEET | 472+ STUDENTS IIT-JEE Main | 125+ STUDENTS IIT-JEE Advanced | 59+ STUDENTS CLAT | 145+ STUDENTS NDA | 39 STUDENTS CA |

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