ALL INDIA RPS OLYMPIAD 2021

(Organized by RPS Education Society Mahendergarh Haryana)

M.M. 60   **Class 6ᵗʰ**   **Time: 60 Minutes**

English (15)

Q. 1   Find the correctly spelt word.

(a) Efflorascence   (b) Efflorescence   (c) Eflorescence   (d) Efllorescence

Q.2   The punch made the boxer _____ with pain.

(a) grumble   (b) gape   (c) wince   (d) fumble

Q. 3   All the teachers _____ that Sunita would stand at the top in the examination, but she _____ short of their expectation.

(a) dreamt, achieved   (b) presumed, failed

(c) expected, ran   (d) thought, fell

Q.4.   Choose the word which is opposite in meaning to the given word.

IMPEDE

(a) Obstruct   (b) Advance   (c) Linger   (d) Guarantee

Q. 5.   Choose the plural of the word given in bracket.

Scientists are always studying the _____ (phenomenon) of nature.

(a) phenomenon   (b) phenomenones

(c) phenomena   (d) phenomenas

Q.6.   Ankit and Nikit are two brothers, the _____ is very clever.

(a) later   (b) latter   (c) last   (d) latest

Q. 7   Keep the ball **rolling**. The underlined word is

(a) present participle   (b) infinitive   (c) finite verb   (d) gerund

Q. 8.   The farmers _____ their farms, if they had known that a thunderstorm was approaching.

(a) will leave   (b) would leave   (c) will have left   (d) would have left

Q. 9.   The father was angry and cast _____ his son.

(a) down   (b) about   (c) off   (d) of

Q. 10.   When she parted _____ her parents, her eyes were full of tears.

(a) from   (b) away   (c) off   (d) with

Q. 11.   Sweet _____ the uses of adversity.

(a) are   (b) is   (c) likes   (d) has been

Q. 12. Neither Mohan nor Sohan has left _____ place.

(a) their (b) theirs (c) its (d) his

Q. 13. Two children helped _____.

(a) one another (b) each other (c) theirselves (d) themself

Direction: (Q 14 -15) A sentence has been given in Direct/ Indirect speech. Out of the four alternatives, select the one which best expresses the same sentence in Indirect/ Direct speech.

Q. 14. Dinesh asked, "Are you going to the party tomorrow, Eliza?"

(a) Dinesh asked whether Eliza was going to the party the next day.

(b) Dinesh asked Eliza you are going to the party the next day.

(c) Dinesh asked Eliza whether she was going to the party the next day.

(d) Dinesh asked if Eliza was going to the party the following day.

Q. 15. Filled with shame, she replied that she could not help snoring and hoped that her son would understand.

(a) "I can't help snoring son", she said, filled with shame. "I hope you will understand."

(b) " I am sorry but I can't help snoring, son," she said. "I hope you understand."

(c) " I hope you understand that I can't help snoring, " she told her son.

(d) " Son, I can't help it, but I hope you understand that I snore, " she said.

Maths (15)

Q. 16   One million = _____.

(a) 1 lakh (b) 10 lakh (c) 100 lakh (d) 1 crore

Q. 17 $\dfrac{1}{6} + \left(\dfrac{55}{14} - \dfrac{1}{2} \right)$ is the reciprocal of

(a) $3\dfrac{28}{42}$ (b) $4\dfrac{29}{151}$ (c) $\dfrac{42}{151}$ (d) $3\dfrac{25}{42}$

Q. 18   The surface of which of the following does not represent a plane?

(a) A book (b) Wall (c) Floor of a room (d) A football

Q. 19   The side of a regular pentagonal shaped metallic wire measures 12cm. If the wire is stretched out and made into a rectangle of width 12cm, what will be the area of the rectangle?

(a) 216 cm^2 (b) 144 cm^2 (c) 324 cm^2 (d) 72 cm^2

Q. 20   The HCF of two co-primes is

(a) the smaller number (b) the larger number (c) 1 (d) None of these

Q21 A wire is cut into several small pieces. Each of the small pieces is bent into a square of side 3cm. If the total area of the small squares is 108cm^2, then find the original length of the wire.

(a) 108cm   (b) 144cm   (c) 136cm   (d) 138cm

Q.22 The number of times an observation is repeated in a data is called

(a) Bar graph   (b) Pictograph   (c) Pie chart   (d) Frequency

Q. 23 The fish caught by Yashika weighted $2\frac{3}{4}\,kg$ and the fish caught by Kanika was of weight $10\frac{4}{5}\,gm$ less than that of Yashika's. Find the weight of fish caught by Kanika.

(a) 2.739kg   (b) 2.825kg   (c) 3.025kg   (d) 2.892kg

Q. 24 What is 7A, if A is the number of line of symmetry of rectangle?

(a) 4   (b) 7   (c) 14   (d) 21

Q. 25 What is the sum of faces and vertices of a tetrahedron?

(a) 6   (b) 7   (c) 4   (d) 8

Q. 26 Absolute value of -2 lies between

(a) –1 and 1   (b) –3 and –1   (c) 1 and 3   (d) 3 and 5

Q. 27 Simplify: (–9) +9 + (–9) +9 + (–9) .... till 99 terms.

(a) –9   (b) 9   (c) 0   (d) 18

Q. 28 The product of a non-zero whole number and its successor is always

(a) an even number   (b) a prime number

(c) an odd number   (d) divisible by 3.

Q. 29. Light travels 28×1000 km in 1 sec. How long (in hours) will it take to travels 504000000 km?

(a) 5 hours   (b) 4 hours   (c) 3 hours   (d) 6 hours

Q. 30 The ratio of the marks secured by Riya and Sonia 5:6. If Sonia secured 78 marks, what did Riya score ?

(a) 50   (b) 35   (c) 60   (d) 65

Science (15)

Q. 31 When more than one electric cell have to be used, they are joined to the electric circuit in such a way that _____.

(a) the positive terminal of one electric cell is connected to the positive terminal of the another electric cell

(b) the negative terminal of one electric cell is connected to the negative terminal of the another

electric cell

(c) the positive terminal of one electric cell is connected to the negative terminal of the

another electric cell

(d) both the cells are parallel to each other with similar terminals in same side.

Q. 32 The figure shows a ring magnet X, floating above another ring magnet, Y. This is because

_____.
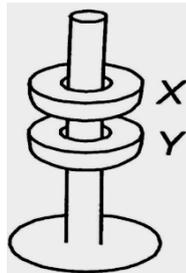
(a) Magnet X is lighter than magnet Y

(b) Magnet Y is more powerful than magnet X

(c) The like poles of both magnets are facing each other and they repel each other

(d) The unlike poles of both magnets are facing each other and they attract each other.

Q. 33. An atlas of India is drawn by taking scale 10cm =15000km. If the actual distance between the cities

of Bhopal and Cochin is 1500km, the distance between the two places in the atlas will be _____

cm.

(a) 102   (b) 1   (c) 10000   (d) 1000

Q. 34   **List -1**   **List-II**

(P) Shadow of the moon falling on the earth   1. Reflection

(Q) Pinhole camera   2. Solar eclipse

(R) Full moon day   3. Inverted image

(S) Bouncing back of light   4. Lunar eclipse

Code:

	P	Q	R	S
(a)	1	2	3	4
(b)	2	3	4	1
(c)	4	3	2	1
(d)	1	3	2	4

Q. 35. In a pinhole camera, what kind of substance is used for a screen?

    (a) Transparent   (b) Opaque   (c) Translucent   (d) All (a), (b) and (c)

Q. 36. Match the following:

Column-A	Column-B
(i) Cotton	(a) Smell of charred meat
(ii) Wool	(b) Smell of burning plastic
(iii) Silk	(c) Smell of burning paper
(iv) Synthetic fibre	(d) Smell of burning hair

    (a) (i-d), (ii-a), (iii-b), (iv-c)   (b) (i-b), (ii-c), (iii-a), (iv-d)

    (c) (i-c), (ii-d), (iii-a), (iv-b)   (d) (i-c), (ii-a), (iii-d), (iv-b)

Q. 37. Which of the following statements is/are true?

    (i) Everything in the universe is compound.

    (ii) Gases occupy all the space available to them.

    (iii) The three states of matter are always inter convertible.

    (a) Only (i)   (b) Only (ii)   (c) Both (i) and (ii)   (d) Both (ii) and (iii)

Q. 38. Which of the following is not a characteristic of a mixture?

    (a) The components of a mixture have not fixed ratio by weight.

    (b) The components of a mixture retain their original properties.

    (c) The components of a mixture can be separated easily.

    (d) Mixture are always soluble in water.

Q. 39. Read the given statements and mark the correct option.

    Statement 1: A new substance is formed during a physical change.

    Statement 2: Beating of aluminium metal to give aluminium foil is a physical change.

    (a) Statement 1 is correct and statement 2 is incorrect.

    (b) Statement 1 is incorrect and statement 2 is correct.

    (c) Both statements 1 and 2 are correct.

    (d) Both statement 1 and 2 are incorrect.

Q. 40. Which of the following are correct for food nutrients?

	Test	Observation	Result
1.	Potato + Dil.iodine	Blue-black colour	Starch present
2.	Soybean + $CuSO_4$+ Dil. NaOH	Voilet colour	Protein absent
3.	Flour + Dil. iodine	Yellow colour	Protein present
4.	Egg white + Dil.iodine	No blue-black colour	Starch absent

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

Q. 41. Mountaineers carry oxygen cylinders while climbing high mountains because _____.

    (a) it is difficult to breathe at high altitudes

    (b) the air is thinner at higher altitudes

    (c) on moving up the oxygen present in the air reduces

    (d) all of these

Q. 42. Which of the following is incorrect for the organism as shown?

    (a) It lives in extremely cold conditions where the water is always below the freezing temperature.

    (b) Its body is streamlined, feet are webbed and is excellent swimmer.

    (c) It is a solitary animal who live alone near the sea.

    (d) It huddles together in groups to keep each other warm.

Q. 43. A specific characteristic that an organism can pass to its offspring is called :

    (a) function   (b) structure

    (c) embryo   (d) trait

Q. 44. Which of the following is a mismatched pair?

    (a) Sternum   - Breast bone

    (b) Humerus   - Bone in upper arm

    (c) Pelvis   - Strongest bone

    (d) Pectoral girdle   - Shoulder girdle

Q. 45. Which of the following is an example of oilseed?

    (a) Mustard   (b) Soya bean   (c) Maize   (d) Both (a) and (b)

Aptitude (15)

Q. 46 Complete the series.

    13, 35, 57, 79, 911, ?

    (a) 1110   (b) 1112   (c) 1113   (d) 1315

Q. 47 **Ecology** is related to **Environment** in the same way as **Histology** is related to

    (a) Fossils   (b) History   (c) Tissues   (d) Harmones

Q. 48 Five policemen are standing in a row facing south. Shekhar is to the immediate right of Dhanush. Bala is between Basha and Dhanush. David is at the extreme right end of the row. Who is standing in the middle of the row?

    (a) Bala   (b) Basha   (c) Shekhar   (d) Dhanush

Q. 49. In a certain code BREAKDOWN is written as BFSCJMVNC. How is ORGANISED written in that code?

(a) PSHBMCDRH   (b) BHSPMCDRH   (c) BHSPOCDRH   (d) None of these

Q. 50. Introducing a boy, a girl says, He is the son of the only sister of my mother's brother. How is the boy related to that girl ?

(a) Father-in- Law   (b) Brother   (c) Cousin   (d) Niece

Q. 51 A man walks 1km towards East and then he turns to south and walks 5km. Again he turns to East and walks 2km, After this he turns to North and walks 9km. Now, how far is he from his starting point?

(a) 3km   (b) 4km   (c) 5km   (d) 7km

Q. 52 If X means $-$, + means $\div$, $-$ means X and $\div$ means + , then $15 - 2 \div 900 + 90 \times 100 = ?$

(a) 190   (b) 180   (c) 90   (d) $-$ 60

Q. 53

6	11	25
8	6	16
12	5	?

(a) 18   (b) 16   (c) 12   (d) 10

Q. 54 Which diagram best representation of the language, German, Japanese

(a)
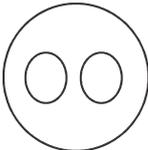
(b)
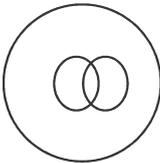
(c)
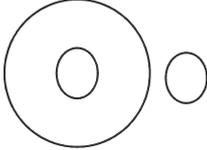
(d)
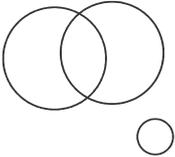
Q. 55 What was the day on 2nd July 1984?

   (a) Wednesday   (b) Tuesday   (c) Monday   (d) Thursday

Q. 56 The angle between the hour hand and the Minute hand of a clock when time is 3:25 will be

   (a) 47.5^0 (b) 42.5^0 (c) 60^0 (d) 45^0

Q. 57 Choose the best option from the following that complete the given analogy.

   (a) 1

   (b) 2

   (c) 3

   (d) 4
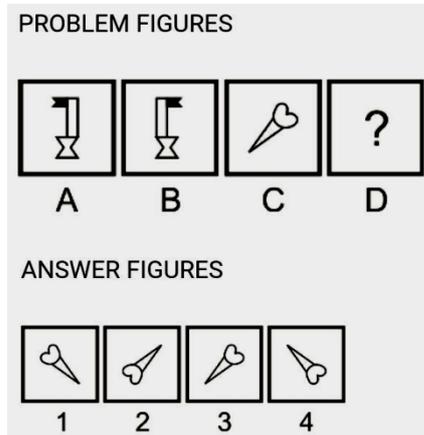
Q. 58 Choose the best option from the following that complete the given series.

   (a) 1

   (b) 2

   (c) 3

   (d) 4
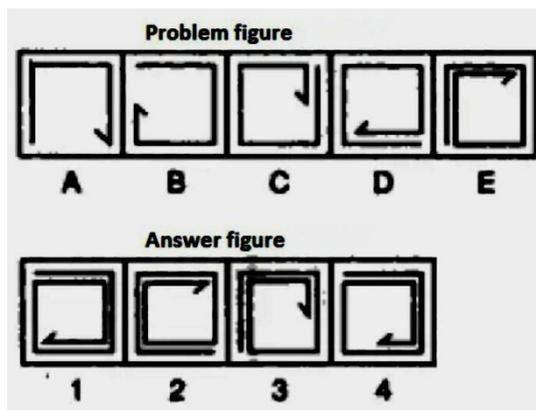
Q. 59 How many triangles are in the figure given below?
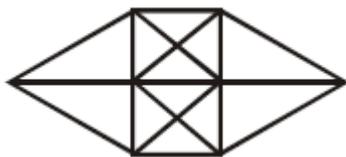
   (a) 32   (b) 22   (c) 24   (d) 28

Q. 60 In a digital representation, if we write '6821' as 'ROSE', '73456' as 'CHAIR' and '961473' as 'PREACH', then in same representation how 'SEARCH' is written ?

   (a) 214673   (b) 214763   (c) 214676   (d) 216743

SPACE FOR ROUGH WORK