

# ALL INDIA RPS OLYMPIAD 2020

(Organized by RPS Education Society Mahendergarh)

M.M. 60

Class 6<sup>th</sup>

Time: 60 Mins.

## English

**Direction: (Q1-3): Choose the most appropriate option to fill in the blank.**

1. He \_\_\_\_\_ his camera on the railing.  
(a) laid (b) lay (c) lain (d) lie
2. After I had \_\_\_\_\_ him farewell, I hurried away.  
(a) bid (b) bade (c) bidden (d) bide
3. The man is blind \_\_\_\_\_ one eye.  
(a) by (b) in (c) from (d) at

**Direction: (Q4 – 6) Choose the correct option.**

4. He mustered courage to speak the truth. The underlined noun is  
(a) nominative case (b) accusative case  
(c) genitive case (d) None of these
5. Which one of the following compound words can function both as a noun and a verb?  
(a) Daylight (b) Daydream  
(c) Daybreak (d) Daytime
6. I saw a heifer. Here 'heifer' is  
(a) masculine gender (b) common gender  
(c) feminine gender (d) neuter gender

**Direction: (Q7 – 9) Choose the correct option to fill in the blank.**

7. The travellers have \_\_\_\_\_ kilometres to go but they have only \_\_\_\_\_ petrol left in the car.  
(a) little; a few (b) many; a little  
(c) a lot of; much (d) more; some
8. At the beginning of next month, we \_\_\_\_\_ married for ten years.  
(a) are (b) will be (c) are going to be (d) will have been
9. He behaves as if he \_\_\_\_\_ my guardian.  
(a) was (b) is (c) were (d) had been

10. State the function of the underlined word in the following sentence:

‘Coming events cast their shadow.’

- (a) Gerund- subject of the verb ‘cast’.                      (b) Present participle-modifies the noun ‘events’.  
(c) Main verb    (d) Subject of the sentence.

11. At this time tomorrow, I \_\_\_\_\_ a letter.

- (a) shall write    (b) shall be writing  
(c) shall have been writing    (d) am writing

**Direction: (Q12 -15) Choose the correct option.**

12. He did not allow smoking there. The underlined word is

- (a) infinitive    (b) gerund  
(c) present participle    (d) past participle

13. Pass me the \_\_\_\_\_ cup.

- (a) plastic big blue Chinese    (b) big plastic blue Chinese  
(c) big blue Chinese plastic    (d) big blue plastic Chinese

14. Which of the options given below is the correct indirect form of the given sentence?

I said, “We must love our country.”

- (a) I said that we have to love our country.                      (b) I said that we must love our country.  
(c) I said that we might love our country.                      (d) I said that we ought to love our country.

15. Which of the options given below is the correct indirect form of the given sentence?

The spectators said, “Bravo! Well played, Ravi.”

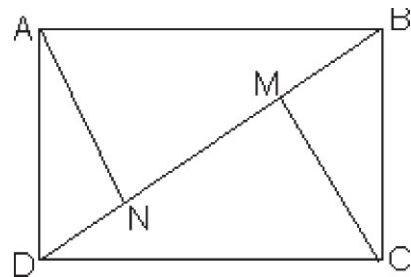
- (a) The spectators called Ravi bravo because he had played well.  
(b) The spectators said that Ravi played well and applauded him.  
(c) The spectators encouraged Ravi saying that he played well.  
(d) The spectators applauded Ravi saying that he had played well.

Mathematics

16. If  $x:y=2:3$  then find the value of  $(3x+2y) : (8x+5y)$ .  
 (a) 4:11                      (b) 5:11                      (c) 11:4                      (d) 12:31
17. If  $x = (-23)+22+(-23)+22\dots\dots\dots$ (upto 40 terms) and  $y=11+(-10)+11+(-10)+\dots\dots\dots$ (upto 20 terms), then  $y - x$  is  
 (a) 40                      (b) 10                      (c) 20                      (d)30

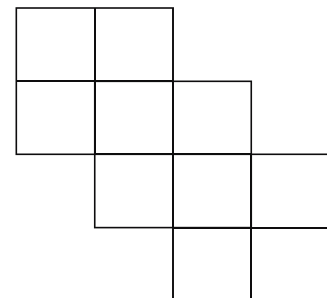
18. Find the number of right triangles in the figure shown below where ABCD is a rectangle and  $CM \perp BD$  and  $AN \perp BD$

- (a) 4  
 (b) 6  
 (c) 8  
 (d) 10



19. In an army camp, there were provisions for 400 armies for 20 days. However, 200 armies attended the camp. How long did the provisions last?  
 (a) 400 days              (b) 300 days              (c) 40 days              (d) 60 days
20. How many students in a class of size 10m by 6m can be made to sit, if each student occupies  $1.2m^2$  of floor area?  
 (a) 50                      (b) 60                      (c) 30                      (d) 90
21. The given figure is made up of 10 squares of the same size. The perimeter of the figure is 80cm. Find the area of the figure.

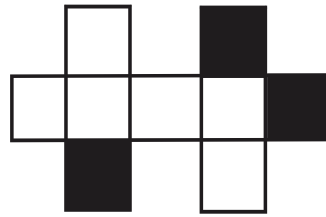
- (a)  $250cm^2$   
 (b)  $150cm^2$   
 (c)  $280cm^2$   
 (d)  $190cm^2$



22. If a bicycle wheel has 18 spokes, then the angle between a pair of adjacent spokes is  
 (a)  $10^\circ$                       (b)  $20^\circ$                       (c)  $25^\circ$                       (d)  $12^\circ$

23. How many minimum squares must be shaded to make the given figure symmetric?

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

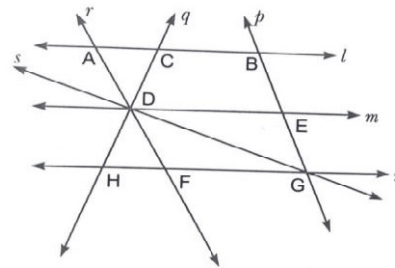


24. The perimeter of a square garden is 48m. A small flower bed covers 18sq m area inside this garden. Find the ratio of the area covered by the flower bed and the remaining area.

- (a) 1:7
- (b) 2:3
- (c) 7:1
- (d) 5:4

25. From the given figure, find number of pairs of intersecting lines,

- (a) 11
- (b) 12
- (c) 13
- (d) 14



26. Bar diagrams are

- (a) 1-dimensional
- (b) 2-dimensional
- (c) 3-dimensional
- (d) pictographs

27. In a colony of 100 blocks of flats numbering 1 to 100, a school van stops at every sixth block while other school bus stops at every tenth block. In how many stops will both of them stop if they start from the entrance of the colony?

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

28. Simplify:

$$\frac{1}{5} - \left[ \left\{ 4 - \frac{7}{5} + \left( 6 - \frac{3}{2} \div \frac{3}{4} \right) \right\} - \frac{2}{5} \right]$$

- (a)  $3\frac{1}{5}$
- (b)  $4\frac{2}{5}$
- (c) -5
- (d) -6

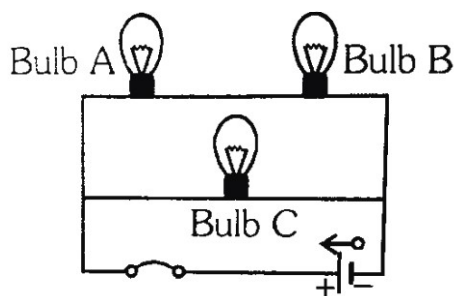
29. The additive inverse of the expression  $10000 \div \{(80 + 100 \div 5) \times 100\}$  is

- (a) 0
- (b) -1
- (c) 10
- (d) 1



Which of the following statements is correct for the above given pictures?

- (a) In P, cars 1 and 2 will come closer and in Q, cars 3 and 4 will come closer.  
 (b) In P, cars 1 and 2 will move away from each other and in Q, cars 3 and 4 will move away.  
 (c) In P, cars 1 and 2 will move away and in Q, 3 and 4 will come closer to each other.  
 (d) In P, cars 1 and 2 will come close to each other and in Q, 3 and 4 will move away from each other.
34. Fuse is the most important safety device, used for protecting the circuits due to:
- a) Short circuiting and overloading    b) Overloading and earthing  
 c) Earthing Only    d) Short circuiting and earthing only
35. Identical bulbs are connected in the circuit as shown in the figure.



Statement-I: Bulb C glows brighter than bulb A.

Statement-II: The current through bulb C is more than the current through bulb A

- (a) Both statement-I and statement-II are true and statement-II is the correct explanation of statement-I.  
 (b) Both statement-I and statement-II are true but statement-II is not the correct explanation of statement-I.  
 (c) Statement-I is true but statement-II is false.    (d) Statement-I is false but statement-II is true.
36. A mixture is prepared by making a powder of sugar and salt and mixing them together. Mark the correct statement regarding the mixture.
- (a) Properties of salt and sugar are changed in the mixture.  
 (b) Constituents can be separated by dissolving the mixture in water.  
 (c) Properties of salt and sugar do not undergo any change.  
 (d) It is very easy to separate the mixture by using simple methods.

37. Select the correct analogy.

(i) Takli: Spinning : : Looms : Weaving

(ii) Silk : Mulberry : : Jute : Patsun

(iii) Coir : Coconut : : Silk cotton : Kapok

(iv) Silk : Spinneret : : Cotton : Charkha

(v) Wool : Animal hair: : Silk : Cocoon

(a) Only (i)                      (b) (i) and (ii)                      (c) (i), (iii) and (v)                      (d) (iii) and (iv)

38. Match column I with II and select the correct option from the given codes.

**Column I**

**(Material)**

P. Oxygen

Q. Talcum powder

R. Aluminium

S. Glass

**Column II**

**(Property)**

(i) Soluble in water

(ii) Opaque

(iii) Transparent

(iv) Conductor

(v) Malleable

(a) P-(i), (iii); Q-(ii), (v); R- (ii), (iv); S- (i), (iii)

(b) P- (i), (iii); Q-(ii); R-(ii), (iv), (v); S- (iii)

(c) P- (iii); Q- (i), (ii); R- (iii), (v); S-(iii)

(d) P-(iv), (v); Q-(i), (iii); R-(ii); S- (iv)

39. Mixture of camphor and common salt is separated by\_\_

(a) sedimentation

(b) distillation

(c) sieving

(d) sublimation

40. Three substances, polythene bag, plastic bottle and naphthalene balls are kept in the open air for a few days. Which of them will show a change in size?

(a) Polythene bag

(b) Plastic bottle

(c) Naphthalene balls

(d) All of these

41. Which of the following are not single flower but groups of flowers:-

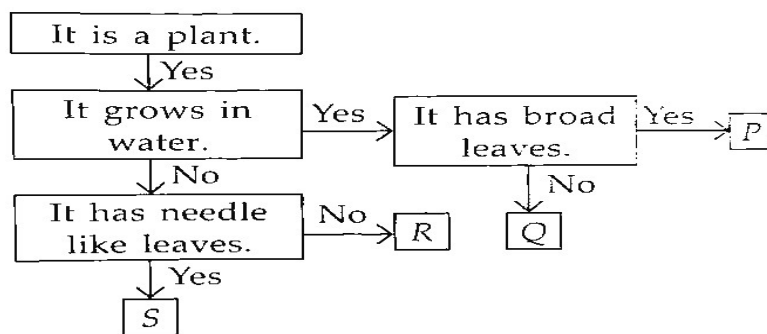
(a) Marigold & Chrysanthemum.

(b) Marigold & Sun flower.

(c) Datura & Marigold.

(d) Both 'a' & 'b'.

42. Select the correct match out of the following.
- (a) Floating ribs- 11<sup>th</sup> and 12<sup>th</sup> pairs of ribs  
 (b) Vertebrae of backbone-Joined by freely movable joints  
 (c) Liquid endoskeleton- Snake  
 (d) Fixed joint-Lower jaw of the skull
43. Identify the correct option regarding P-S from the given flow chart.



- (a) S may be a non-flowering plant.  
 (b) P could be Hydrilla whereas Q could be Vallisneria.  
 (c) P leaves may possess specialised tips called drip tips whereas leaves of R lack stomata.  
 (d) S could be spruce whereas R could be pine.
44. When Anushka tried to grow a new rose plant from a stem cutting, she was not successful. What could be the likely reason?
- (a) A cutting needs strong sunlight to grow.  
 (b) Rose plants can not be propagated by cutting.  
 (c) There were no buds on the cutting.  
 (d) There were no leaves on the cutting.
45. Which one of the following is an example of acclimatisation?
- (a) Duck's feet. (b) Yak's mouth.  
 (c) Dolphin's blowholes. (d) Altitude sickness.

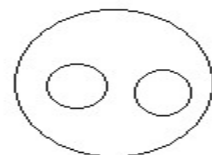
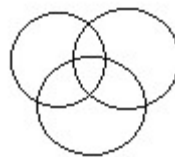
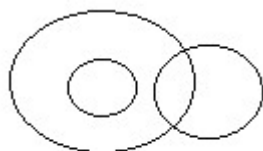
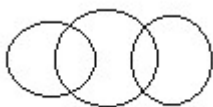


Aptitude

46. Choose the missing term out of the given alternatives.  
2, A, 9, B, 6, C, 13, D, ?  
a) 9                      b) 10                      c) 12                      d) 19
47. Choose the best alternative. 11: 101 :: 91: ?  
a) 225                      b) 810                      c) 205                      d) 901
48. Choose out the odd one:  
a) Five-rupee note                      b) Ten-rupee note  
c) Hundred-rupee note                      d) One – rupee note
49. In a certain code WHEN is written as VGFO. How is POLICE written in that code?  
a) OPMHBD                      b) ONKHBD  
c) OPKJBF                      d) ONKJDF
50. Showing a lady in the park, Vikash said, “She is the daughter of my grandfather’s only son.”  
How is Vikash related to that lady?  
a) Father                      b) Uncle                      c) Cousin                      d) Brother
51. A watch reads 4:30. If the minute hand point East. In what direction will the hour hand point?  
a) North                      b) North-West                      c) South – East                      d) North – East
52. If the first day of the year (other than the leap year) was Friday, then which was the last day of the year?  
a) Monday                      b) Friday                      c) Saturday                      d) Sunday
53. How many degrees does an hour hand covers in 20 minutes?  
a) 5°                      b) 10°                      c) 15°                      d) 20°
54. How many times between 2 o’clock to 6 o’clock the minute hand and hour hands of a clock will be at right angle?  
a) 6                      b) 7                      c) 8                      d) 9

**Direction: (Q-55). Find the alternatives that best states the relationship for the following questions:**

55. Teacher, Writer, Musician



a)

b)

c)

d)

56. If  $3 - 2$  means  $3^2 \times 2^3$  and  $(8 + 2)$  means  $8^2 \div 2^4$ , then the value of  $5 - (9 + 3)$  is
- a)  $\frac{-5}{12}$                       b) -25                      c) 5                      d) 25

57. Read the following information and answer the given questions.

Alka is older than Mala. Gopal is older than Mala but younger than Alka. Kapil is younger than Ram and Mala. Mala is older than Ram.

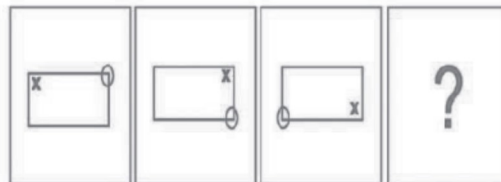
Whose age is between Gopal and Ram?

- a) Mala                      b) Kapil                      c) Alka                      d) None of these
58. Find the missing character.

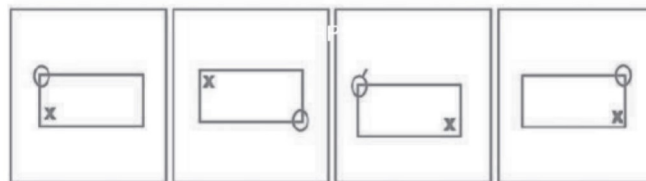
- a) 12  
b) 5  
c) 13  
d) 26

3	15	11
2		
5	7	?
	7	

59. Complete the series.  
Problem figure.



Answer figure.



- (a)                      (b)                      (c)                      (d)

60. Ram and Shyam start walking in opposite direction. Ram covers 3 km and Shyam covers 4km. Then Ram turns left and walks 4km and Shyam turns right and walks 3km. How far they from each other?

RPS

- a)  $\sqrt{58}$ kms                      b)  $\sqrt{50}$ kms                      c)  $\sqrt{48}$ kms                      d)  $\sqrt{60}$ kms