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## OFFLINE EXAMINATION (PHASE –II)

### CLASS-VII

M.M. 60

TIME: 60 Minutes

Name : \_\_\_\_\_ Regn. No \_\_\_\_\_ Mobile No. \_\_\_\_\_

#### General Instructions:-

1. Duration of the examination is 60. Question Paper contains 60 questions with maximum 60 marks.
2. **There will be negative marking in Phase -II i.e:  $\frac{1}{4}$  mark will be deducted for each incorrect answer.**
3. Use of gadgets is not allowed.
4. Students must abide by the instructions issued during the examination by the invigilator or the centre incharge.
5. Before attempting the question paper ensure that it contains all pages & no question is missing.
6. Immediately fill the particulars on this page of the test booklet with blue/black ball point pen. Use of pencil is strictly prohibited.
7. Darken the bubbles completely. Do not put a tick ☑ or a cross ☒. Fill the bubbles completely.
8. Half-filled or over-filled bubbles will not be read by the software & liable to be rejected.

Correct Method



Student's Signature

Wrong Method



Invigilator's Signature



# ALL INDIA RPS OLYMPIAD-2022

(Organized by RPS Education Society Mahendergarh-Haryana)

**M.M. 60**

**Class -7th**

**Time: 60 Minutes**

## English (15)

1. Do not jeer ..... the poor beggar.  
(a) on (b) upon (c) in (d) at
2. I prevail ..... him to join a college.  
(a) to (b) in (c) on (d) against
3. Neither of them ..... the standard required.  
(a) reaches (b) reach (c) were reaching (d) none of these
4. She and not you ..... at fault.  
(a) is (b) are (c) am (d) none of these

**Directions (5-6): In the following questions, a sentence has been given in Active/ Passive Voice. From the given alternatives, choose the one which best expresses the given sentence in Passive/Active Voice.**

5. Many persons went to see the hanging of the patriot.  
(a) The hanging of the patriot is seen by many of persons.  
(b) Many persons went to see the patriot being hanged.  
(c) It is seen by many persons the patriot is being hanged.  
(d) None of these
6. Thank God.  
(a) We thanked God. (b) God is thanked by us.  
(c) God be thanked. (d) It is said to be thanked.

Direction (Q. 7-8) Choose the most appropriate kind of the underlined Pronoun.

7. We believe in helping each other.  
(a) Reflexive Pronoun (b) Possessive Pronoun  
(c) Demonstrative Pronoun (d) Reciprocal Pronoun
8. I myself solve the problem.  
(a) Reflexive Pronoun (b) Empathic Pronoun  
(c) Indefinite Pronoun (d) None of these
9. .... I don't like this vegetable.  
(a) Shh! (b) Ugh! (c) Yippe! (d) Yeh!

10. The size of the shirt is ..... than I demanded.  
(a) little (b) littler (c) littlest (d) None of these

**Direction (Q. 11) Choose correct question tag for the given sentence.**

11. No body is present here,.....?  
(a) is he ? (b) isn't he ? (c) are they ? (d) aren't they ?
12. After I ..... him a week, he asked for a loan of ten thousand rupees.  
(a) will know (b) would have known (c) know (d) had known
13. If you ..... your superiors, you will not come to grief.  
(a) listen (b) listens (c) will have listen (d) will listen.

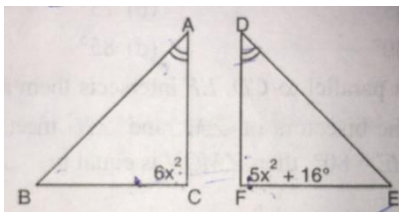
**Directions (14–15): In the following questions, a sentence has been given in Direct/Indirect Speech.**

**Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect/Direct Speech.**

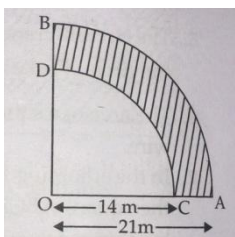
14. "Would that I were rich!" said the poor beggar.  
(a) The poor beggar said that he would be rich.  
(b) If I would be rich asked the poor beggar.  
(c) The poor beggar wished that he had been rich  
(d) Both 'b' and 'c' are correct.
15. He said, "Oh! for a glass of water."  
(a) She told for a glass of water.  
(b) She exclaimed with grief for a glass of water.  
(c) She implored for a glass of water.  
(d) None of these

### Mathematics (15)

16. The supplement of an angle is  $60^\circ$  more than twice the complement of the angle. Find the angle.  
(a) 60 (b)  $30^\circ$  (c)  $120^\circ$  (d) none of these
17. If the perimeter of a right- angled triangle is 30 cm and the length of its hypotenuse is 13 cm. What can be the length of other two sides ?  
(a) 7 cm, 10 cm (b) 6 cm, 11 cm (c) 3 cm, 14 cm (d) 5 cm, 12 cm
18.  $\triangle ACB \cong \triangle DFE$ . Find  $\angle F$



- (a)  $4^0$  (b)  $96^0$  (c)  $100^0$  (d)  $60^0$
19. If  $x\%$  of  $y$  is the same as  $\frac{4}{5}$  of 80, then the value of  $xy$  is
- (a) 320 (b) 400 (c) 640 (d) 6400
20. A person sells 320 mangoes at the cost price of 400 mangoes. What is his profit per cent ?
- (a) 10 % (b) 15 % (c) 20 % (d) 25 %
21. The base of an isosceles triangle is 6 cm and its perimeter is 16 cm. Find its area.
- (a)  $96 \text{ cm}^2$  (b)  $48 \text{ cm}^2$  (c)  $22 \text{ cm}^2$  (d)  $12 \text{ cm}^2$
22. In the adjoining figure, ABCD is a flower bed. If  $OA = 21 \text{ m}$  and  $OC = 14 \text{ m}$ , find the area of bed.



- (a)  $192.5 \text{ m}^2$  (b)  $770 \text{ cm}^2$  (c)  $385 \text{ cm}^2$  (d) none of these
23. By how much is  $x^4 + 4x^2y^2 + y^4$  more than  $x^4 - 8x^2y^2 + y^4$  ?
- (a)  $12x^2y^2$  (b)  $-12x^2y^2$  (c)  $2x^4 + 2y^4$  (d) none of these
24. If  $x = 1$ ,  $y = -2$  and  $z = 3$ , find the value of  $\frac{4xy - 4z^2}{x^2 + 2xyz}$ .
- (a) -4 (b) +4 (c) -8 (d) +8
25.  $[1 - 2(1 - 2)^{-1}]^{-1}$  equals
- (a) -1 (b)  $\frac{1}{2}$  (c)  $\frac{1}{3}$  (d)  $\frac{-1}{3}$
26. If  $8^{n-1} = 2^{n+3}$ , then  $n$  is
- (a) 2 (b) 4 (c) 1 (d) 3
27. The sides of a triangle are in the ratio  $\frac{1}{2} : \frac{1}{3} : \frac{1}{4}$ . If the perimeter of the triangle is 52 cm, then what is the length of the smallest side ?
- (a) 12 cm (b) 16 cm (c) 24 cm (d) none of these

28. A bag contains red, white and blue marbles. The probability of selecting a red marble is  $\frac{2}{15}$  and that of selecting a blue marble is  $\frac{4}{15}$ . The probability of selecting a white marble is.
- (a)  $\frac{13}{15}$                       (b)  $\frac{11}{15}$                       (c)  $\frac{3}{5}$                       (d)  $\frac{2}{5}$
29. In a certain hospital, the mean birth rate of a week was 35. If the mean birth rate from Monday to Thursday was 32 and that of the Thursday to Sunday was 36, find the number of births on Thursday.
- (a) 20                      (b) 27                      (c) 32                      (d) 35
30. What must be subtracted from each term of the ratio 4 : 7 so that the ratio becomes 2 : 5 ?
- (a) -2                      (b) -1                      (c) 2                      (d) 1

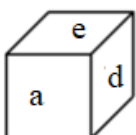
### Science (15)

31. An erect image, 5 times the size of the object, is obtained with a concave mirror of radius of curvature 40cm. What is the position of the image ?
- (a) 180 cm                      (b) 100 cm                      (c) 80 cm                      (d) 20 cm
32. If three resistors of resistances  $2\Omega$ ,  $4\Omega$ , and  $6\Omega$  are connected in parallel. If a 6V battery is connected across the circuit, Calculate the value of total current of the circuit ?
- (a) 10 A                      (b) 12.2 A                      (c) 4A                      (d) 5.5 A
33. A copper wire of Resistance  $16\Omega$  is doubled on it. Calculate the new resistance of wire ?
- (a)  $32\Omega$                       (b)  $4\Omega$                       (c)  $8\Omega$                       (d)  $16\Omega$
34. Find the amount of heat energy released when 2 gram of water is cooled from  $70^{\circ}\text{C}$  to  $10^{\circ}\text{C}$ . If specific heat capacity of water is  $4.2 \frac{\text{J}}{\text{g}^{\circ}\text{C}}$
- (a) 252 J                      (b) 504 J                      (c) 1000 J                      (d) 200 J
35. A train moves with a speed of 30 km/h in the first 15 minutes, with another speed of 40 km/h the next 15 minute and then with a speed of 60 km/h in the last 30 minutes. Calculate the average speed of the train for this Journey.
- (a) 48.5 km/h                      (b) 46 km/h                      (c) 44 km/h                      (d) 47.5 km/h
36. Identify the wrong statement
- (a) Soil helps forests to grow and regenerate
- (b) Forests influence climate and water cycle.
- (c) Forest protect the soil from erosion

- (d) Plants and animals in a forest are not dependent on each other
37. Why do swimmers float in Dead Sea ?
- (a) Salt makes it dense (b) It is lighter in weight  
(c) Both (a) and (b) (d) None of these
38. Which of the following is the function of hair
- (a) Traps a lot of air (b) Protects internal organs  
(c) Gives shape (d) Gives beauty
39. When magnesium is burnt, heat and light are produced. The burning of magnesium is a.
- (a) reversible Change (b) physical Change  
(c) chemical and exothermic change (d) chemical and endothermic change
40. Which of the following salts does not contain water of crystallization ?
- (a) Blue Vitriol (b) Baking Soda (c) Washing Soda (d) Gypsum
41. Choose the function of the pancreatic juice from the following statements.
- (a) Trypsin digests protein and lipase carbohydrates  
(b) Trypsin digests emulsified fats and lipase proteins.  
(c) Trypsin and lipase digest fats  
(d) Trypsin digests proteins and lipase emulsified fats.
42. Which of the following statements are correct ?
- (i) Pyruvate can be converted into ethanol and carbon dioxide by yeast  
(ii) Fermentation takes place in the case of aerobic bacteria  
(iii) Fermentation takes place in mitochondria  
(iv) Fermentation is a form of anaerobic respiration.
- (a) (i) and (ii) (b) (ii) and (iii) (c) (i) and (iii) (d) (i) and (iv)
43. If the cut end of a tree is put in eosin solution .....
- (a) Leaves remain fresh but ascent of sap stops  
(b) Phloem gets coloured because of ascent of sap.  
(c) Xylem elements get stained showing ascent of sap through them.  
(d) Ascent of sap stops
44. The blood leaving the tissues becomes richer in:
- (a) carbon dioxide (b) water (c) oxygen (d) haemoglobin
45. The organisms which can reproduce by fragmentation are.
- (a) Corals and sponges (b) Corals and spirogyra  
(c) Sea anemone and spirogyra (d) Sponges and Sea anemones

**Aptitude (Reasoning-15)**

46. Find the missing term in the given series .  
5824, 5242 ..... 4247, 3823  
(a) 4467 (b) 4718 (c) 4856 (d) 5164
47. Analogy:  
182 : ..... :: 210 : 380  
(a) 156 (b) 240 (c) 272 (d) 342
48. If 'MADRAS' can be written as ARSARS how can 'ARKONAM' be written in that code ?  
(a) ROAAKNM (b) ROAKANM (c) ROAKNNM (d) None of these
49. If ZIP = 198 and ZAP = 246 then how will you code VIP ?  
(a) 175 (b) 222 (c) 888 (d) 990
50. Pointing to a photograph, a man said, "I have no brother or sister but that man's Father is my Father's son. Whose photograph was it ?  
(a) His own (b) His Son's (c) His Father's (d) None of these
51. A, B, C and d are to be seated in a row. But C and d cannot be together. Also B cannot be at the third place.  
Which of the following must be false ?  
(a) A is at the first place (b) A is at the second place  
(c) A is at the third place (d) A is at the fourth place
- 52.
- |    |    |      |
|----|----|------|
| 6  | 11 | 25   |
| 8  | 6  | 16   |
| 12 | 5  | ---- |
- (a) 18 (b) 16 (c) 12 (d) 10
53. At the end of a Business conference the ten people present all shake hands with each other once. How many handshakes will there be altogether ?  
(a) 20 (b) 45 (c) 55 (d) 90
54. If  $A + D = B + C$ ,  $A + E = C + D$ ,  $2C < A + E$  and  $2A > B + D$  then  
(a)  $A > B > C > D > E$  (b)  $B > A > D > C > E$   
(c)  $D > B > C > A > E$  (d)  $B > C > D > E > A$
55. In a dice a, b, c and d are written on the adjacent faces, in a clockwise order and e and F at the top and bottom. When C is at the top. What will be at the bottom ?





- (a) a (b) b (c) c (d) data insufficient

56.  $08 : 66 :: ? : 38$

- (a) 2 (b) 6 (c) 12 (d) 19

57. In the following series, how many KGN occur in such a way that 'G' is in the middle and 'K' and 'N' are adjacent to it on both sides ?

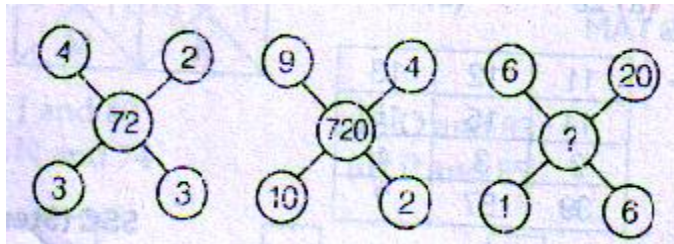
AKGLMNDQKGCSNGKTGKGNDZPUXGKE

- (a) 3 (b) 5 (c) 1 (d) 2

58. If ASHA equals 79, then VINAY BHUSHAN = ?

- (a) 211 (b) 200 (c) 144 (d) 180

59



- (a) 72 (b) 720 (c) 7200 (d) 38

60. In a line of boys Aman is 12<sup>th</sup> from top and baman is 18<sup>th</sup> from bottom. If there are 6 boys between Aman and Baman, then how many maximum boys are there in the row ?

- (a) 34 (b) 36 (c) 35 (d) 37

**SPACE FOR ROUGH WORK**

**SPACE FOR ROUGH WORK**

# RPS - THE COMPLETE SCHOOL

## BEST IN HARYANA

IN CULTURAL

IN SPORTS

IN ACADEMICS



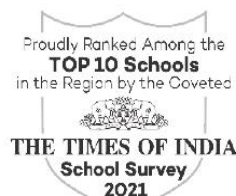
Highest Number of  
**Girls Qualifiers** in  
**NDA**  
Among Schools of India



in **World Dancer Online**  
International Dance Contest 2021  
to **Amishi Gautam**  
by Akhil Nalrajam Aantur sanskritik  
Sangh, Nagpur



Sensational performance by  
**LAXIT**  
in the **ASIAN PARALYMPIC**  
GAMES (Bahrain)  
**Bronze Medal**  
(Javelin Throw)



RPS International School  
Sec-50 Gurugram,  
**Rank-4** in Gurugram  
Challengers Category

RPS International School  
Sec-89 Gurugram,  
**Rank-5** in Gurugram  
Challengers Category

RPS International School  
Behror, Rajasthan,  
**Rank-7** among Top 10  
Boarding Schools of North India



**SANYAM BANSAL**  
IN **COMMERCE**  
**WIZARD-2021**  
by Institute of  
Chartered  
Accountants  
of India  
& won  
Prize of ₹ 1 Lakh

**RPS PUBLIC SCHOOL (HANSARA)**  
**OVERALL CHAMPION**  
in Distt. Rewari in Bal Mahotsava 2021  
9th Time in a Row

**RPS SR. SEC. SCHOOL**  
(MAHENDERGARH) Claimed Distt. Narnaul  
**CHAMPION'S TROPHY**  
in Bal Mahotsava 2021, 12th Time in a Row



**RPS PUBLIC SCHOOL**  
(DHARUHERA) stood proud as  
**First Runner Up**  
in Bal Mahotsava Rewari 2021

**RPS INTERNATIONAL SCHOOL**  
(Sec-50, Gurugram)  
**CHAMPION'S TROPHY**  
in Bal Mahotsava, Gurugram-2021

**SUPER**  
Achievements  
of **RPS**  
GROUP OF  
SCHOOLS

**40**  
STUDENTS

**AIIMS**  
2021

**66**  
STUDENTS

**NTSE-II**  
2022

**507**  
STUDENTS

**NEET**

**441**  
STUDENTS

**IIT-JEE**  
Main

**80**  
STUDENTS

**IIT-JEE**  
Advanced

**15**  
STUDENTS

**KVPY**

**110**  
STUDENTS

**NDA**

**62**  
STUDENTS

Securing 600  
marks & Above in  
**NEET**

**17**  
STUDENTS

**CLAT**