



Where all the students get equal opportunity to show their brilliance and win amazing prizes!



OFFLINE EXAMINATION (PHASE –II)

CLASS-VIII

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 -8th

Time: 60 Minutes

English (15)

1. **Directions (1–2): 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.**

1. The queen said to her son, “You must go to the forest and remain there till your father calls you back.”
 - (a) The queen ordered her son to go to the forest and remain there till his father calls him back.
 - (b) The queen told her son that he must go to the forest and remain there till his father called him back.
 - (c) The queen told his son that you must go to the forest and remain there till your father called you back.
 - (d) The queen told her son to go to the forest and remained there till his father called him back.
2. The Prime Minister said that no one would be allowed to disturb the peace.
 - (a) The Prime Minister said, “We shall not allow any one to disturb the peace.”
 - (b) The Prime Minister said, “We would not allow no one to disturb the peace
 - (c) The Prime Minister said, “No one will disturb the peace.”
 - (d) The Prime Minister said, “No one can disturb the peace.”

Directions (3-4): 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.

3. They first sun-dried the garbage for one to three days to bring down the moisture level.
 - (a) The moisture level was brought down by sun-drying the garbage for one to three days.
 - (b) One to three days of sun-drying brought down the moisture level of the garbage.
 - (c) The moisture level of the garbage came down when it was sun-dried for one to three days.
 - (d) The garbage was first sundried for one to three days to bring down the moisture level.
4. We all know that there is only one God.
 - (a) We are all known that there is only one God.
 - (b) It is known to us all that there is only one God.
 - (c) We have all known that there is only one God.
 - (d) Only one God is known by us all.

5. The ultimate dream of car lover is to own a Rolls-Royce.
(a) many (b) a lot of (c) few (d) any
6. It is time wewith determination.
(a) act (b) acted (c) have acted (d) will act
7. The ship will have left before we _____ the harbour.
(a) shall reach (b) reach (c) reaches (d) reached
8. Today students should be reconciled _____ the way things are changing.
(a) with (b) from (c) for (d) at
9. The food that an average Indian eats has been found to be deficient _____ vitamins and proteins.
(a) of (b) from (c) with (d) in

Directions (10-12): In the following questions, some parts of the sentences have errors and some are correct. Find out which part of the sentences has an error. The number of that part is the answer. If a sentence is free from error, your answer is No error.

10. Shilpa would broke (a)/ a pot every day (b)/ when she came to Agra last year. (c)/ No error (d)
11. Far from being a poor city with little diversity, New Orleans (a)/ certainly rank as one of (b)/ the most interesting spots in the United States. (c)/No error (d)
12. According to the police, (a)/ the killer of the girls in both villages are (b)/ probably between the ages of 30 and 40. (c)/ No error (d)
13. You have caught the train if you had run fast.
(a) may (b) can (c) should (d) could

Directions (14 - 15): In each of the questions, four alternatives are given for the Idiom/Phrase. Choose the alternative which best expresses the meaning of the Idiom/Phrase.

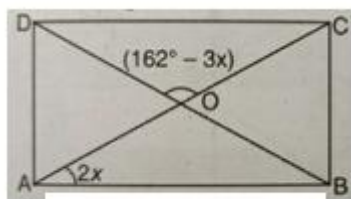
14. Cut a sorry figure
(a) Did not stand straight (b) Apologised for his remarks
(c) Created a good impression (d) Made a poor impression
15. To take to task
(a) Forgave him (b) Slapped him
(c) Gave him extra work (d) Reprimanded him

Mathematics (15)

16. Which is greater $(\sqrt{7} + \sqrt{10})$ or $(\sqrt{3} + \sqrt{19})$?
(a) $\sqrt{7} + \sqrt{10}$ (b) $\sqrt{3} + \sqrt{19}$ (c) both are equal (d) none of these

17. A man can row at 8 km/h in still water. If the river is running at 2 km/h, it takes 48 minutes to row to a place and back. How far is he from the place ?
(a) 1 km (b) 2 km (c) 3 km (d) 4 km
18. If $x - \frac{1}{x} = 9$, then $x + \frac{1}{x} = ?$
(a) $\sqrt{85}$ (b) $-\sqrt{85}$ (c) $\pm \sqrt{85}$ (d) none of these
19. If $x = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $y = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$, the value of $x^2 + xy + y^2$ is :
(a) 99 (b) 100 (c) 1 (d) 0
20. The parallel sides of a trapezium are 20 cm and 10 cm. Its non-parallel sides are both equal, each being 13 cm. Find the area of the trapezium ?
(a) 120 cm^2 (b) 180 cm^2 (c) 210 cm^2 (d) 150 cm^2
21. At what percent above the cost price must an article be marked so as to gain 25 % after allowing the customer a discount of 20 %.
(a) $\frac{125}{2}\%$ (b) $\frac{225}{2}\%$ (c) $\frac{125}{4}\%$ (d) $\frac{225}{4}\%$
22. Given $\frac{(x^2-5x+6)}{(x^2-7x+12)} = \frac{(x^2-x-6)}{(x^2+7x+10)}$, find the value of x.
(a) 2.4 (b) -2.0 (c) 2.2 (d) 2.3
23. A square and a regular hexagon have equal perimeters. Their areas are in the ratio:
(a) 2 : 1 (b) $2\sqrt{3}:1$ (c) $\sqrt{3}:2$ (d) 3 : 2
24. A is thrice as good a work man as B and takes 60 days less than B for doing a job. Find the time in which they can do it together.
(a) $22\frac{1}{2}$ days (b) $20\frac{1}{2}$ days (c) 22 days (d) 20 days
25. Which number can replace both the question marks in the equation $4\frac{1}{2} = \frac{?}{32}$
(a) 1 (b) 7 (c) $7\frac{1}{2}$ (d) none of these
26. If $y - 2$ and $y - \frac{1}{2}$ are factors of $py^2 + 5y + r$, then
(a) $p > r$ (b) $p = r$ (c) $p < r$ (d) none of these

27. ABCD is a rectangle. Find x.



- (a) 54° (b) 36° (c) 24° (d) 18°
28. Find the percentage increase in the area of a triangle if its each side is doubled.
 (a) 50 % (b) 100 % (c) 300 % (d) 150 %
29. A man gains 10 % by selling a certain article for a certain price. If he sells it at double the price, then the profit percent made is ?
 (a) 100 % (b) 110 % (c) 120 % (d) 130 %
30. Solve for n in $4^n + 4^n + 4^n + 4^n = 2^{2010}$
 (a) 1005 (b) 2010 (c) 1004 (d) 1003

Science (15)

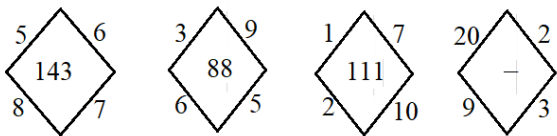
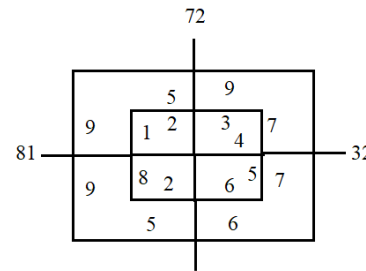
31. A stone is dropped from a 500 m tall building into a pond. When is sound splash heard ? Given $g = 10 \text{ m/s}^2$, speed of sound = 340 m/s.
 (a) 10 sec (b) 11 sec (c) 11.47 sec (d) 10.47 sec
32. A box weighing 2000 N is sliding across a cement floor. The force pushing the box is 500 N and the coefficient of sliding friction between the box and the floor is 0.20. What is the acceleration of the box ? ($g = 10 \text{ m/s}^2$)
 (a) 0.5 m/s^2 (b) 1.0 m/s^2 (c) 1.5 m/s^2 (d) 2.0 m/s^2
33. A car of mass 200 kg is moving with a certain velocity. It is brought to rest by the application of brakes, within a distance of 20m. When the average resistance being offered to it is 500 N. What was the velocity of the motor car ?
 (a) 9 m/s (b) 10 m/s (c) 11 m/s (d) 12 m/s
34. Amber is a
 (a) metal (b) rubber (c) resin (d) sugar
35. A student very cautiously traces the path of a ray through a glass slab for different value of the angle of incidence. He then measures the corresponding values of the angle of refraction and angle of emergence for every value of the angle of incidence. On analyzing these measurements of angles, his conclusion would be –

- (a) $\angle i > \angle r > \angle e$ (b) $\angle i = \angle e > \angle r$
(c) $\angle i < \angle r < \angle e$ (d) $\angle i = \angle e > \angle r$
36. What are the monomers of Nylon -6, 6
(a) Hexamethylenediamine and Adipic acid
(b) Ethylene glycol and terephthalic acid
(c) Ethylene glycol and Phthalic acid
(d) Hexamethylenediamine and Ethylene glycol
37. Which of the following is the correct arrangement of the given metals in ascending order of their reactivity ? Zinc, Iron, Magnesium, Sodium
(a) Zinc > Iron > Magnesium > Sodium (b) Sodium > Magnesium > Iron > Zinc
(c) Sodium > Zinc > Magnesium > Iron (d) Iron < Zinc < Magnesium < Sodium
38. The full form of EPNS is
(a) Electric Potential Neutral switch (b) Electric Potential Negative Switch
(c) Electroplated Nickel Silver (d) Electroplated Nickel Steel
39. Name the substance which is black with unpleasant smell, mixture of about 200 substances used in manufacturing various substance like synthetic dyes, drugs, explosives, perfume etc.
(a) Coke (b) Coal tar (c) Coal gas (d) None of these
40. Match the following from column A with column B.
- | Column-A | Column - B |
|------------------------------|--------------------------------|
| (i) CNG | (a) 50000 |
| (ii) Coal | (b) 55000 |
| (iii) Petrol | (c) 45000 |
| (iv) LPG | (d) 25000 – 33000 |
| (a) i-a, ii-c, iii-d, iv- a | (b) i- a, ii- c, iii- d, iv- b |
| (c) i-a, ii-d, iii- c, iv- b | (d) i-b, ii-d, iii-c, iv-a |
41. Rough Endoplasmic Reticulum is actively involved in
(a) hormone synthesis (b) protein synthesis
(c) lipid synthesis (d) carbohydrate synthesis
42. The bacterium that causes botulism is
(a) a facultative aerobe (b) an obligate aerobe
(c) a facultative anaerobe (d) an obligate anaerobe
43. These are some of the endocrine glands.
(a) Salivary, thyroid, adrenal, ovary, testes
(b) Pituitary, thyroid, adrenal, ovary, testes

- (c) Adrenal, ovary, testes, liver
(d) Pituitary, salivary, adrenal, ovary, testes
44. Here are different stages of conception and child birth. Arrange them in the correct order.
- (i) The ovum comes out of the ovary and reaches the fallopian tube.
(ii) Zygote undergoes cell division and forms the embryo.
(iii) Sperm reaches the fallopian tube and fertilization takes place.
(iv) Embryo gets implanted in the uterus and conception takes place.
(v) Embryo develops to foetus and then to a fully grown baby.
- (a) iii, i, ii, iv, v (b) i, iii, iv, ii, v
(c) ii, iv, iii, i, v (d) i, iii, ii, iv, v
45. Late blight of potato is caused by-
- (a) TMV (b) Xanthomonas oryzae
(c) Puccinia graminis (d) Phytophthora infestans

Aptitude (Reasoning-15)

Direction (1-2) : Find the missing term

46. 
- (a) 108 (b) 133 (c) 130 (d) 200
47. 
- (a) 43 (b) 45 (c) 39 (d) 46
48. Find the next letter in the given series.
J, F, M, A, M, J, J
- (a) A (b) S (c) N (d) O
49. TWO = 60, ONE = 150, LOW =
- (a) 140 (b) 180 (c) 155 (d) 190

50. Find the next Number in the given series.

600, 690, 1536, 2457.6, 3932.16

- (a) 7684.32 (b) 6219.456 (c) 7864.32 (d) 6291.456

51. If $A + B > C + D$, $B + E = 2C$ and $C + D > B + E$, it necessarily follows that :

- (a) $A + B > 2C$ (b) $A + B > 2D$ (c) $A + B > 2E$ (d) $A > C$

Direction (52-53) : In a swimming race five participants. A, B, C, D and E take part. Lane 1 is extreme left and Lane 5 is extreme right. The following conditions exist.

(i) B and E are not swimming adjacent to each other.

(ii) D is not in one of the extreme (outermost) Lanes.

(iii) A is to the left of C.

52. If B is in Lane 3, A is Lane 1, then C could be.

- (a) Lane 4 (b) Lane 2 (c) Lane 2 or 4 (d) Situation violates the conditions

53. If B is in Lane 4 and C is in Lane 3, then E could be in :

- (a) Lane 1 (b) Lane 2 (c) lane 1 or 2 (d) Situation violates the conditions.

54. A vagabond runs out of cigarettes. he searches of the stubs, having learnt that 7 stubs can make a new cigarette, good enough to be smoked, he gather 49 if he smokes 1 cigarette every three quarters of an hour, how long will his supply last ?

- (a) 5.25 hour (b) 6 hours (c) 4.5 hours (d) 3 hours

55. $23 : 72 :: 38 : ?$

- (a) 110 (b) 117 (c) 123 (d) 112

56. In the following letter series, how many M's are followed by N, but not preceded by N ?

NMWVMNMVWNMNMNMNWVMN

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

57. If 'REASON' is coded as 5 and 'BELIEVED' as 7, then what is the code number for 'GOVERNMENT' ?

- (a) 10 (b) 6 (c) 9 (d) 8

58. Numbers/Letters in following questions have been arranged according to an identical pattern. Find out the missing numbers.

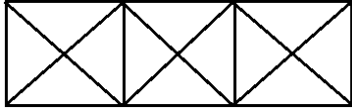
2	9	11	7
8	5	13	-3
7	?	10	-4
6	4	10	?

- (a) 3 and (-2) (b) (-3) and (-2) (c) 3 and 2 (d) (-3) and 2

59. 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

60. Count the total no. of triangle



- (a) 25 (b) 28 (c) 30 (d) 35

SPACE FOR ROUGH WORK

RPS - THE COMPLETE SCHOOL

BEST IN HARYANA

IN CULTURAL

IN SPORTS

IN ACADEMICS



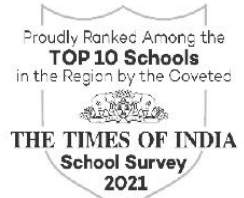
Highest Number of
Girls Qualifiers in
NDA
Among Schools of India



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 (HANSALA)
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