

KENDRIYA VIDYALAYA GACHIBOWLI , GPRA CAMPUS, HYD-32
SAMPLE PAPER 02 FOR SESSION ENDING EXAM (2018-19)

SUBJECT: MATHEMATICS

BLUE PRINT FOR SESSION ENDING EXAM: CLASS VIII

Unit/Topic	VSA (1 mark)	SA-I (2 marks)	SA-II (3 marks)	LA (4 marks)	Total
Linear equations in one variable	1(1)	--		1(4)	2(5)
Understanding Quadrilaterals	1(1)	1(2)	1(3)	--	3(6)
Data Handlings	--	--	1(3)	1(4)	2(7)
Squares and Square Roots	1(1)	1(2)	1(3)	--	3(6)
Algebraic Expression	1(1)	--	2(6)	1(4)	4(11)
Visualizing Solid Shapes	1(1)	1(2)	1(3)	--	3(6)
Mensuration	--	--	2(6)	1(4)	3(10)
Exponents and Powers	1(1)	1(2)	1(3)	1(4)	4(10)
Direct and Inverse Proportion	--	1(2)	--	1(4)	2(6)
Factorisation	--	1(2)	--	1(4)	2(6)
Introduction to Graphs	--	--	--	1(4)	1(4)
Playing with Numbers	--	--	1(3)	--	1(3)
Total	6(6)	6(12)	10(30)	8(32)	30(80)

Note:

- 1) 30% i.e. 24 marks of 1st term syllabus covering significant topics/chapters have taken as per CBSE guidelines.
- 2) Numerals inside the bracket indicate marks and outside the bracket indicate the number of questions

MARKING SCHEME FOR SESSION ENDING EXAM

SECTION	MARKS	NO. OF QUESTIONS	TOTAL
VSA	1	6	06
SA – I	2	6	12
SA – II	3	10	30
LA	4	8	32
GRAND TOTAL			80

KENDRIYA VIDYALAYA GACHIBOWLI , GPRA CAMPUS, HYD-32
SAMPLE PAPER 02 FOR SESSION ENDING EXAM (2018-19)

SUBJECT: MATHEMATICS
CLASS : VIII

MAX. MARKS : 80
DURATION : 2½HRS

General Instructions:

- (i). All questions are compulsory.
- (ii). This question paper contains **30** questions divided into four Sections A, B, C and D.
- (iii). **Section A** comprises of 6 questions of **1 mark** each. **Section B** comprises of 6 questions of **2 marks** each. **Section C** comprises of 10 questions of **3 marks** each and **Section D** comprises of 8 questions of **4 marks** each.
- (iv). Use of Calculators is not permitted

SECTION – A

1. Solve : $2y + 9 = 4$
2. Find the square of the number 39.
3. What is the sum of all the angles of a pentagon?
4. Simplify and write the answer in the exponential form: $(2^5 \div 2^8)^5 \times 2^{-5}$
5. Can a polyhedron have 10 faces, 20 edges and 15 vertices? Give reason.
6. Find the value of the expression $3x(4x - 5) + 3$ for $x = 3$

SECTION – B

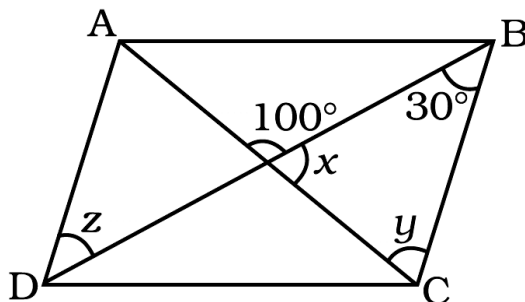
7. A hall has a capacity of 2704 seats. If the number of rows is equal to the number of seats in each row, then find the number of seats in each row.
8. If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weigh $2\frac{1}{2}$ kilograms?
9. Factorise : $a^2 - 2ab + b^2 - c^2$
10. Using Euler's formula find the unknown.

Faces	6	5
Vertices	8	5
Edges	?	?

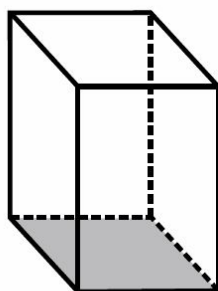
11. Find the value of m for which $5^m \div 5^{-3} = 125$.
12. If two adjacent angles of a parallelogram are $(5x - 5)^\circ$ and $(10x + 35)^\circ$, then find the ratio of these angles.

SECTION – C

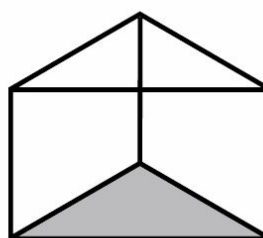
13. The weekly wages (in Rs) of 30 workers in a factory are.
830, 835, 890, 810, 835, 836, 869, 845, 898, 890, 820, 860, 832, 833, 855, 845,
804, 808, 812, 840, 885, 835, 835, 836, 878, 840, 868, 890, 806, 840
Using tally marks make a frequency table with intervals as 800–810, 810–820 and so on.
14. What is the least number that should be subtracted from 1385 to get a perfect square?
15. ABCD is a parallelogram. Find the value of x, y and z.



16. (a) Add: $7xy + 5yz - 3zx$, $4yz + 9zx - 4y$, $-3xz + 5x - 2xy$.
(b) Subtract $5x^2 - 4y^2 + 6y - 3$ from $7x^2 - 4xy + 8y^2 + 5x - 3y$.
17. Simplify: $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$
18. Find the values of the letters in the given below:
- $$\begin{array}{r} 3 \text{ A} \\ + 2 \text{ 5} \\ \hline \text{B 2} \end{array}$$
19. A suitcase with measures 80 cm × 48 cm × 24 cm is to be covered with a tarpaulin cloth. How many metres of tarpaulin of width 96 cm is required to cover 100 such suitcases?
20. The floor of a building consists of 3000 tiles which are rhombus shaped and each of its diagonals are 45 cm and 30 cm in length. Find the total cost of polishing the floor, if the cost per m² is Rs 4.
21. Verify Euler's formula for these solids:



(i)



(ii)

22. Simplify: (i) $(t + s^2)(t^2 - s)$
(ii) $(a + b)(c - d) + (a - b)(c + d) + 2(ac + bd)$

SECTION – D

23. The following data represents the approximate percentage of water in various oceans. Prepare a pie chart for the given data.

Pacific	40%
Atlantic	30%
Indian	20%
Others	10%

24. In a two digit number, digit in units place is twice the digit in tens place. If 27 is added to it, digits are reversed. Find the number.

25. A milk tank is in the form of cylinder whose radius is 1.5 m and length is 7 m. Find the quantity of milk in litres that can be stored in the tank? What are advantages of drinking milk?

26. (a) Factorise the expressions and divide them as directed: $(m^2 - 14m - 32) \div (m + 2)$

(b) Factorise: $a^4 - 2a^2b^2 + b^4$

27. A bank gives 10% Simple Interest (S.I.) on deposits by senior citizens. Draw a graph to illustrate the relation between the sum deposited and simple interest earned.

Find from your graph

(a) the annual interest obtainable for an investment of Rs 250.

(b) the investment one has to make to get an annual simple interest of Rs 70.

28. (a) If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the number of the children is reduced by 4?

(b) A farmer has enough food to feed 20 animals in his cattle for 6 days. How long would the food last if there were 10 more animals in his cattle?

29. Express the number appearing in the following statements in standard form.

(i) Charge of an electron is 0.000,000,000,000,000,16 coulomb.

(ii) Size of a bacteria is 0.0000005 m

(iii) Size of a plant cell is 0.00001275 m

(iv) Thickness of a thick paper is 0.07 mm

30. Using identities, evaluate (i) 5.2^2 (ii) 297×303

