

KENDRIYA VIDYALAYA SANGATHANDEHRADUN REGION

Term II Examination (Session-2021-22)

Subject: Mathematics

Class- VIII

SAMPLE QUESTION PAPER [SET 2]

Max.Marks: 40

Time: 2 hours

General instructions:

- 1. All questions are compulsory*
- 2. This question paper contains 32 questions divided into 4 sections Sections-A, B, C and D*
- 3. Section –A comprises 20 Multiple Choice questions of 1 mark each,
Section –B comprises 6 questions of 1 mark each,
Section –C comprises 4 questions of 2marks each.
Section –D comprises 2 questions of 3 marks each.*

SECTION A. (MCQ)

1x20= 20

- Euler's formula for a polyhedron is **1**
a) $F+V= E-2$. b) $F +V= E+2$. c) $F+E=V+2$. d) $F+E= V-2$.
- Two quantities are said to be in direct proportion if they both increase or decrease in the same **1**
a) Direction. b) ratio. c) time d) Speed
- Any base with exponent 0 is equal to **1**
a) 0 b) 1. c) -1. d) none of these
- The usual number for 3×10^{-6} **1**
a) 0.00003. b) 0.00000003. c) 0.000003 d) 0.0003
- $3y(2x+5)=$ **1**
a) $6xy+5$ b) $6xy+15$. c) $6xy+15y$ d) none of these
- The common factor of $16x^3$ and $32x$ is **1**
a) 16 b) x c) $16x$ d)
 $16x^3$
- If $21y5$ is a multiple of 9, where y is a digit , then value of y is **1**
a) 9 b) 3 c) 1 d) 10

8. The area of a rhombus is 240 cm^2 and one of its diagonals is 16 cm , then the other diagonal is **1**
- a) 60 cm b) 30 cm c) 90 cm d) 120 cm
9. The value of 2^{-3} is **1**
- a) 8 b) $1/6$ c) $1/8$ d) 61
10. A 10 m high pole cast a shadow 6 m long. The length of the shadow a 6 m high pole will cast at the same time is **1**
- a) 10 m b) 3.6 m c) 6 m d) 12 m
11. A line graph which is a whole unbroken line is called a **1**
- a) Bar graph b) pie graph c) histogram d) linear graph
12. Write in usual form : $100 \times 7 + 10 \times 1 + 8$ **1**
- a) 781 b) 817 c) 718 d) 187
13. $(10x - 25) \div 5$ gives **1**
- a) $2x - 25$ b) $10x - 5$ c) $2x - 5$ d) $10x - 2$
14. The height of a cuboid whose volume is 275 cm^3 and base area is 25 cm^2 is **1**
- a) 15 cm b) 11 cm c) 25 cm d) 13 cm
15. Area of a parallelogram is given by **1**
- a) $b \times h$ b) $\frac{1}{2} \times b \times h$ c) $2 \times b \times h$ d) none of these
16. The lateral faces of a pyramid are **1**
- a) Rectangle b) square c) triangle d) parallelogram
17. Q17. The product of $(a^3) \times (a^{25}) \times (a^{72})$ is **1**
- a) $3a$ b) a^{110} c) a^{100} d) a^{1000}
18. Number of faces in a triangular pyramid is **1**
- a) 3 b) 4 c) 5 d) 6
19. 1 m^3 is equal to **1**
- a) 10 L b) 100 L c) 1000 L d) 10000 L
20. The standard form of 0.0000003 is **1**
- a) 3×10^{-7} b) 3×10^7 c) 3×10^6 d) 3×10^{-6}

SECTION B (VSA)**1X6:**

21. If $(A B) \times 3 = C A B$, where A,B and C are digits , then find the possible value of A,B and C **1**
22. Plot the following points on a graph sheet **1**
 $A(0,2)$, $B(2,3)$
23. Find the number of faces of a polyhedron having 16 edges and 12 vertices. **1**
24. Simplify $(-4)^{-5} \times (-4)^{10}$ and write your answer with positive exponent **1**
25. Expand using identity: $(3m- 4n)^2$ **1**
26. Find the value of m for which $5^m \div 5^{-3} = 5^5$ **1**

SECTION C. (SA)**2x4=8**

27. Simplify **2**
 $3x(2x+3y) - 5x(3y- 2x) + 5xy$
28. A car traveling with uniform speed of 60 km/hr covers a distance in 4 hrs. What should be the speed of the car if the driver wants to cover the same distance in 3 hrs. **2**
29. A road roller takes 750 complete revolution to move once over to level a road. Find the area of the road if the diameter of the road roller is 84 cm and length is 1 m. **2**
30. Evaluate using suitable identity: 297×303 . **2**

SECTION D (LA)**3X2=6**

31. Draw the graph for the following data: Distance travelled by a car with a uniform speed **3.**

Time (in hours)	6 a.m.	7 a.m.	8 a.m.	9 a.m.
Distances (in km)	40	80	120	160

- i) How much distance did the car cover during the period 7:30 am to 8 a.m.
 ii) What is the time when the car had covered a distance of 100 km since its start.
32. Factorise the expression and divide them as directed **3**
 $(m^2 - 14m - 32) \div (m+2)$