

KENDRIYA VIDYALAYA SANGATHAN, PATNA REGION

SUMMATIVE ASSESSMENT-II 2015-16

CLASS-VIII

SUB-MATHEMATICS

TOTAL MARKS=60

Time: - 2:30 hours

GENERAL INSTRUCTION:-

- (1) All questions are compulsory
- (2) There are four sections in this question paper as section A, Section B, Section C and Section D.
- (3) Section A MCQ: $1 \times 7 = 7$ marks
Section B VSA: $2 \times 5 = 10$ marks
Section C SA: $3 \times 7 = 21$ marks
Section D LA: $4 \times 3 = 12$ marks
- (4) In OTBA answer the question selecting one theme from given two themes.

Section-A

1. Which one is trinomial
A. $2x(x^2 - 1)$
B. $3x + y$
C. xyz
D. $3(x+1)^2$
2. Total number of vertices of a cuboid is
A. 4
B. 6
C. 8
D. none of these

3. If the radius & height of cylinder is 7cm and 3cm respectively then its volume will be
- A. $7\pi \text{ cm}^3$
 - B. 154 cm^3
 - C. $2\pi \text{ cm}^3$
 - D. none of these
4. The scientific notation of 1035.3
- A. 1.0353×10^{-3}
 - B. 1.0353×10^3
 - C. 10.353×10^2
 - D. None of these
5. The expression $(x-2)^2$ is equal to.
- A. X^2-4X+4
 - B. X^2+4X-4
 - C. X^2-4X-4
 - D. None of these
6. Co-ordinate (0,0) Lying on
- A. X-axis.
 - B. Origin.
 - C. 1st quadrant
 - D. Y- axis.
7. Which Number is divisible by 9?
- A. 10125
 - B. 13475
 - C. 3675
 - D. 15925

Section – B

8. Write Euler's formula & verify it for cube.

9. The base and altitude of a parallelogram is 14cm & 10cm finds its area.

Or

The area of a square is 196cm^2 find its perimeter.

10. Evaluate
 $(30+4^{-1}) \times 4^{-1}$
11. Factorize: x^2-49
12. Find the value of letter :-
402
+53A
A41

Section – C

13. By use of identities find the product of
 $(3x+7) \times (3x+8)$
14. Can a polyhedron have 10 faces 20 edges and 15 vertices? Explain the reason of your answer.
15. If each edge of a cube is doubled,
(1) How many times will its surface are increase?
(2) How many times will its volume increase?
16. Evaluate:-
 $\{(1/3)^{-1} - (1/4)^{-1}\}^{-1}$

Or

Find 'm' if $(-3)^{m+1} \times (-3)^5 = (-3)$

17. Use the tables below to draw graph. The number of days a hill side city received snow in different years.

Year	2003	2004	2005	2006
Days	8	10	5	12

18. If $31z5$ is a multiple of 3, where z is a digit find the value of z .

19. Factorize

(1) $P^2 + 6P + 8$

(2) $x^2 - (x-y)^2$

Section-D

20. Divide the given polynomial by the given polynomial.

(1) $(5x^2 - 6x) / 3x$

(2) $(y^2 + 7y + 10) / (y + 5)$

21. Find the height of a cuboid whose base area 180 cm^2 and volume is 900 cm^3 ?

22. A factory requires 42 machines to produce a given number of articles in 63 days. How many machines would be required to produce the same number of articles in 54 days?

OTBA

Theme-1 Cleanliness

Q.1. What is the deadline for completion of Swachh Bharat Mission and what is the reason for choosing that year? 4

Q.2. What was the pledge of Swachh Bharat Abhiyan? In which year, the Indian PM Narendra Modi launched it? 4

Q.3. Name the country that issued least carbon credits. 2

Theme-2 Global Warming

Q.1. What are the percentages of CO_2 and Methane gases in annual greenhouse gas emitted by sector. 4

Q.2. Write some harmful effects of global warming on agriculture. 4

Q.3. What do you mean by Global warming? 2