

FINAL TERM 2022-23

8 Class Final Term Exam Mathematics

Maximum Marks = 60
Total Time = 2H

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

Section-A

- 1. Which one is trinomialA.
 $2x(x^2 - 1)$
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

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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 1035.3A.
- 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.
- 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.
- A. 10125
 - B. 13475
 - C. 3675
 - D. 15925

Section – B

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

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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 area 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

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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 900cm^3 ?

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