

Maths Special Batch By Gagan Pratap Sir





$$7\sqrt{7\sqrt{7\sqrt{7...\infty}}} = 343^{y-1}$$
 then y =?

c)
$$\frac{5}{4}$$

$$\sqrt{64}\sqrt[3]{64}\sqrt[3]{64}...$$
 =

$$\begin{array}{c} \text{b)8} & \text{c)16} \\ \hline 0.512\sqrt[4]{0.512\sqrt[4]{0.512} \dots \dots \dots} \end{array}$$

$$d)4\sqrt{2}$$

0.16

a)<mark>3</mark>

$$b)3\sqrt{3}$$

ind
$$12\sqrt{12\sqrt{12\sqrt{12\sqrt{12}}}} = ?$$

a)
$$12^{\frac{32}{31}}$$

 $27 \div \sqrt{27 \div \sqrt{27 \dots \dots \infty}} = ?$

c)
$$12^{\frac{31}{32}}$$

11
$$\int_{11}^{3} 11 \sqrt[3]{11 \sqrt[3]{11}} = 121^{k}$$
 then k =?

7.
$$\int_{a}^{m} \int_{b}^{n} \int_{a}^{m} a^{n} da^{n}$$

a)
$$\sqrt[mn-1]{a^n b}$$

b)
$$\sqrt[mn]{ab}$$

c)
$$^{mn-1}\sqrt{b^na}$$

d)
$$\sqrt{ab}$$

Find the value of $\sqrt{30 + \sqrt{30 + \sqrt{30 + \cdots}}}$

$$\sqrt{30+\sqrt{30+\sqrt{30+\cdots}}}$$
 का मान ज्ञात कीजिए?

(b)
$$3\sqrt{10}$$

Find the value of the given expression?

दिए गए ब्यंजक का मान ज्ञात कीजिये?

$$20 - \sqrt{20 - \sqrt{20 - \cdots \dots \infty}}$$

- A) 5
- B) 6
- C) 2

10. Let
$$x = \sqrt{42 - \sqrt{42 - \sqrt{42 - \dots + to infinity}}}$$
; then x equals

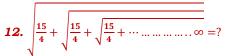
a) 6

- c) Between 6 and 7
- d) Greater than 7
- 11. $\sqrt{0.56 + \sqrt{0.56 + \cdots \dots \infty}} = ?$
- 1.4
- 1.2
- 1.3
- D) 1.1



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- B) 2.5
- C) 3
- D) 2.75

13.
$$\frac{\sqrt{210+\sqrt{210+\sqrt{210+\cdots}}}}{\sqrt{156-\sqrt{156-\sqrt{156-\cdots}}}} = ?$$

- a)1
- b)1.33
- c)1.25
- d)1.5

14.
$$\sqrt{14 + \sqrt{14 + \sqrt{14 + \sqrt{14 + \cdots \infty}}}}$$
 lies between
a) 4 and 4.5 b) 4.5 and 5

- a) 4 and 4.5
- c)3 and 4
- d) none

15. Find
$$\sqrt{19 - \sqrt{19 - \sqrt{19 - \sqrt{19 ... \infty}}}} = ?$$

- d) Between 4 and 5

16. If
$$a = \sqrt{13 + \sqrt{13 + \sqrt{13 + \sqrt{13 ... \infty}}}}$$
 and

b=
$$\sqrt{13-\sqrt{13-\sqrt{13-\sqrt{13}...\infty}}}$$
, then which option is true?

- c) a b + 1 = 0

17. Find
$$154 + 3\sqrt{154 + 3\sqrt{154 + 3\sqrt{154 + \cdots \infty}}} = ?$$

- a)13
- d) 11

18.
$$\sqrt{750 - 5\sqrt{750 - 5\sqrt{750 \dots \dots \infty}}} = ?$$

- A) 20
- B) 25
- C) 30
- D) 10

19. Let
$$x = \sqrt{4 + \sqrt{4 - \sqrt{4 + \sqrt{4 - \cdots to infinity}}}}$$
; then x equals

- a) 3

20. Let
$$x = \sqrt{13 - \sqrt{13 - \sqrt{13 + \cdots \infty}}}$$
; then x equals

21. If
$$m = \frac{1}{2 + \frac{1}{1}}$$
, then find m?

यदि
$$m = \frac{1}{2 + \frac{1}{3 + \dots - 1}}$$
 है, तो m ज्ञात कीजिये?

A)
$$\frac{\sqrt{15-3}}{2}$$

C)
$$\frac{\sqrt{15}+3}{2}$$

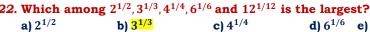
B)
$$\frac{\sqrt{13}+3}{2}$$

D)
$$\frac{\sqrt{13}-3}{2}$$



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Surds and Indices (घातांक और करणी) Sheet - 2



c)
$$4^{1/4}$$

d)
$$6^{1/6}$$
 e) $12^{1/12}$

23. Which of the following given value is greater than $\sqrt[3]{12}$?

दिया गया कौन से मान $\sqrt[3]{12}$ से अधिक है?

(a) $\sqrt[12]{33214}$ (c) $\sqrt[6]{121}$

(b) $\sqrt[5]{60}$ (d) $\sqrt[9]{1500}$

24. Which of the following is TRUE?

I.
$$\sqrt[3]{11} > \sqrt{7} > \sqrt[4]{45}$$

II.
$$\sqrt{7} > \sqrt[3]{11} > \sqrt[4]{45}$$

III.
$$\sqrt{7} > \sqrt[4]{45} > \sqrt[3]{11}$$

IV.
$$\sqrt[4]{45} > \sqrt{7} > \sqrt[3]{11}$$

निम्नलिखित में से कौन सा सत्य है?

I. $\sqrt[3]{11} > \sqrt{7} > \sqrt[4]{45}$

II. $\sqrt{7} > \sqrt[3]{11} > \sqrt[4]{45}$

III. $\sqrt{7} > \sqrt[4]{45} > \sqrt[3]{11}$

IV. $\sqrt[4]{45} > \sqrt{7} > \sqrt[3]{11}$

Options:

a) Only I/केवल I

b) Only II/केवल II

c) Only III/केवल III

d) Only IV/केवल IV

25. Which of the following is TRUE?

निम्नलिखित में से कौन सा सत्य है?

I.
$$\frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt{5}}$$

$$\|.\frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt{5}}$$

III.
$$\frac{1}{\sqrt{5}} > \frac{1}{\sqrt[3]{12}} > \frac{1}{\sqrt[4]{29}}$$

IV.
$$\frac{1}{\sqrt{5}} > \frac{1}{\sqrt[4]{29}} > \frac{1}{\sqrt[3]{12}}$$

Options:

- a) Only I/केवल I
- b) Only II/केवल II
- c) Only III/केवल III
- d) Only IV/केवल IV

26. The greatest number among 2^{72} , 5^{36} , 11^{24} and 3^{60} is

(a)
$$2^n$$

27. The smallest of $(\sqrt{8} + \sqrt{5})$, $(\sqrt{7} + \sqrt{6})$, $(\sqrt{10} + \sqrt{3})$, and $(\sqrt{11} + \sqrt{2})$ is:

a)
$$(\sqrt{8} + \sqrt{5})$$

b)
$$(\sqrt{7} + \sqrt{6})$$

c)
$$(\sqrt{10} + \sqrt{3})$$

d)
$$(\sqrt{11} + \sqrt{2})$$

28. The smallest of, $(\sqrt{69} + 2\sqrt{7})$, $(\sqrt{61} + 6)$, $(5\sqrt{3} + \sqrt{22})$, and $(\sqrt{58} + \sqrt{39})$ is:

a)
$$(\sqrt{61} + 6)$$

b)
$$(\sqrt{69} + 2\sqrt{7})$$

c)
$$(5\sqrt{3} + \sqrt{22})$$

29. Which is the greatest among $(\sqrt{24} + \sqrt{10})$, $(\sqrt{30} + \sqrt{8})$, $(\sqrt{15} + 4)$, $(\sqrt{12} + \sqrt{20})$?

 $(\sqrt{24} + \sqrt{10}), (\sqrt{30} + \sqrt{8}), (\sqrt{15} + 4), (\sqrt{12} + \sqrt{20})$ निम्निलिखित में से कौन सी संख्या **सबसे बड़ी है**

a)
$$\sqrt{24} + \sqrt{10}$$
)

b)
$$(\sqrt{30} + \sqrt{8})$$

c)
$$(\sqrt{15}+4)$$

d)
$$(\sqrt{12} + \sqrt{20})$$

30. Which is the greatest among

$$(\sqrt{17} - \sqrt{14}), (\sqrt{19} - 4), (\sqrt{22} - \sqrt{19}), (\sqrt{13} - \sqrt{10})$$
?

a)
$$(\sqrt{17} - \sqrt{14})$$
 b) $(\sqrt{19} - 4)$

b)
$$(\sqrt{19} - 4)$$

c)
$$(\sqrt{22} - \sqrt{19})$$

d)
$$(\sqrt{13} - \sqrt{10})$$