

(CISF HCM 2023)

Maths Special Batch



Calculation and Simplification Sheet- 2

| 1. | Find $(99\frac{1}{2})^{-1}$ | | | | | | | | | | |
|----|--|---|-----------------|--------------------|-------------------------------------|----------------------|----------------|--|--|--|--|
| | $(99\frac{1}{2})^2$ ज्ञात कीजिये | 1? | | | | | | | | | |
| A) | | | | | | | | | | | |
| B) | 9900.25 | | | | | | | | | | |
| C) | 8990.25 | | | | | | | | | | |
| D) | 9821.25 | these number | *c2 | | | | | | | | |
| 2. | Find the square of | | | | | | | | | | |
| | इन संख्याओं का वर्ग ज्ञात कीजिये? | | | | | | | | | | |
| | · / |) 114) 837 | c) 163 | d) 197 | e) 291 | f) 374 | | | | | |
| | g) 413 h) |) 03 / | i) 926 | | | | | | | | |
| 3. | The value of 1801 | × 1801 is: | | | | | | | | | |
| | 1801 × 1801 का मान | है। | | | | | | | | | |
| | (a) 3423601 | | | | | X | | | | | |
| | (b) 3243601 | | | | | | | | | | |
| | (c) 2343601 | | | | | | | | | | |
| | (d) 3243106 | | | | | | | | | | |
| 4. | Which of the | following | options is | s not a squai | e number? | | | | | | |
| | निम्नलिखित में से | _ | _ | | | 18) | | | | | |
| A) | 5625 | M-1 (II 14 IV | \ 1 \ N \ 4-1 \ | 1041 9101 (1. (0 | . Constable 20 | 19/ | | | | | |
| B) | 7225 | | | | | | | | | | |
| C) | 3625 | | | | | | | | | | |
| D) | 9025 | | | | | | | | | | |
| 5. | | number which | h when subt | racted from 1042 | 4 gives a perfec | t square number. Wha | t is the least | | | | |
| | | Let x be the least number which when subtracted from 10424 gives a perfect square number. What is the least number by which x should be multiplied to get a perfect square? | | | | | | | | | |
| | माना x बह छोटी से छोटी संख्या है, जिसे 10424 में से घटाने पर एक पूर्ण वर्ग संख्या प्राप्त होती है। बह छोटी से छो | | | | | | | | | | |
| | संख्या ज्ञात करें, जिसे x से गुणा करते पर पूर्ण वर्ग संख्या प्राप्त हो। | | | | | | | | | | |
| | (a) 3 | (b) 6 | | (c) 5 | (d) | 2 | | | | | |
| 6. | A 4-digit number of | of the from aa | bb is a perfec | t square. What is | the value of a – | b? | | | | | |
| | 4-अंकीय संख्या aal | bb एक पूर्ण व | र्ग है। a-b क | ा मान क्या है? | | | | | | | |
| | |) 2 | c) 4 | d) 1 | | | | | | | |
| 7. | If a 5-digit number | r in the form | xxyxx is a per | fect square then f | ind value of x+y | +x*y? | | | | | |
| | गटि ४४४४४ ऊप मे | ं 5 थंकों की उ | ग्रंद्धा एक पा | ंतर्गदै। तो र+र | _ਪ + v * v का मा न | चात कीजिए? | | | | | |
| | यदि xxyxx रूप में 5 अंकों की संख्या एक पूर्ण वर्ग है। तो x + y + x * y का मान ज्ञात कीजिए? | | | | | | | | | | |
| _ | |) 51 | c) 48 | d) 50 | | | | | | | |
| 8. | | | | | | ach student donate | | | | | |
| | rupees as the number of students in the class. The number of students in the class is: | | | | | | | | | | |
| | एक कक्षा के विद्यार्थी ₹ 2,809 की राशि दान करते हैं। यदि प्रत्येक विद्यार्थी ने उतने ही रुपये दान किए, जितनी कक्षा में विद्यार्थियों की संख्या है, तो कक्षा में विद्यार्थियों की संख्या ज्ञात करें। | | | | | | | | | | |
| | | | | | | | | | | | |
| | (a) 49 | (b) 53 | } | (c) 51 | (d) | 47 | | | | | |
| 9. | What is the squ | are root of | 735.4944? | • | | | | | | | |
| | 735.4944 का वर्ग | मूल क्या है? | | | | | | | | | |
| A) | 27.12 | • | | | | | | | | | |
| B) | 32.12 | | | | | | | | | | |
| C) | 37.14 | | | | | | | | | | |
| D) | 29.14 | | | | | | | | | | |
| 10 | 10. Find the square root of 645.8 correct to two decimal places. | | | | | | | | | | |
| | 645.8 का वर्गमूल दो दशमलव स्थानों तक ज्ञात कीजिए। | | | | | | | | | | |



(b) Only II/केवल II

(c) Both I and II/I और II दोनों (d) Neither I nor II/न तो I न ही II

Maths Special Batch



Calculation and Simplification Sheet- 2

| | (a) 26.08 | (b) 2 | 5.84 | (c) 25.41 | (d) 26.40 | | | | | |
|-------------|---|--|-----------------------------------|-----------------------------------|------------------------------------|--|--|--|--|--|
| 11. | Find cube root? | (5) = | 0.01 | (6) 20.11 | (4) 20.10 | | | | | |
| | a) $\sqrt[3]{-17576}$ b) | $\sqrt[3]{493039}$ c | $\sqrt[3]{1771561}$ | | | | | | | |
| | , | e) $\sqrt[3]{1225043}$ f | | | | | | | | |
| 12. | The square root of | , | , | l number? | | | | | | |
| | | वर्गमूल एक परिमेय संख्या है: | | | | | | | | |
| | | 1250.49 c) 13 | | 5768.28 | | | | | | |
| 13. | The square root of | | | | | | | | | |
| | निम्नलिखित में से 1 | किसका वर्गमल एक | परिमेय संख्या | } ? | | | | | | |
| | | 524.176 c) 34 | | 19.4482 | | | | | | |
| 14. | , , , , , , , , , , , , , , , , , , , | / | / | any digits will it have? | | | | | | |
| | यदि किसी संख्या के | | | | | | | | | |
| | | | | | A 0 | | | | | |
| 15 | | | d) s 22 digits the | n how many digits will it have | | | | | | |
| 15. | | | | • • | | | | | | |
| | यदि किसी संख्या के | | | • | | | | | | |
| | a) 12 b) | 11 c) 9 | d) | 10 | | | | | | |
| 1. | | | / 0.4 | 1 /45400 | | | | | | |
| 16. | How many natural | | | | | | | | | |
| | $\sqrt{261}$ और $\sqrt{45109}$ | के बीच कितनी प्राकृ | तेक सख्याये है | ? | | | | | | |
| | a)144 b)168 | c)196 d |)195 | | | | | | | |
| 17 . | | | | | 36562 army men. After | | | | | |
| | arrangement, he | | | | _ 40 | | | | | |
| | | | .74. | करने के बाद कुछ सैनिक बच गये। बचे | हुए सानका का संख्या ज्ञात क्या था? | | | | | |
| | (a) 36 (b) 65 | 5 (c) 81 | (d) 97 | | | | | | | |
| 18. | What least number | must be subtracted | from 923604 s | o that it becomes a perfect squ | are? | | | | | |
| | . What least number must be subtracted from 923604 so that it becomes a perfect square? 923604 पर कौन सी संख्या घटाया जाना चाहिए ताकि यह एक पूर्ण वर्ग बन जाए? | | | | | | | | | |
| | | | | | | | | | | |
| | a)78 b) | 79 c)83 | d)8 | 34 | | | | | | |
| 10 | If ¹ = 0.2246.4 | and the value of | 1 | | | | | | | |
| 19. | If $\frac{1}{4.263} = 0.2346$, f | | | / | | | | | | |
| | यदि $\frac{1}{4.263} = 0.2346$ | $\frac{1}{6, \text{ nl}} \frac{1}{0.0004263}$ an Hir | ज्ञात कीजिए। | | | | | | | |
| | (a) 4.263 | (b) 2.346 | | | | | | | | |
| | (c) 2346 (d) |) 4263 | | | | | | | | |
| | ***** | | | | | | | | | |
| 20 | Which of the fol. निस्त्रतिखित में | llowing statemei से कौन–सा कथन सत्य | it(s) is/are t ≜? | rue | | | | | | |
| | | $\frac{(64)}{(64)} + \sqrt{(0.0064)}$ | | $\sqrt{(0.0081)} = 9.07$ | | | | | | |
| | • | $(0.010201) + \sqrt{(9.004)}$ | • | | | | | | | |
| | | | 0.01) $\mathbf{+}\sqrt{(0.2)}$ | (3) - 11.51 | | | | | | |
| | (a) Only I / केवल I | | | | | | | | | |
| | (b) Only II/केवल II (c) Both I and II/I और II दोनो | | | | | | | | | |
| | (c) Both I and II/I आर II दोना (d) Neither I nor II/ न तो I न ही II | | | | | | | | | |
| | (a) Mercher I nor | | | | | | | | | |
| 21 | 21. Which of the following statement(s) is/are true | | | | | | | | | |
| | निम्नलिखित में से कौन—सा कथन सत्य है? | | | | | | | | | |
| | | $7)^2 + (0.07)^2 + (1$ | | 3 | | | | | | |
| | II. $(1.12)^2 + (10.3)^2 + (1.05)^2 > 108.3$ | | | | | | | | | |
| | (a) Only I/ केवल I | | | | | | | | | |
| | (~) 1/ 4/40/ 1 | | | | | | | | | |