



CHAPTER 1: LARGE NUMBERS AROUND US

Name:

Date:

A. Mathematical Reasoning (40 Qs)

1. Sum of the place value and face value of 9 in 91825967 is:

- ☐ (a) 909
- ☐ (b) 891
- ☒ (c) 900
- ☐ (d) 8100

2. Rohan wrote 9,46,11,066 on the blackboard. How would an American student write this using the International System?

- ☐ (a) 94 , 611 , 066
- ☒ (b) 94,611,066
- ☐ (c) 9,46,11,066
- ☐ (d) 94611066

3. Which of the following correctly represents the expanded form of 4761907?

- ☒ (a) $(4 \times 1000000) - (7 \times 100000) - (6 \times 10000) - (1 \times 1000) - (9 \times 100) - (7 \times 1)$
- ☐ (b) $(4 \times 100000) + (7 \times 10000) + (6 \times 1000) + (1 \times 100) + (9 \times 10) + (7 \times 0.1)$
- ☐ (c) $(4 \times 10000000) + (7 \times 1000000) + (6 \times 100000) + (1 \times 10000) + (9 \times 1000) + (7 \times 10)$
- ☐ (d) $(4 \times 1000000) + (7 \times 100000) + (6 \times 10000) + (1 \times 1000) + (9 \times 100) + (7 \times 1)$

4. Evaluate the numeral corresponding to:

$$(6 \times 1000000) + (4 \times 100000) + (7 \times 10000) + (4 \times 1000) + (1 \times 100) + (2 \times 10) + (2 \times 1).$$

- ☒ (a) 6474123
- ☐ (b) 6474122
- ☐ (c) 6474121
- ☐ (d) 64741220

5. Which of the following numbers would round to 60000 when rounded to the nearest ten thousand?

- ☒ (a) 60019
- ☐ (b) 110019
- ☐ (c) 50000
- ☐ (d) 70000

6. Round the number 18326 to the nearest ten thousand.

- ☐ (a) 10000
- ☐ (b) 30000
- ☒ (c) 20000
- ☐ (d) 18000

7. A computer printed the number 416448196 without commas. How should it be correctly written according to the International System of Numeration?

- ☒ (a) 416,448,196
- ☐ (b) 416 , 448 , 196
- ☐ (c) 416448196
- ☐ (d) 41,64,48,196

8. Create the smallest 6-digit number from 9, 6, 5, 4, 3, 2 (no repetition). What is its face value at the hundreds place?

- ☒ (a) 4
- ☐ (b) 6
- ☐ (c) 5

9. Find the product of the first and last digits of the greatest 6-digit number formed by 9, 7, 6, 5, 4, 2.

- ☒ (a) 18
- ☐ (b) 11
- ☐ (c) 28
- ☐ (d) 18

10. Form the smallest 6-digit number using the digits 9, 8, 5, 4, 2, 1 exactly once. What is the sum of the digits at the ten-thousands and tens places?

- ☐ (a) 10
- ☐ (b) 10
- ☒ (c) None of these
- ☐ (d) 7

11. If the expanded form of 2708513 is written as $(2 \times 1000000) + (7 \times 100000) + X + (5 \times 100) + (1 \times 10) + (3 \times 1)$, what does X represent?

- ☐ (a) (8×1000)
- ☒ (b) (8×1000)
- ☐ (c) (2×1000000)

12. If you subtract 1000 from the smallest 6-digit number formed by 7, 6, 5, 4, 3, 1, what is the result?

- ☒ (a) 764431
- ☐ (b) 135567
- ☐ (c) 134467
- ☐ (d) 133567

13. Which digit in the number 12668732 has a place value exactly equal to 8000?

- ☐ (a) 10
- ☐ (b) 9
- ☐ (c) 80
- ☒ (d) 8

14. How would you express 5747119 as a sum of place values?

- ☐ (a) $(5 \times 10000000) + (7 \times 1000000) + (4 \times 100000) + (7 \times 10000) + (1 \times 1000) + (1 \times 100) + (9 \times 10)$
- ☒ (b) $(5 \times 1000000) + (7 \times 100000) + (4 \times 10000) + (7 \times 1000) + (1 \times 100) + (1 \times 10) + (9 \times 1)$
- ☐ (c) $(5 \times 1000000) \times (7 \times 100000) \times (4 \times 10000) \times (7 \times 1000) \times (1 \times 100) \times (1 \times 10) \times (9 \times 1)$
- ☐ (d) $(5 \times 2000000) + (7 \times 200000) + (4 \times 20000) + (7 \times 2000) + (2 \times 200) + (2 \times 20) + (9 \times 2)$

15. Find the estimated difference when 28131 and 76784 are both rounded to the nearest thousand before subtracting.

- ☒ (a) -48000
- ☐ (b) -49000
- ☐ (c) 49000
- ☐ (d) -50000

16. In the number 13575562, the place value of 3 is how many times its face value?

- ☐ (a) 1000000
- ☐ (b) 3000000
- ☐ (c) 100000
- ☒ (d) 10000000

17. What is the difference between the place value and the face value of the digit 8 in the number 81801586?

- ☐ (a) 80000008
- ☐ (b) 79999920
- ☐ (c) 79999992
- ☒ (d) 80000000

18. What is the International equivalent of 10 Lakhs?

- ☐ (a) 1 Million
- ☐ (b) 100 Thousand
- ☒ (c) 10 Million
- ☐ (d) 100 Million

19. Construct the greatest 6-digit number from 9, 7, 6, 5, 3, 1 (no repetition). Is the resulting number even or odd?

- ☐ (a) Even
- ☐ (b) Cannot be determined
- ☒ (c) Odd
- ☐ (d) Prime

20. The place value of 5 in 57629388 is 50000000. By how much does it exceed the number 1488?

- ☐ (a) 50001488
- ☒ (b) 50000000
- ☐ (c) 49998512
- ☐ (d) 1488

21. Which of the following equals 10 million in the Indian numbering system?

- ☐ (a) 10 Crores
- ☐ (b) 100 Lakhs
- ☒ (c) 1 Crore
- ☐ (d) 10 Lakhs

22. Consider the digits 7, 7, 5, 3, 2, 1. What is the difference between the greatest and the smallest 6-digit numbers formed using these digits exactly once?

- ☒ (a) 898898
- ☐ (b) 651744
- ☐ (c) 651753
- ☐ (d) 651735

23. True or False: 65333 and 88172 both round to the same value when rounded to the nearest ten thousand.

- ☒ (a) False
- ☐ (b) Cannot be determined
- ☐ (c) None of these
- ☐ (d) True

24. Find the number whose expanded form contains the term 1×100000 among its components.

- ☒ (a) 7190293
- ☐ (b) 14380586
- ☐ (c) 7090293
- ☐ (d) 8190293

25. Using 9, 7, 6, 5, 2, 1 each exactly once, what is the sum of the greatest and smallest possible 6-digit numbers?

- ☒ (a) 251358
- ☐ (b) 1953042
- ☐ (c) 850842
- ☐ (d) 1102200

26. Identify the correct Indian System representation for the numeral 684996843.

- ☒ (a) 68,49,96,843
- ☐ (b) 684996843
- ☐ (c) 68 , 49 , 96 , 843
- ☒ (d) 684,996,843

27. Estimate the product of 30969 and 10 by first rounding 30969 to the nearest hundred.

- ☐ (a) 309000
- ☐ (b) 310000
- ☐ (c) 311000
- ☒ (d) 309690

28. Select the true expanded notation for the numeral 1656017:

- ☒ (a) $(1 \times 1000000) + (6 \times 100000) + (5 \times 10000) + (6 \times 1000) + (1 \times 10) + (7 \times 1)$
- ☐ (b) $(1 \times 1000000) - (6 \times 100000) - (5 \times 10000) - (6 \times 1000) - (1 \times 10) - (7 \times 1)$
- ☐ (c) $(1 \times 10000000) + (6 \times 1000000) + (5 \times 100000) + (6 \times 10000) + (1 \times 10) + (7 \times 1)$
- ☐ (d) $(1 \times 10000000) + (6 \times 1000000) + (5 \times 100000) + (6 \times 10000) + (1 \times 100) + (7 \times 1)$

29. Determine the quotient when the place value of 7 in 32227216 is divided by its face value.

- ☒ (a) 7000
- ☐ (b) 1000
- ☐ (c) 100
- ☐ (d) 7

30. What is the standard form of the expression:

$(1 \times 1000000) + (8 \times 100000) + (1 \times 10000) + (4 \times 1000) + (8 \times 100) + (3 \times 1)?$

- ☐ (a) 1815803
- ☐ (b) 181480
- ☐ (c) 18148030
- ☒ (d) 1814803

31. Write 5808456 in short expanded form (using zeros):

- ☐ (a) $5000000 - 800000 - 8000 - 400 - 50 - 6$
- ☐ (b) $5111111 + 811111 + 8111 + 411 + 51 + 6$
- ☒ (c) $5000000 + 800000 + 8000 + 400 + 50 + 6$
- ☐ (d) $5000000000 + 80000000 + 80000 + 4000 + 50 + 6$

32. A student rounded 16175 to the nearest ten thousand. By how much did his estimated value differ from the actual value?

- ☒ (a) 175
- ☐ (b) 3825
- ☐ (c) 3725
- ☐ (d) 3925

33. Convert 324,797,776 from the International system to the Indian system.

- ☒ (a) 3247,97,776
- ☐ (b) 324797776
- ☐ (c) 324,797,776

34. How many lakhs make one million?

- ☒ (a) 10
- ☐ (b) 100
- ☐ (c) 1000
- ☐ (d) 1

35. Find the product of the face value and the place value of the digit 6 in the number 76329037.

- ☐ (a) 60000000
- ☐ (b) 36000000
- ☐ (c) 36000006
- ☒ (d) 6000000

36. If the face value of 9 in 99847493 is multiplied by its place value, the result is:

- ☐ (a) 810000000
- ☒ (b) 90000000
- ☐ (c) 90
- ☐ (d) 90000009

37. What is the estimated sum of 30033 and 92240 if each is rounded to the nearest hundred?

- ☐ (a) 122100
- ☐ (b) 122200
- ☒ (c) 122300

38. Translate 1 Billion into the Indian system of numeration.

- ☐ (a) 100 Crores
- ☐ (b) 10 Crores
- ☐ (c) 1 Arab
- ☒ (d) 1000 Lakhs

39. Estimate the sum of 74686 and 21915 by rounding off each number to the nearest thousand.

- ☐ (a) 97000
- ☐ (b) 96000
- ☒ (c) 97000
- ☐ (d) 98000

40. Form the greatest 6-digit number using the digits 9, 5, 4, 3, 2, 1 exactly once. What is the digit at the thousands place?

- ☒ (a) 4
- ☐ (b) 3
- ☐ (c) 5

B. Everyday Mathematics (20 Qs)

41. During a national voting event, candidate A and candidate B faced off. Candidate A received 421801 votes, while candidate B received 360945 votes. 23182 votes were rejected. What was the total number of votes cast by the public?

- ☐ (a) 444983
- ☐ (b) 782746
- ☐ (c) 759564
- ☒ (d) 805928

42. A government allocated ₹ 84439648 for city development. After spending ₹ 72177843 on various projects, the rest was saved. How much was saved?

- ☐ (a) ₹ 24667227
- ☒ (b) ₹ 12261805
- ☐ (c) ₹ 47510616
- ☐ (d) ₹ 84439648

43. The smart city project spent ₹ 18594297 on hospitals and ₹ 19046844 on schools from a total budget of ₹ 89344146. What was the total expenditure on just hospitals and schools combined?

- ☒ (a) ₹ -452547
- ☐ (b) ₹ 89344146
- ☐ (c) ₹ 23559102
- ☐ (d) ₹ 37641141

44. A leading automobile manufacturer produced 1563441 cars in the year 2021. Due to high market demand and expansion, the production increased by 164986 cars in 2022. However, due to global supply chain issues and chip shortages, the production in 2023 fell to 1648976 cars. What was the total number of cars produced by the manufacturer over these three years?

- ☐ (a) 4840844
- ☐ (b) 4940844
- ☐ (c) 5040844
- ☒ (d) 3291868

45. A city council budgeted ₹ 88153634 for public works. ₹ 27935169 went to road repair and ₹ 13194548 went to education. How much more was spent on roads compared to education?

- ☐ (a) ₹ 14740621
- ☐ (b) ₹ 13194548
- ☒ (c) ₹ 4129717
- ☐ (d) ₹ 27935169

46. A space telescope is positioned 346520510 km away from a space station, which is itself 97437600 km away from Earth in a straight line. What is the total distance of the space telescope from Earth?

- ☒ (a) 443958110 km
- ☐ (b) 443959110 km
- ☐ (c) 346520510 km
- ☐ (d) 97437600 km

47. In three consecutive years, a toy factory produced 1537220, 1822776, and 1690057 toys respectively. If half of the total toys produced over these three years were exported, how many toys were exported?

- ☐ (a) 3359996
- ☒ (b) 5050053
- ☐ (c) 2526026
- ☐ (d) 2525026

48. A garment manufacturer sold 1533568 shirts in Year 1. Year 2 sales were 1722195. What was the average number of shirts sold per year over these two years?

- ☐ (a) 1627881
- ☒ (b) 3255763
- ☐ (c) 1722195
- ☐ (d) 1533568

49. A satellite orbits at a distance of 366748176 km from Earth. If a second satellite is launched to orbit 78203328 km further away than the first, what is the orbital distance of the second satellite?

- ☐ (a) 366748176 km
- ☒ (b) 283544848 km
- ☐ (c) 444951504 km

50. During a space mission, an astronaut travels 557376 km in a single day. At this rate, how far will the astronaut travel in 107 days?

- ☐ (a) 2484968 km
- ☒ (b) 59639232 km
- ☐ (c) 421115686 km
- ☐ (d) 480754918 km

51. Out of 608462 voters who turned up on election day, 41148 accidentally voided their ballots. Candidate X won with a margin of 92062 votes against Candidate Y. What was the total number of valid votes counted?

- ☒ (a) 567314
- ☐ (b) 329688
- ☐ (c) 608462
- ☐ (d) 526166

52. A deep space probe is traveling towards a newly discovered distant asteroid located 408077827 km away from Earth. The probe travels continuously at a constant speed of 31118 km per hour through the vacuum of space. After traveling without interruption for exactly 113 days, a communications check is performed by scientists on Earth. How much further does the probe need to travel to reach its target asteroid?

- ☐ (a) 404561493 km
- ☒ (b) 84392016 km
- ☐ (c) 323685811 km
- ☐ (d) 323695811 km

53. A smartphone factory assembled 1808512 devices in January, 1966240 in February, and 1915298 in March. If their target for the quarter was 5740050 devices, by how much did they miss their target?

- ☐ (a) 100000
- ☐ (b) 25000
- ☒ (c) 50000
- ☐ (d) 10000

54. If ₹ 21188789 is spent on roads, ₹ 23626108 on hospitals, and ₹ 13993055 on schools, what is the combined total expense for all these infrastructure projects?

- ☐ (a) ₹ 32279388
- ☐ (b) ₹ 91087340
- ☐ (c) ₹ 44814897
- ☒ (d) ₹ 58807952

55. In a local council election, 581198 total ballots were collected. After recounting, 44911 were discarded as blank. The winner defeated the runner-up by 36481 votes. How many valid votes did the runner-up receive?

- ☐ (a) 249903
- ☒ (b) 26843
- ☐ (c) 286384

56. In a state assembly election, two primary candidates contested from a major constituency. A total of 855759 votes were polled by the citizens, out of which 37730 votes were declared invalid due to various reasons. If the winning candidate secured 432894 of the valid votes, what was his winning margin over his rival?

- ☐ (a) 47759
- ☒ (b) 395164
- ☐ (c) 46759
- ☐ (d) 48759

57. The distance between Planet X and Planet Y is 413247990 km. A spaceship has covered 84278880 km of this journey. What is the remaining distance to reach Planet Y?

- ☐ (a) 84278880 km
- ☒ (b) 328969110 km
- ☐ (c) 413247990 km
- ☐ (d) 497526870 km

58. A fiercely contested mayoral race saw a total polling of 613944 votes. 27370 votes were deemed illegitimate. If the losing candidate received 248706 votes, how many votes did the winning candidate receive?

- ☒ (a) 337868
- ☐ (b) 248706
- ☐ (c) 365238
- ☐ (d) 89162

59. A tech company generated a revenue of 1808443 dollars in Q1. In Q2, revenue grew to 2053650 dollars. In Q3, it dipped to 1973489 dollars. What is the difference in revenue between the highest earning quarter and the lowest earning quarter?

- ☐ (a) 2053650
- ☒ (b) -165046
- ☐ (c) 245207
- ☐ (d) 245207

60. For the development of a Smart City, the state government allocated a total mega budget of ₹ 83165048. Out of this massive allocation, ₹ 21626229 was spent on constructing new expressways, ₹ 22231838 on upgrading advanced medical facilities, and ₹ 15944126 on building digitally-enabled smart schools. The remaining amount was kept in a secure reserve fund for unexpected emergencies. How much money was deposited into the reserve fund?

- ☐ (a) ₹ 23362855
- ☐ (b) ₹ 22862855
- ☒ (c) ₹ 23462855
- ☐ (d) ₹ 61538819

C. Achievers Section [HOTS] (10 Qs)

61. Consider the following statements:

I: 10 million is equal to 1 crore.

II: In the Indian system, commas are placed after every three digits starting from the right.

III: The place value of 8 in 8,785,900 is 800,000.

- ☐ (a) All statements are true
- ☐ (b) Only I and III are true
- ☒ (c) Only I is true
- ☐ (d) Only II and III are true

62. Consider the following statements:

I: The difference between the largest 5-digit number and the smallest 6-digit number is 1.

II: 1 billion is equal to 100 crores.

III: The estimated value of 81,567 rounded to the nearest thousand is 81,000.

- ☐ (a) Only I and III are true
- ☒ (b) Only I and II are true
- ☐ (c) None of these
- ☐ (d) Only II and III are true

63. Consider the following statements:

I: 100 lakhs make 1 million.

II: To multiply 60 by 5 quickly, you can multiply by 10 and divide by 2, giving 300.

III: $50,000 + 4,000 + 30 + 2$ is the expanded form of 54,032.

- ☐ (a) Only I and II are true
- ☒ (b) Only II and III are true
- ☐ (c) All statements are true
- ☐ (d) Only I and III are true

64. Match the following equivalent values:

(i) 60 Lakhs

(p) 600 Crores

(ii) 60 Million

(q) 6 Million

(iii) 6 Billion

(r) 6 Crore

- ☐ (a) (i)→r, (ii)→p, (iii)→q
- ☐ (b) (i)→p, (ii)→q, (iii)→r
- ☐ (c) (i)→q, (ii)→p, (iii)→r
- ☒ (d) (i)→q, (ii)→r, (iii)→p

65. Match the numbers to their nearest thousand approximation:

(i) 47,678

(p) 48,000

(ii) 54,982

(q) 67,000

(iii) 66,500

(r) 55,000

- ☒ (a) (i)→p, (ii)→r, (iii)→q
- ☐ (b) (i)→p, (ii)→q, (iii)→r
- ☐ (c) (i)→r, (ii)→p, (iii)→q
- ☐ (d) (i)→q, (ii)→r, (iii)→p

66. Match the place value of digit '9' in the given numbers:

(i) 9,678,901

(p) 90,000

(ii) 34,967,290

(q) 9,000,000

(iii) 8,994,321

(r) 900,000

- ☒ (a) (i) → q, (ii) → r, (iii) → p
- ☐ (b) (i) → p, (ii) → q, (iii) → r
- ☐ (c) (i) → r, (ii) → p, (iii) → q
- ☐ (d) (i) → q, (ii) → p, (iii) → r

67. Fill in the blanks: The number 4,500,000 is written as ___(p)___ in the Indian system. It is equivalent to ___(q)___ lakhs. The place value of 4 in it is ___(r)___.

- ☐ (a) p: 45,00,000, q: 4.5, r: 40,000
- ☐ (b) p: 4,500,000, q: 450, r: 40,000,000
- ☒ (c) p: 4,50,00,000, q: 450, r: 400,000
- ☐ (d) p: 45,00,000, q: 45, r: 4,000,000

68. Fill in the blanks: The largest 6-digit number is ___(p)___. Its successor is a ___(q)___ digit number.

- ☐ (a) p: 99999, q: 6
- ☐ (b) p: 999999, q: 6
- ☒ (c) p: 999999, q: 7
- ☐ (d) p: 999999, q: 7

69. Fill in the blanks: In the International system, 1 billion equals ___(p)___ million. In the Indian system, 1 billion equals ___(q)___ crores, and 1 million equals ___(r)___ lakhs.

- ☐ (a) p: 100, q: 10, r: 1
- ☒ (b) p: 1000, q: 100, r: 10
- ☐ (c) p: 10, q: 1000, r: 10
- ☐ (d) p: 1000, q: 10, r: 100

70. Fill in the blanks: The number 74,54,302 has the digit ___(p)___ in the ten lakhs place. If rounded to the nearest lakh, the number becomes ___(q)___. If rounded to the nearest thousand, it becomes ___(r)___.

- ☒ (a) p: 7, q: 75,00,000, r: 74,54,000
- ☐ (b) p: 7, q: 74,00,000, r: 74,55,000
- ☐ (c) p: 4, q: 74,00,000, r: 74,50,000
- ☐ (d) p: 5, q: 75,00,000, r: 74,54,000