

25	A chessboard has 64 small equal squares. Questions: (i) How many rows and columns are there? (ii) Find the total area if each small square is $2\text{ cm} \times 2\text{ cm}$ (iii) Write whether 64 is a perfect square or not. (iv) Write whether 64 is a perfect cube or not	4
Q.NO	SECTION-E (LONG ANSWER)	MARKS
26	I. In ancient times, different civilizations used different numeral systems. A student collected the following information - Egyptians used symbols like heel bone, lotus flower, etc. - Romans used letters I, V, X, L, C, D, M. - Mesopotamians used base 60 system. Answer the following questions: (i) Write 349 in Roman numerals. (ii) Write 245 using Egyptian numerals. (iii) Which civilization used base 60? Name one modern use of this system. (iv) Compare Hindu-Arabic numeral system with Roman numeral system. (v) Explain why place value system is considered an improvement over earlier numeral systems.	5
27	(a) Simplify (i) $(2^3 \times 3^2)^2 \div 6^2$ (ii) $(7^3 \times 7^{-2} \times 7^4)$ (b) If $2^x = 128$, find the value of x. Also verify by writing 128 as a power of 2 (c) Write the following numbers in standard form: (i) 0.000000452 (ii) 5,820,000,000	5