

CHAPTER - 01  
**UNITS AND MEASUREMENTS**

PART I - (JEEMAIN LEVEL)

QUESTIONS

SECTION - I

1. 2
2. 4
3. 3
4. 2
5. 3
6. 2
7. 4
8. 4
9. 4
10. 4

11. 1

$$A = a^2$$
$$\frac{\Delta A}{A} = 2 \frac{\Delta a}{a}$$
$$\Delta a = \frac{\Delta A}{A} \times \frac{a}{2}$$

12. 4

SECTION - II

Numerical Type Questions

13. 25
14. 2

PART - II (JEE ADVANCED LEVEL)

SECTION - III (One correct answer)

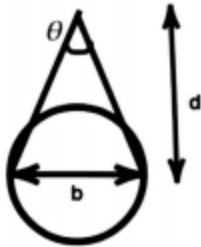
15. A
16. A
17. D
18. A

SECTION - IV (More than one correct answer)

19. A, D
20. B, C
21. A, C
22. A, B, C

**SECTION - V (Numerical Type - Upto two decimal place)**

23. 4.4



$$b = 2 \times 6400 \text{ km} = 12800 \text{ km and}$$

$$\theta = \frac{\pi}{180} \times \frac{1}{60} \text{ rad. Now as } d \text{ is very large}$$

compared to  $b$ , we can write

$$\sin \theta = \theta = \frac{b}{d}$$

$$\Rightarrow d = \frac{b}{\theta}$$

Now putting the values of different quantities, we get

$$d = 12800 \times \frac{60 \times 180}{\pi}$$

$$\Rightarrow d = 4.4 \times 10^7 \text{ km}$$

24. 1.25

25. 0.529

**SECTION - VI (Matrix Matching)**

26. A i-b, ii-a, iii-c, iv-d