

:: ANSWER KEY ::

Exercise-I

- | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 1. D | 2. C | 3. C | 4. B | 5. B | 6. C | 7. B |
| 8. C | 9. D | 10. B | 11. A | 12. C | 13. D | 14. A |
| 15. A | 16. C | 17. D | 18. B | | | |

Exercise-II

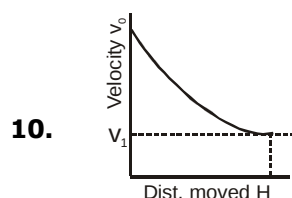
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|---|------------------------------------|---|---------------------------------------|
| 1. $1.44 \times 10^{-5} \text{ J}$ | 2. $1.25 \times 10^{-2} \text{ m}$ | 3. $7.2 \times 10^{-2} \text{ Nm}^{-1}$ | 4. $8.08 \times 10^5 \text{ Nm}^{-2}$ |
| 5. 0.004 m (common film will be concave towards the centre of the smaller bubble) | | | |

6. $\sigma = \frac{P(c^3 - a^3 - b^3)}{4(a^2 + b^2 - c^2)}$

7. $h = 1.5 \text{ cm}$

8. 1860 Nm^{-2}

9. $\ell = 1 \text{ cm}$



11. 2.5 cm

12. 20.4 m

13. 4.5 m

Exercise-III

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|--------|------|------|------|------|------|
| 1. A,D | 2. B | 3. D | 4. C | 5. A | 6. B |
|--------|------|------|------|------|------|