

## PHARMACEUTICAL SCIENCES

**Q1.** Match the problems in manufacturing tablets with their corresponding causes.

- A-4, B-3, C-1, D-2
- A-1, B-2, C-4, D-3
- A-1, B-3, C-2, D-4
- A-3, B-1, C-4, D-2

Problems in manufacturing tablets	Causes
A. Cracking	1. Due to a difference between the drug's colour and of the rest of the granular mixture
B. Mottling	2. Excessive binding
C. Capping	3. Due to rapid expansion of tablets
D. Chipping	4. Due to air entrapment in the granular material

**Q2.** What is the molar extinction coefficient of a 1/2 M solution following Beer Lambert's law, whose absorbance when calculated through a path length of 5 cm is found to be 0.18?

- $0.4765(\text{mol}/\text{dm}^{-3})^{-1} \text{cm}^{-1}$
- $0.04765 (\text{mol}/\text{dm}^{-3})^{-1} \text{cm}^{-1}$
- $0.75(\text{dm}^{-3} / \text{mol})^{-1} \text{cm}^{-1}$
- $0.075(\text{mol}/\text{dm}^{-3})^{-1} \text{cm}^{-1}$

**Q3.** For the Assertion (A) and Reason (R) given below, choose the correct alternative from the following:

- A. Both 'A' and 'R' are true and 'R' is not the correct explanation of A.
- B. Both 'A' and 'R' are true and 'R' is the correct explanation of A.
- C. 'A' is true but 'R' is false.
- D. 'A' is false but 'R' is true.
- E. Both are false.

Assertion: Apraclonidine is used in treating chronic glaucoma.

Reason: It decreases aqueous humour production which lowers the high pressure associated with glaucoma.

- A
- B
- C
- D
- E

**Q4.** The equivalent of 8 fl.Oz of 5% solution is \_\_\_\_\_.

- 886.7 grains in 5 fl.Oz
- 68.7 grains in 6 fl.Oz
- 86 grains in 3 fl.Oz
- 87 grains in 4 fl.Oz

**Q5.** Identify molecule "A" in the given image that displays the renin-angiotensin system.

- Guanfacine
- Benazepril
- Atenolol
- None of the above

