VITEEE 2021 (May 28 - Slot 3) - Memory Based Questions

Ques- The amino acid residue that favors the occurrence of a turn in the protein structure is:
1.Proline
2.Tryptophan
3.Serine
4.Glutamic acid

Ques- Honey is more vicious than coconut oil because:
1.The intermolecular attraction between the molecules of coconut oil is weaker than honey.
2.Honey is denser than coconut oil
3. The intermolecular spaces between the molecules in honey are more than coconut oil.
4.The intermolecular attraction between the molecules of coconut oil is stronger than honey.

Ques- A car of mass M is moving with uniform velocity v on a horizontal road. When a person of mass m drops on it from above, the velocity of thecar will be?
 1. Mv / M+m
 2. mv / M
 3. Mv / m
 4. Mv / M+m

Ques- One of the following aldehydes undergoes Cannizzaro's reaction and reduces the Schiff's reagent, but does not reduce Fehling's reagent. That is
1.2-OH-PhCHO
2.PhCHO
3.HCHO
4.CH3CHO

Ques- A nucleus with atomic number Z and mass numberA undergoes alpha decay. Which of the following is true?
1.Z increases by 2 and A decreases by 4
2.Z decreases by 2 and A decreases by 2
3.Z increases by 1 and A do not change
4.Z decreases by 2 and A decreases

Ques- A carbamate contains
1.A carbonate and an amide group
2.A carbonyl and an amide group
3.An amide and an ester group
4.A carbonyl and an ester group

Ques- A conducting loop in the plane of the paper is halfway into the magnetic field (which points into the page). If the magnetic field begins to increase rapidly in strength, what happens to the loop?
1. The loop is pushed upwards, towards the top of the page.
2. The loop is pushed to the right, out of the page.
3. The loop is pulled to the left towards the magnetic field.
4. The loop is pushed downwards, towards the bottom of the page.

Ques- The arithmetic mean and the harmonic mean between 2 numbers are 27 and 12 respectively, then their geometric mean is given by:
1.15
2.18
3.17
4.16