## JEE Main April 9 Shift 2 Answer Key

1. Two vehicle each with $20 \mathrm{~m} / \mathrm{s}$ moves into each other initially, there separation is 300 m , after some time it acquires an acceleration $2 \mathrm{~m} / \mathrm{s} 2$. Their distance between each row is?
Ans: 300
2. If the nucleus of the mass is disintegrated into 1:2. The nucleus move as?

Ans: Same speed Same direction
3. If a proton of mass mp and ad and ad a-particle of ma entered in a magnetic field with same kinetic energy. Find the Radius?
Ans: $r=(r 1+r 2) / 2$
4. A fair dice is rolled thrice... probability that no. obtained on ith roll is greater than (i-1)th roll for $\mathrm{i}=2,3$ is?
Ans: 5/6
5. What is the structure of carbocation?

Ans: Trigonal planar
6. The mole of H 2 O and C 2 H 5 OH are 9 and 1 mole respectively the mass percentage of C 2 H 5 OH will be?
Ans: 22.11\%
7. The work done by a diatomic gas during an isobaric process is 100 J . Calculate the heat supplied?
Ans: 350
8. Two satellites are revolving around a planet at radius a and 4a respectively. If the speed of the first satellite is $6 u$, find the speed of second satellite?
Ans: 3 u
9. Total number of carbon atom in Tyrosine is?

Ans: 9
10. 9.3 gram of aniline is treated with excess of $\mathrm{NaNO}+\mathrm{HC} 1$, then with phenol what is the weight of the orange dye product?

Ans: 0.1 Mole

