Question: Briefly describe the most popular and accepted theory about Universe.

Universe is basically the total of all that exists and has existed, including matter and energy, stars, planets, glaxies and contents of interglactic space (Plasma).

The Big Bang Theory is considered as the most accepted theory about the origin of universe. The term, Big Bang, is coined by Sir Fred Hoyle in 1950. The universe began about 13.8 billion years ago as a tiny, hot and dense dot (a singularity). Then, it expanded rapidly, this event is called the Big Bang.

Explanation of theory:

A. Inflation: The rapid expansion of singularity is called cosmic inflation.

B. Particle formation: One microsecond after Big bang, subatomic particles like protons, neutrons and electrons formed as

the universe expanded and cooled down.

C. Nuclear Fusion: Within the first three minutes after Big Bang, nuclear reaction occured, involving protons and neutrons leading to the formation of elements like Hydrogen and Helium.

D. Atom Formation: As the universe continued to expand and cool, electrons combined with photons to create atoms, resulting in the release of cosmic microwave background radiation.

E. Star Formation: After 200 million years of Bigbang, atoms formed nebulas (a group of molecules), which then developed into stars.

F. Structure Formation: After 400 million years, in the universe, the formation of structures like glaxies, dark energy.

Thus, the universe, humans observe today, after 13.8 billion years of Big bang is still expanding accelerated by dark energy.

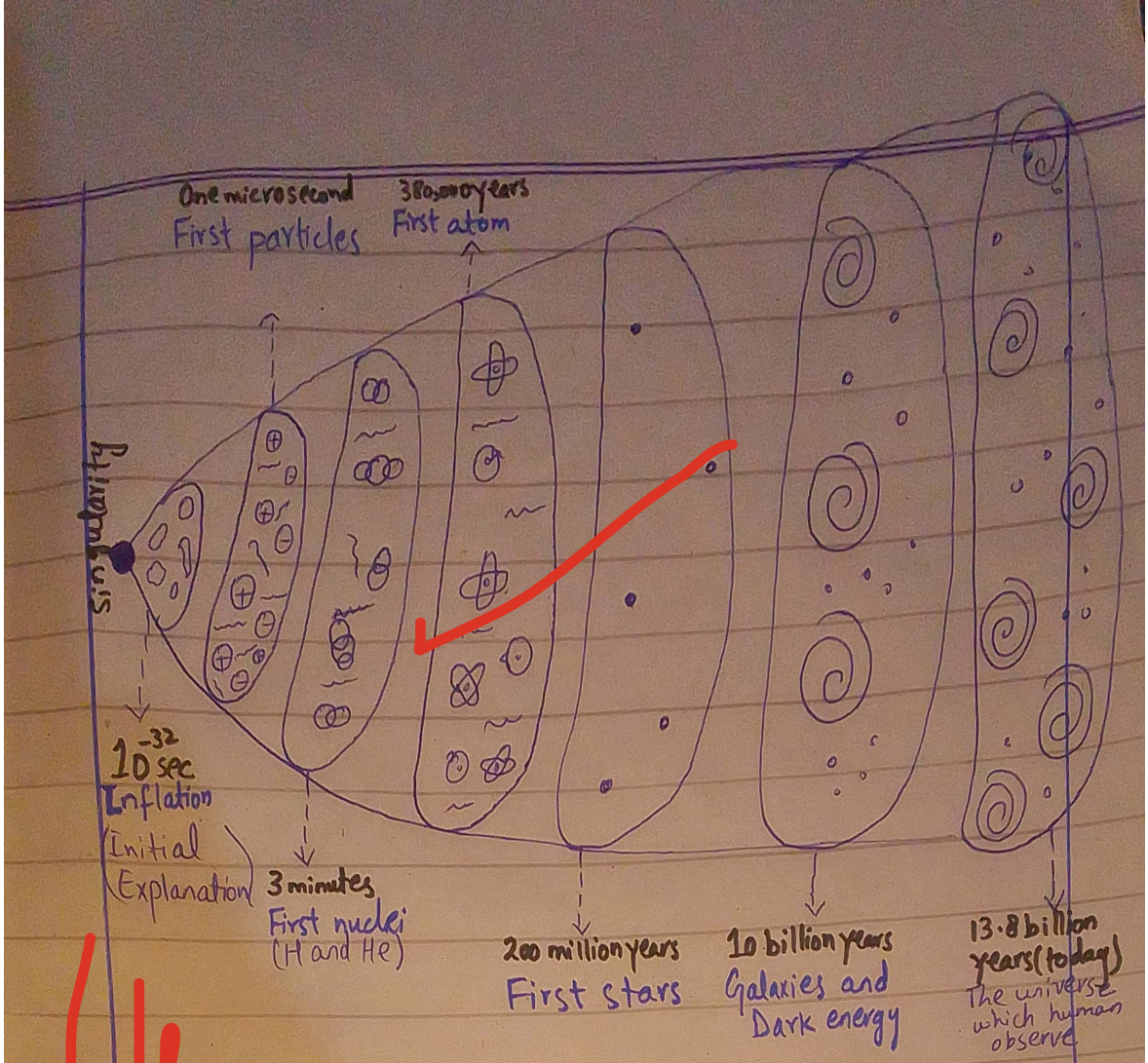

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Diagram of Big Bang Expansion