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**Genetic Code :** Genetic Code is the relationship of amino acids sequence in a polypeptide and nucleotide/base sequence in mRNA. It directs the sequence of amino acids during synthesis of proteins.

George Gamow suggested that genetic code should be combination of 3 nucleotides to code 20 amino acids.

H.G. Khorana developed chemical method to synthesising RNA molecules with defined combination of bases.

Marshall Nirenberg's cell free system for protein synthesis finally helped the code to be deciphered.

Salient features of Genetic Code are-

- i. The code is triplet. 61 codons code for amino acids and 3 codons do not code for any amino acids called stop codon (UAG, UGA and UAA).
- ii. Codon is unambiguous and specific, code for one amino acid.
- iii. The code is degenerate. Some amino acids are coded by more than one codon.
- iv. The codon is read in mRNA in a contiguous fashion without any punctuation.
- v. The codon is nearly universal. AUG has dual functions. It codes for methionine and also act as initiator codon.