SCHOOL OF AERONAUTICS (NEEMRANA)

 I 04, RIICO Industrial Area, Neemrana, Dist. Alwar, Rajasthan.

**IAE-I-QUESTION PAPER**

**FACULTY NAME: D.SUKUMAR CLASS: B.Tech AERONAUTICAL**

**SUBJECT CODE: 6AN5 SEMESTER: VI**

**SUBJECT NAME: AIRCRAFT DESIGN**

Max Marks: 30 DATE: 30/01/2019

 Duration: 1Hr 45Min

**Answer any four questions**

**(4X7.5=30 marks)**

1. Explain the phase Preliminary design of Aircraft Design.
2. List down the Primary requirements for designing the Military Aircraft FIGHTERS-Tactical, FIGHTERS- Interceptor & Bomber.
3. Explain the classification of aircraft based on the Wing configuration & fuselage configuration.
4. Explain the aerodynamics consideration for designing the aircraft.
5. Explain about the Structural Design Criteria (SDC)different types of load acting on the aircraft.
6. With neat sketches, explain the V-n diagram.
7. Write the formula for nmax, Vstall , Vc, Stall Speed And Minimum Speeds.
8. Write down the parameters required to design the wing of an aircraft in Airplane Data Sheet.