

**2022**  
**B.A./B.Sc.**  
**Fourth Semester**  
GENERIC ELECTIVE – 4  
**NCC**  
*Course Code: NCG 4.11 (B)*  
(NCC: Air Wing)

*Total Mark: 70*

*Pass Mark: 28*

*Time: 3 hours*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Define meteorology. Elaborate on the importance and application of meteorology in aviation. 2+12=14
2. Explain in detail the basic terminology and operation of a piston engine with the help of a diagram. 14

**UNIT-II**

3. Elucidate on the basic aircraft controls with reference to primary and secondary controls. 14
4. Write a note on the following: 7×2=14
  - (a) Altimeter
  - (b) Artificial horizon

**UNIT-III**

5. Write a note on the history of aero-modelling. List out the various types of aero-modelling. 7+7=14
6. Explain in detail the construction of any three types of aero-models. 14

#### **UNIT-IV**

7. Elaborate on civil defence measures and the various civil defence services in India. 4+10=14
8. Define essential services. Explain in detail the maintenance of various essential services. 2+12=14

#### **UNIT-V**

9. Explain in detail the importance of human rights with special reference to social, economic and political rights. 14
10. What are directive principles of state policy? Elaborate the DPSP as provided for in the constitution of India. 4+10=14
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