

2023
B.A./B.Sc.
Third Semester
 GENERIC ELECTIVE – 3
NCC
Course Code: NCG 3.11 (B)
 (NCC: Air Wing)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

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| 1. | (a) Define the following: | 1×5=5 |
| | (i) Aero foil | (ii) Chord line |
| | (iii) Angle of attack | (iv) Lift |
| | (v) Drag | |
| | (b) State Newton's laws of motion. | 3 |
| | (c) Write a short note on Bernoulli's principle and Venturi effect. | 6 |
| 2. | (a) Explain fly-by-wire of an aircraft. | 4 |
| | (b) Write a brief note about autopilot. | 5 |
| | (c) What is UAV? What are their uses? Mention the different types of UAV. | 1+1+3=5 |

UNIT-II

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|----|---|-------|
| 3. | (a) What are the movement of areas in an aerodrome? Explain any four of them. | 2+4=6 |
| | (b) Write a short note about the changing concepts of airfields. | 5 |
| | (c) State any three ways in which airmanship helps pilots. | 3 |
| 4. | (a) Give the importance of aircraft recognition. | 4 |
| | (b) List the purpose of air traffic control services. | 4 |
| | (c) What are the various stages of survival in flying? | 6 |

UNIT-III

5. (a) When was the term RADAR coined? Briefly describe the different types of RADARs. 1+5=6
(b) Write a short note on the following: 4×2=8
(i) Altimeter
(ii) Artificial horizon
6. (a) What are the basic flight instruments? 7
(b) What is a rudder? Explain its primary purpose and its usage. 7

UNIT-IV

7. (a) What is the essence of national integration? Describe the factors affecting national integration. 1+6=7
(b) Discuss Indian freedom struggle in detail. 7
8. (a) Describe the role of NCC towards nation building. 7
(b) What are the aims of national integration camps? Highlight the factors leading to the growth of Indian nationalism also mention the geographical factors which influence the defence of India. 7

UNIT-V

9. (a) Mention the different parts of a rifle. Discuss the characteristics of rifle .22 No II MK-IV BA. 3+4=7
(b) Explain loading and unloading, position and hold of a rifle. 7
10. (a) With the help of an illustration explain the application of fire. 7
(b) Explain aiming and discuss the uses of range and target. 7
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