

AMTS26 AIRPORT INFRASTRUCTURE, PLANNING AND DESIGN

UNIT-1 INTRODUCTION

Air transport- structure and organization, the challenges and the issues..

UNIT-2 AIRPORT PLANNING AND GEOMETRIC DESIGN

Airport master plan, Aircraft characteristics, Geometric design of airfields

UNIT-3 PLANNING AND DESIGN OF THE TERMINAL AREA

The planning terminal system; design considerations and visual aids

UNIT-4 STRUCTURAL DESIGN OF AIRPORT PAVEMENTS

Design factors, Design of flexible and rigid pavements

UNIT-5 AIRSIDE CAPACITY AND DELAY

Mathematical models for capacity and delay, space time concept

UNIT-6 AIR TRAFFIC CONTROL

Elements; major components and functions of the National airspace system

UNIT-7 AIRPORT DRAINAGE

Design runoff, inlet size and location design, surface and subsurface design

Reference Books:

1. Horonjeff , R. Mickelvey, F.X, Planning & design of airports, Mc Graw Hill, New York, 4th edition. 2010
2. Khanna, S.K., Arora, M.G., and S.S. Jain; Airport Planning and Design, Nem Chand & Brothers 2012
3. Air transportation planning and design by Virender Kumar & Satish Chandra, Galgotia Publications, N.Delhi 2012