

AIRCRAFT GENERAL ENGINEERING AND MAINTENANCE

Subject code-PAE6J004

MODULE- I

AIRCRAFT GROUND HANDLING AND SUPPORT EQUIPMENT

Mooring, jacking, levelling and towing operations – Preparation – Equipment – precautions – Engine starting procedures – Piston engine, turboprops and turbojets – Engine fire extinguishing – Ground power unit.

MODULE- II

GROUND SERVICING OF VARIOUS SUB SYSTEMS

Air conditioning and pressurization – Oxygen and oil systems – Ground units and their maintenance.

MODULE- III

MAINTENANCE OF SAFETY

Shop safety – Environmental cleanliness – Precautions

MODULE- IV

INSPECTION

Process – Purpose – Types – Inspection intervals – Techniques – Checklist – Special inspection – Publications, bulletins, various manuals – FAR Air worthiness directives – Type certificate Data sheets – ATA Specifications.

MODULE- V

AIRCRAFT HARDWARE, MATERIALS, SYSTEM PROCESSES

Hand tools – Precision instruments – Special tools and equipments in an airplane maintenance shop – Identification terminology – Specification and correct use of various aircraft hardware (i.e. nuts, bolts, rivets, screws etc) – American and British systems of specifications – Threads, gears, bearings, etc – Drills, tapes and reamers – Identification of all types of fluid line fittings. Materials, metallic and non-metallic = Plumbing connectors – Cables – Swaging procedures, tests, Advantages of swaging over splicing.