

**Subject: Helicopter aero plane aerodynamics structures and systems Part A
Practical**

Sr No	Task NO.	Practical Tasks	Performed on	Level
200.	12-1	Visual identification of cyclic control, system layout, different parts & its functional test.	Helicopter & Lab	3
201.	12-2	Visual identification of collective control system layout, different parts & its function test.	Helicopter & Lab	3
202.	12-3	Visual identification of anti-torque system layout, different parts & directional control & its function test.	Helicopter & Lab	3

203.	12-4	Visual identification of Swash plate location its component and its inspection.	Helicopter & Lab	3
204.	12-5	Visual identification of Horizontal stabilizer operation & its functional test.	Helicopter & Lab	3
205.	12-6	Identification of Main Rotor Head: Design and Operation features	Helicopter & Lab	3
206.	12-7	Visual identification of Tail Rotor Head: Design and Operation features.	Helicopter & Lab	3
207.	12-8	Check indication of cyclic and collective pitch indication in cockpit.	Helicopter & Lab	3
208.	12-9	Visual identification of rotor brake, system layout & its functional test.	Helicopter & Lab	3
209.	12-10	Visual inspection/ identification of hydraulically operated control system and its inter-relation with other system and also observe the system configuration from pressure generation to the movement of control surfaces.	Helicopter & Lab	3
210.	12-11	Visual identification of Rotor blade Removal & fitment system.	Helicopter & Lab	3

211.	12-12	Visual identification of Rotor blades tracks check.	Helicopter & Lab	3
212.	12-13	Visual identification of Gear boxes, Clutches, free wheel units and flexible couplings	Helicopter& Lab	3
213.	12-14	Familiarization of bearing and bearing. Inspections.	Helicopter & Lab	3

214.	12-15	Visual inspection/ identification of mechanically operated control system and its inter-relation with other system.	Helicopter & Lab	3
215.	12-16	Visual inspection/ identification of tailrotor drive shaft through inspection panel in tail boom.	Helicopter& Lab	3
216.	12-17	Visual inspection/ identification of vibration dampers and bearing hangers at main rotor/ tail rotor section.	Helicopte r & Lab	3
217.	12-18	Visual identification of truss type construction	Helicopter & Lab	2
218.	12-19	Visual identification of stressed skin construction	Helicopte r & Lab	2
219.	12-20	Visual identification of A/c Doors, Windows, windshield and safety devices.	Helicopter & Lab	2
220.	12-21	Identification/demonstration of removal and inspection of panel	Helicopte r & Lab	2
221.	12-22	Inspection / identification of different types of fuel tanks such as bladder, external tanks.	Helicopter& Lab	2
222.	12-23	Perform the identification of lightning strike protection provision applied to the airframe structure.	Helicopter& Lab	2
223.	12-24	carryout general inspection /Identification of affected area vulnerable to lightning strike	Helicopter & Lab	2
224.	12-25	Inspection /Identification of the Pylon, stabilizer.	Helicopte r & Lab	2
225.	12-26	Inspection /Identification of the undercarriage attachments with airframe structure.	Helicopter & Lab	2

226.	12-27	Inspection of Doors & windows Removal & fitment procedure	Helicopter& Lab	2
227.	12-28	Demonstration of Removal& fitment of seats.	Helicopter& Lab	2
228.	12-29	Carryout visual inspection for corrosion near to the joints of helicopter structure and perform operation for removing/ cleaning of corrosion.	Helicopter& Lab	2
229.	12-30	Identification of helicopter hydraulic system components, identification & working.	Helicopter& Lab	3
230.	12-31	Visual identification of helicopter Filters.	Helicopter& Lab	3
231.	12-32	Identification of Hydraulic reservoirs and accumulators.	Helicopter& Lab	3
232.	12-33	Visual identification of helicopter hydraulic system.	Helicopter& Lab	3
233.	12-34	Demonstration of Landing Gear Construction and shock absorbing;	Helicopter& Lab	3
234.	12-36	Demonstration of helicopter landing gear system.	Helicopter& Lab	3
235.	12-37	Demonstration of Landing Gear Wheels, tyres, brakes; and Steering.	Helicopter& Lab	3