

TABLE OF CONTENT

Foreword	V
Questions Legend	VI
AIRFRAME AND SYSTEMS – AEROPLANES	1
Fuselage	1
Cockpit and cabin windows	3
Wing	3
Stabilising surfaces	4
Landing gear	5
Flight controls (construction and operation)	11
Hydraulics	14
Air Driven systems (piston engines only)	20
Air driven systems (turbopropeller and jet aircraft)	20
Non-pneumatic operated de-ice and anti-ice systems	31
Fuel system	32
ELECTRICS	42
Direct current (DC)	42
Alternating current (AC)	49
Semiconductor	59
Basic knowledge of computers	59
Basic radio propagation theory	62
POWERPLANT	67
Piston Engine	67
Turbine Engine	88
Engine Construction	95
Engine Systems	99
Auxiliary Power Unit (APU)	103
EMERGENCY EQUIPMENT	104
Doors and Emergency Exits	104
Smoke detection	106
Fire detection	106
Fire Fighting Equipment	108
Aircraft oxygen equipment	110
Emergency equipment	119
AIRFRAME AND SYSTEMS - HELICOPTER SPECIFIC	125
Helicopter Configurations	125
Controls and rotors	125
Fuselage	128
Cockpit and Cabin	128
Transmission Systems	128
Rotorbrake	130
Inspection	130
Hydraulics	130
Air Driven Systems	131
De ice and anti-ice systems	131
JAR-FCL-1 / Subpart J	133
Sample Test 1	137
Sample Test 2	146
Correct Answers for Sample Test 1	155
Correct Answers for Sample Test 2	156
Picture Supplements	157