

# جامعة البلقاء التطبيقية

وحدة التقييم والامتحانات العامة  
الدائرة الفنية وتكنولوجيا المعلومات  
امتحان الشهادة الجامعية المتوسطة



## الكفايات العملية لتخصص: محركات الطائرات

بعد انتهاء دراسة مواد التخصص يتوقع من الطالب أن يكون قادرا على تحقيق الأهداف التالية:

#		
1	To realize the importance of safety inside Shop or Hanger	المشغل الهندسي
2	To understand safety procedure to use hand and portable power tools	
3	To realize the importance and benefits of machine guarding	
4	Electrical equipment safety	
5	Safety color coding	
6	Aircraft and Flight line safety	
7	Aircraft armament safety	
8	Know the components of simple electric circuits.	مختبر اساسيات الكهرباء
9	Measure and check batteries.	
10	Know and find the value of resistors by using color code.	
11	Measuring current, voltage using digital Multimeter.	
12	Study the basic construction of Motors and Generators.	
13	To identify the types of hand tools.	وتجهيز خدمة أدوات مشغل الطائرات
14	To identify the precision measuring tools.	
15	To identify the hardware of an aircraft (Bolts, Nuts ...).	
16	To identify the painting, welding.	
17	To know reciprocating engine instrument.	مشغل النظم الكهربائية والاجهزة الدقيقة لمحركات الطائرات
18	To know turbine engine instrument.	
19	To know electrical system components.	
20	To know engine fire protection.	
21	Perform assemble & disassemble for all the parts, the systems, & the subsystems of reciprocating engine.	مشغل المحركات التوربينية وقسم الامتحانات العامة
22	Locating strokes in reciprocating engine	
23	Locating pistons in induction, compression, power & exhaust strokes	
24	Valve adjustment (inlet & exhaust valves)	
25	Cylinder head removal, inspection and installation	
26	Cylinder, piston and oil rings inspection	



# جامعة البلقاء التطبيقية

وحدة التقييم والامتحانات العامة  
الدائرة الفنية وتكنولوجيا المعلومات  
امتحان الشهادة الجامعية المتوسطة



27	Induction system removal, inspection & installation of induction manifold	
28	Exhaust system removal, inspection & installation of exhaust manifold	
29	Removal, inspection & installation of cooling baffles	
30	Cooling fins inspection	
31	Oil filters removal, inspection and installation	
32	Oil pipe lines removal, inspection and installation	
33	Oil pumps removal, inspection and installation	
34	Carburetor removal, inspection and installation	
35	Fuel lines removal, inspection and installation	
36	Magneto, removal, inspection & installation	
37	Know the basic construction & the systems of the J85-GE-21B engine.	
38	Know the basic construction & the systems of the T56-A-7B engine.	مشغل المحركات النفاثة
39	Know the basic construction & the systems of the F100-PW-220E engine	
40	Know the principles of propellers.	
41	Distinguish the propellers types.	
42	Know the propeller parts & the forces acting on the propeller.	
43	Deals with turboprop propellers.	
44	Know the propeller auxiliary systems and their functions.	
45	Know how to install the propeller.	
46	How to use the T.O's for propeller system	
47	Propeller build up	مشغل مرواح الطائرات
48	Wooden-Propeller removal	
49	Wooden-Propeller installation	
50	Two-Position propeller construction	
51	Blade angle adjustment ( Two-Position propeller )	
52	Hydromatic-Propeller Construction	
53	How to put the different blade angles on the Hydromatic- Propeller blade	
54	Oil servicing to the propeller	
55	Propeller-Governor construction	



## جامعة البلقاء التطبيقية

وحدة التقييم والامتحانات العامة  
الدائرة الفنية وتكنولوجيا المعلومات  
امتحان الشهادة الجامعية المتوسطة



56	Propeller-Governor ( Assembly & Disassembly )	
57	Know the systems of reciprocating engine & gas turbine engine. Such as :Induction, Cooling, Exhaust, Starting, and Lubrication.	النظم المساندة للمحرك
58	Know the purpose & components of each system.	
59	Describe the reciprocating engine ignition system.	
60	Know the auxiliary system for starting.	
61	Describe the turbine engine ignition system.	
62	Recognize spark plug & igniter plug.	نظم اشعال المحرك
63	Know how to make inspection and maintenance for both types of ignition	
64	To evaluate practice the principles of analyses and design acquired throughout the course of the students study	مشغل محركات الطائرات
65	The training gives the student an opportunity to apply the theory gained within the theoretical courses of Aircraft engine through practical experimentation in the real world of the profession.	قواعد سلاح الجو الملكي الاردني

