

(A44) ATPL航空器一般維護

最近更新日期：無；更新題號：無

原始題號:0013977 題組:0 難易度:易

- (B) 1. 載客飛機上之緊急照明燈何時必須備便或開啟
(A) 滑行，起飛，巡航以及落地 (B) 滑行，起飛以及落地 (C) 滑行，巡航以及落地

原始題號:0013978 題組:0 難易度:易

- (A) 2. 如果載客飛機上被要求裝有自動展開之逃生滑梯系統時，於何時此系統必須備便？
(A) 滑行，起飛，以及落地 (B) 只在起飛以及落地 (C) 當滑行，起飛，落地以及水上迫降後

原始題號:0013979 題組:0 難易度:易

- (B) 3. 在商務客艙以上之座椅安全帶於何時可由兩人共用？
(A) 一人為成人而另一人為三歲以下幼童時 (B) 只有在巡航中 (C) 任何時候除起飛及落地時

原始題號:0013980 題組:0 難易度:中

- (B) 4. 一架民航機一定要有工作正常之大眾廣播系統當
(A) 可搭載旅客數達19人時 (B) 可搭載旅客數超過19人時 (C) 重量超過12,500磅

原始題號:0013981 題組:0 難易度:中

- (C) 5. 組員內部通話系統在何種飛機上須設置
(A) 一架大型飛機 (B) 一架渦輪噴射機 (C) 可搭載旅客數達19座位以上時

原始題號:0013982 題組:0 難易度:中 (R20190708)

- (B) 6. 飛行在何種座艙壓力高度時，全程均須提供乘客氧氣？
(A) 20,000英呎 (B) 13,000英呎 (C) 10,000英呎

原始題號:0013983 題組:0 難易度:中

- (B) 7. 當一位駕駛員不在其工作崗位時，另一位駕駛員可以不需戴氧氣面罩之最高飛航空層為何？
(A) 飛航空層240 (B) 飛航空層250 (C) 飛航空層250以上

原始題號:0013984 題組:0 難易度:中

- (A) 8. 飛航組員需在多少時間內將可快速戴妥氧氣面罩並開始使用
(A) 5秒 (B) 10秒 (C) 15秒

原始題號:0013985 題組:0 難易度:易

- (A) 9. 若動壓管上之衝壓空氣進口因結冰而堵塞而靜壓口及排出口未阻塞時，空速指示將有何改變？
(A) 指示將降為0 (B) 指示將升高至表最高處 (C) 指示將保持不變但於爬升時會增加

原始題號:0013986 題組:0 難易度:易

- (A) 10. 若動壓管上之衝壓空氣進口及排出口因結冰而堵塞，飛行員遇期將遭遇何情況？
(A) 空速指示器的反應如同高度表 (B) 高度升高時空速指示將降低 (C) 爬升或下降時空速指示將不會有任何改變

原始題號:0013987 題組:0 難易度:易

(C) 11. 在兩階段過程的最後一步中，除冰/防冰液的溫度為何？

(A)熱 (B)溫 (C)冷

原始題號:0013988 題組:0 難易度:中

(A) 12. 當使用二階段防冰過程時下列何者會減少待命時間？

(A)使用加熱之第二型液 (B)減少水的成分 (C)增加第一型液之黏度

原始題號:0013989 題組:0 難易度:中

(A) 13. 當飛機使用二階段除冰/防冰過程時何種程序會增加待命時間

(A)使用加熱之第一型液接著使用冷的第二型液 (B)使用冷的第一型液接著使用熱的第二型液 (C)使用加熱之第一型或第二型液接著使用冷的第一型液

原始題號:0013990 題組:0 難易度:易

(C) 14. 飛機除冰/防冰使用一階段相對二階段過程之缺點為何？

(A)將更為複雜 (B)待命時間將增加 (C)當飛機表面堆積有較多之冰或雪須去除時，一階段方式將使用更多的液體

原始題號:0013991 題組:0 難易度:中

(B) 15. 第二型除冰/防冰液中乙二醇(glycol)之最低含量為？

(A)百分之三十 (B)百分之五十 (C)百分之八十

原始題號:0013992 題組:0 難易度:中

(C) 16. 第一型除冰/防冰液中乙二醇(glycol)之最低含量為？

(A)百分之三十 (B)百分之五十 (C)百分之八十

原始題號:0013993 題組:0 難易度:中

(B) 17. 在非降水狀況下用水沖淡乙烯乙二醇除冰液之目的是為了

(A)提高溶解點 (B)降低冰點 (C)增加最低冰點

原始題號:0013994 題組:0 難易度:易

(B) 18. 除冰或防冰液上層之雪

(A)並不需要考慮會附著在飛機上 (B)一定要考慮會附著於飛機上 (C)一定要考慮會附著於飛機上，但是會被吹掉故可安全起飛

原始題號:0013995 題組:0 難易度:易

(C) 19. 防冰液應能提供冰點保護至

(A)周圍溫度華氏負20度 (B)外界溫度華氏32度或以下 (C)冰點不高過華氏20度低於周圍或飛機表面溫度

原始題號:0013996 題組:0 難易度:易

(B) 20. 北美航空運輸產業所發展及可被接受使用的傳統北美液體可保證殘留薄膜之冰點低於外界溫度至少為

(A)華氏10度 (B)華氏20度 (C)攝氏20度

原始題號:0013997 題組:0 難易度:易

(C) 21. 冰點抑制劑(FPD)殘留於引擎扇葉或壓縮機葉片之影響為何？

(A)可能會造成冰點抑制劑揮發進入飛機但對引擎推力或馬力並無影響 (B)會增加性能以及造成失速或衝激 (C)會減低引擎效能並造成衝激或壓縮機失速

原始題號:0013998 題組:0 難易度:易

- (B) 22. 使用冰點抑制劑(FPD)除冰
(A)提供飛行時防冰保護 (B)僅限於地面提供防冰保護 (C)在地面時，並不會造成任何起飛性能之降級
- 原始題號:0013999 題組:0 難易度:易
- (C) 23. 冰，雪或霜對飛機性能以及飛行特性之負面影響包括降低升力以及
(A)增加推力 (B)失速速度降低 (C)失速速度增加
- 原始題號:0014000 題組:0 難易度:易
- (A) 24. 冰，雪或霜在飛機上形成的影響為何？
(A)失速速度增加 (B)增加機頭低的傾向 (C)當爬升或下降時空速指示不會改變
- 原始題號:0014001 題組:0 難易度:易
- (C) 25. 冰，雪或霜在飛機上形成的影響為何？
(A)失速速度降低 (B)降低機頭高的傾向 (C)減低失速之攻角
- 原始題號:0014002 題組:0 難易度:易
- (C) 26. 高於建議之觸地速度對於水漂效應有何影響？
(A)對水漂效應並無影響，但增加落地滾行距離 (B)如果使用大煞車量則減低水漂效應之可能 (C)無論煞車與否仍增加水漂效應可能
- 原始題號:0014003 題組:0 難易度:易
- (C) 27. 當落地時遭遇水漂效應時何者為減速之最佳方式？
(A)只使用最大主輪煞車 (B)突然並交互使用主輪及鼻輪煞車 (C)使用最大之空氣動力煞車
- 原始題號:0014004 題組:0 難易度:易
- (C) 28. 如果胎壓為70PSI動態水漂效應於何最低速時會發生？
(A)85海哩 (B)80海哩 (C)75海哩
- 原始題號:0014005 題組:0 難易度:易 (R20190708)
- (B) 29. 如果胎壓為121PSI動態水漂效應於何最低速時會發生？
(A)90節 (B)96節 (C)110節
- 原始題號:0014006 題組:0 難易度:易
- (B) 30. 如何在落地時使用螺旋槳之反推力可以得到最大之煞停效果？
(A)當滾行速度減低時，逐漸增加反推力至最大 (B)當觸地後儘快使用最大反推力 (C)落地後使用反推力拉桿以及使用引擎之慢車動力設定
- 原始題號:0014007 題組:0 難易度:易
- (A) 31. 渦輪噴射機之反推力應如何使用來減少落地距離？
(A)觸地後馬上使用 (B)觸地前馬上使用 (C)使用最大煞車後
- 原始題號:0014008 題組:0 難易度:中
- (A) 32. 當壓縮機失速時何者為適當之回復動作
(A)減少燃油流量，減低攻角以及增加空速 (B)增加油門，減低攻角以及減低空速 (C)減少油門，降低空速，增加攻角
- 原始題號:0014009 題組:0 難易度:中
- (C) 33. 何種壓縮失速最有可能造成嚴重引擎損害？
(A)間斷"回火"失速 (B)瞬間"回火"失速 (C)穩定，連續逆流失速

原始題號:0014010 題組:0 難易度:中

- (A) 34. 壓縮機失速及其後變穩定之指示為何?
(A)強烈震動以及巨大噪音 (B)偶發之巨大"碰"聲及倒流 (C)嚴重損失空速馬力完全損失

原始題號:0014011 題組:0 難易度:中

- (C) 35. 短暫壓縮機失速之特性為何?
(A)吵雜, 穩定之噪音伴隨強烈震動 (B)瞬間喪失推力伴隨巨大噪音 (C)間斷之"碰"聲, 發生回火以及逆流

原始題號:0014012 題組:0 難易度:易

- (B) 36. 渦輪螺旋槳引擎通常在何種高度範圍有最低之油耗?
(A)10,000英尺到25,000英尺 (B)25,000英尺到對流層頂 (C)對流層頂到45,000英尺

原始題號:0014013 題組:0 難易度:中

- (A) 37. 渦輪螺旋槳引擎之可用等值軸馬力於高度增加時將會有何影響?
(A)較低空氣密度以及引擎空氣流量將導致馬力減低 (B)較高之螺旋槳效率將導致可用之軸馬力及推力增加 (C)馬力保持相同但螺旋槳效率降低

原始題號:0014014 題組:0 難易度:易

- (B) 38. 渦輪螺旋槳引擎等值軸馬力之計算是依據
(A)渦輪機進氣溫度 (B)軸馬力及噴射推力 (C)只有螺旋槳推力

原始題號:0014015 題組:0 難易度:易

- (B) 39. 渦輪噴射或渦輪螺旋槳引擎最重要之操作限制是
(A)壓縮機轉速限制 (B)排氣溫度限制 (C)扭力限制

原始題號:0014016 題組:0 難易度:易

- (C) 40. 當外界空氣壓力降低, 推力輸出將
(A)增加因為噴射機在稀薄空氣中之效率較好 (B)保持相同因為壓縮機之進氣將補償任何空氣壓力之降低 (C)減少, 因為較高之密度高度

原始題號:0014017 題組:0 難易度:中

- (A) 41. 外界溫度高對渦輪機引擎推力之影響為何?
(A)推力將降低, 因為空氣密度減少 (B)推力保持不變, 但渦輪機溫度將會提高 (C)推力較高因為可從較熱空氣中吸取更多的熱能

原始題號:0014018 題組:0 難易度:中

- (C) 42. 外界溫度或空氣密度改變對渦輪機引擎之性能影響為何?
(A)當空氣密度減少, 推力增加 (B)當溫度增加, 推力增加 (C)當溫度增加, 推力減少

原始題號:0014019 題組:0 難易度:易

- (C) 43. 渦輪噴射引擎何處會產生最高溫度?
(A)壓縮機排氣 (B)噴油嘴 (C)渦輪機進氣處

原始題號:0014020 題組:0 難易度:易

- (A) 44. 如果動壓管之衝壓進氣口及排出口皆被冰所阻塞，空速指示將預期有何變化？
(A)平飛時大馬力之改變對空速並不會有影響 (B)爬升時會造成速度減小 (C)下降時速度不變

原始題號:0014021 題組:0 難易度:中

- (C) 45. 冰點抑制劑可高度溶解於水中，但是
(A)當冰與冰點抑制劑接觸時冰會緩慢吸收但會快速融化 (B)當冰與冰點抑制劑接觸時冰會快速吸收但緩慢融化 (C)當冰與冰點抑制劑接觸時冰會緩慢吸收並開始融化

原始題號:0014022 題組:0 難易度:中

- (C) 46. 冰點抑制劑液體殘餘在引擎風扇或壓縮機葉片
(A)可增加性能以及導致失速或衝激 (B)會導致冰點抑制劑揮發進入飛機但對引擎推力或馬力並不會造成影響 (C)會減少引擎性能以及導致衝激或壓縮機失速

原始題號:0014023 題組:0 難易度:易

- (b) 47. 航空器或商用航空公司要保存艙單，適航簽放，駕駛員航路許可，飛行許可及飛行計畫等記錄多久？
(A)一個月 (B)三個月 (C)十二個月

原始題號:0014024 題組:0 難易度:中

- (A) 48. 何種飛機需要安裝地面防撞系統之下滑道偏離警告系統？
(A)所有渦輪引擎飛機 (B)所有渦輪引擎載客飛機 (C)只有大型渦輪引擎飛機

原始題號:0014025 題組:0 難易度:中

- (A) 49. 國家主要級(flag)航空公司所擁有之飛機飛越杳無人煙地區必須攜帶何種緊急裝備？
(A)合適之信號煙火 (B)有色煙霧火焰彈及反射鏡 (C)每位乘客之求生包

原始題號:0014026 題組:0 難易度:中

- (B) 50. 國家附屬級(supplemental)航空公司所擁有之飛機飛越杳無人煙地區必須攜帶何種緊急裝備？
(A)每位乘客之求生包 (B)合適之信號煙火 (C)有色煙霧火焰彈及反射鏡

原始題號:0014027 題組:0 難易度:中

- (C) 51. 商用(commercial)航空公司所擁有之飛機飛越杳無人煙地區必須攜帶何種緊急裝備？
(A)有色煙霧火焰彈及反射鏡 (B)每位乘客之求生包 (C)經認可之求生式緊急定位發送器

原始題號:0014028 題組:0 難易度:中 (R20180823)

- (C) 52. 長程越水飛行需具備何種緊急裝備？
(A)每一艘救生艇需有可攜式求生緊急信號發送器 (B)每件救生裝備上需有信號煙火 (C)飛機上的每個人需有具備求生信號燈之救生裝備

原始題號:0014029 題組:0 難易度:中

- (C) 53. 越水飛行時救生裝備被要求置於
(A)每個乘客均需輕易取得 (B)在每個乘員座位下 (C)每個乘員均可輕易取得的座位範圍之內

原始題號:0014030 題組:0 難易度:中

- (A) 54. 當一趟飛行因事故或事件而結束者，座艙通話記錄及飛行記錄應被保存幾天？
(A)60天 (B)90天 (C)30天

原始題號:0014031 題組:0 難易度:易

- (C) 55. 對於判定每件於前次載入機上維修記錄本之機械問題，誰具有直接權利責任？
(A)飛機簽派員 (B)線上維修主管 (C)下一位機長

原始題號:0014032 題組:0 難易度:易

- (A) 56. 誰有責任提出機件可信度報告？
(A)各航空公司 (B)發現需要報告情況的該地機務主管 (C)情況被發現的該地首席檢查員

原始題號:0014033 題組:0 難易度:中

- (A) 57. 螺旋槳或旋翼可變幾何槳距之原因是？
(A)當巡航時沿其長度，可保持相對恆定之攻角 (B)當巡航時沿其長度，可保持相對恆定之入射角 (C)當巡航時避免槳葉接近根部或中心處失速

原始題號:0014034 題組:0 難易度:中

- (A) 58. 在正常操作下，何種MAP與RPM結合會產生最嚴重，疲勞以及對高性能往複式引擎造成損害？
(A)高RPM以及低MAP (B)低RPM 以及高MAP (C)高RPM以及高MAP

原始題號:0014035 題組:0 難易度:易

- (B) 59. 現代飛機引擎最大推力輸出在高相對濕度下有何影響？
(A)渦輪噴射或往複式引擎皆不受影響 (B)往複式引擎將遭遇明顯喪失馬力(BHP) (C)渦輪引擎將遭遇明顯喪失推力

原始題號:0014037 題組:0 難易度:中

- (C) 60. 測試資料顯示位於機翼前緣及上表面的冰，雪，或霜的厚薄大小如同粗或中粒沙紙時，其造成影響為何
(A)減少升力百分之40以及增加阻力百分之30 (B)增加阻力以及減少升力百分之40 (C)減少升力百分之30以及增加阻力百分之40

原始題號:0014038 題組:0 難易度:中

- (A) 61. 為何引擎P(t) probe積冰時EPR指示會上升？
(A)此時P(t) probe之作用等同P(s) probe (B)防冰氣使 nose dome 及 vent hole增壓，造成EPR指示會上升 (C)進氣面積減少造成增壓，並使衝壓之效應增加

原始題號:0014039 題組:0 難易度:中

- (A) 62. 開車時若TIT有超溫傾向，應立即關閉？
(A)燃油 (B)起動器 (C)點火

原始題號:0014040 題組:0 難易度:中

- (B) 63. 渦輪噴射發動機如何控制燃油溫度？
(A)電熱油濾 (B)引擎 Bleed air 到熱交換器 (C)引擎滑油加熱油濾

原始題號:0014041 題組:0 難易度:中

- (B) 64. 在電子渦輪機(aviation turbine)燃油內之水份於通過油濾時，常因易於結冰而產生危害，其常見之預防方法為？
(A)使用燃油微濾網 (B)使用防冰添加劑 (C)添加除冰劑

原始題號:0014042 題組:0 難易度:中

- (B) 65. 發動機鼻艙(nose dome)P(t) probe因結冰堵塞,為何EPR會錯誤指示下降?
(A)此時P(t) probe之作用等同P(s) probe (B)防冰氣體使 nose dome 及 vent hole 增壓,造成EPR指示會下降 (C)進氣面積減少造成增壓,並使衝壓之效應增加

原始題號:0014043 題組:0 難易度:中

- (B) 66. 若壓縮機損害,何種引擎儀表指示會異常升高?
(A)EPR. (B)EGT or TIT. (C)Oil pressure.

原始題號:0014044 題組:0 難易度:中

- (B) 67. 下列何種情況會造成空中或地面EPR錯誤或異常升高之指示?
(A)Bleed valve 故障在打開位置 (B)進氣管積冰 (C)渦輪洩壓管鬆動

原始題號:0014045 題組:0 難易度:中

- (B) 68. 在所有動力設定且EPR指示正常時,下列何種情況會造成高 EGT, W(f), and RPM?
(A)FOD. (B)Bleed valve 故障在打開位置 (C)進氣管積冰

原始題號:0014046 題組:0 難易度:中

- (B) 69. 為何在起飛,落地及重飛時不可使用燃油加熱器?
(A)EPR會顯著降低 (B)燃油揮發會造成引擎熄火 (C)滑油溫度會因燃油溫度在油冷器中增加而上升

原始題號:0014047 題組:0 難易度:中

- (B) 70. 燃油加熱器過度使用會造成下列何種情況?
(A)油耗增加 (B)燃油控制因過熱而損壞 (C)燃油濾網可能熔化

原始題號:0014048 題組:0 難易度:易

- (C) 71. 何時應手動開啟燃油加熱器
(A)起飛,落地及重飛時 (B)當外界溫度低於+32°F (C)當燃油溫度接近+32°F

原始題號:0014049 題組:0 難易度:中

- (A) 72. 燃油加熱器手動過度使用會造成下列何種情況?
(A)氣鎖 (B)EPR異常升高 (C)油耗顯著增加

原始題號:0014050 題組:0 難易度:易

- (A) 73. 渦輪引擎的連續燃燒行程為何?
(A)進氣,壓縮,燃燒,排氣 (B)進氣,壓力,燃燒,加速 (C)壓縮,點火,供油,膨脹,推力

原始題號:0014051 題組:0 難易度:中

- (A) 74. 渦輪引擎的擴散器用途為何?
(A)使氣體減速而靜壓上升 (B)避免壓縮機後段氣阻 (C)使進燃燒室之氣體加速

原始題號:0014052 題組:0 難易度:易

- (B) 75. 在雙軸壓縮機中,第一級渦輪扇驅動?
(A)N(1) 壓縮機 (B)N(2)壓縮機 (C)N(1) 及 N(2)壓縮機

原始題號:0014053 題組:0 難易度:中

(B) 76. EPR如何測定?

- (A)壓縮機進氣端未修正壓力,及渦輪扇出氣端壓力之比值 (B)壓縮機進氣端經進氣導減少之修正總壓與渦輪扇出氣端總壓之比值 (C)壓縮機出氣端經溫度修正總壓與渦輪扇出氣端總壓之比值

原始題號:0014054 題組:0 難易度:中

(B) 77. 開車時應如何避免氣動起動器超轉?

- (A)驅動軸剪力點 (B)止墊離合器組 (C)起動器渦輪扇造成氣阻之設計

原始題號:0014055 題組:0 難易度:易

(B) 78. 開車時如何判斷起動器氣閥已關閉?

- (A)引擎怠轉已穩定 (B)歧管壓力稍微上升 (C)歧管壓力稍微下降

原始題號:0014056 題組:0 難易度:中

(A) 79. 為何大型渦輪引擎大多採用氣動起動器?

- (A)輕量化 (B)設計簡單,不需離合器 (C)氣動起動器係機械式,比電動起動器可靠度高

原始題號:0014057 題組:0 難易度:中

(C) 80. 壓縮機轉速與渦輪扇引擎的動力輸出有何相關?

- (A)與引擎的動力輸出呈現線性正比 (B)壓縮機風扇葉尖的速度到達或略高於1馬赫時效率提升 (C)壓縮機的氣動力設計,與引擎的動力輸出呈現非線性正比

原始題號:0014058 題組:0 難易度:中

(B) 81. 渦輪引擎中哪個位置的氣壓最高?

- (A)渦輪扇出氣端 (B)壓縮機出氣端 (C)燃燒室出氣端

原始題號:0014059 題組:0 難易度:中

(B) 82. 開車時哪個引擎儀表指示是最重要的?

- (A)滑油壓力 (B) EGT. (C)起動器使用時間

原始題號:0014060 題組:0 難易度:中

(A) 83. 為何渦輪引擎關車前通常需要保持怠速一段時間?

- (A)因渦輪扇室冷卻較快,可能收縮造成渦輪扇葉收縮或卡死 (B)渦輪扇快速冷卻可能造成扇葉裂痕 (C)穩定降溫能避免燃燒室的高溫點燃殘餘燃油

原始題號:0014061 題組:0 難易度:易

(A) 84. 在雙軸渦輪引擎中,低壓壓縮機的轉速(RPM or percent)為?

- (A) N(1). (B)N(2). (C)N(3).

原始題號:0014062 題組:0 難易度:中

(A) 85. 在渦輪引擎中,渦輪扇的基本組成為

- (A)轉子與定子 (B)氣斗與膨脹器 (C)轉葉與擴散器

原始題號:0014063 題組:0 難易度:中

(B) 86. 在渦輪引擎中,擴散器的功能為何?

- (A)將壓力轉為速度 (B)減速增壓 (C)減壓加速

原始題號:0014064 題組:0 難易度:中

- (C) 87. APU所使用之離心式壓縮機最主要的優點為何?
(A)每級壓縮器的增壓率較高 (B)起動時所需動力較小 (C)外型上比軸流式壓縮機短

原始題號:0014065 題組:0 難易度:易

- (C) 88. 壓縮機扇葉污染可能導致?
(A)低 RPM. (B)低 EGT. (C)高 EGT.

原始題號:0014066 題組:0 難易度:中

- (B) 89. 渦輪引擎在開車若內部著火, 第一步應如何處置?
(A)關閉所有開關並離開飛機 (B)斷油並持續監控起動器 (C)持續運轉引擎, 並將進入進氣導管之二氧化碳排出

原始題號:0014067 題組:0 難易度:易

- (B) 90. 渦輪引擎在開車時的正確順序為何?
(A)點火, 起動, 注油 (B)起動, 點火, 注油 (C)起動, 注油, 點火

原始題號:0014068 題組:0 難易度:中

- (A) 91. 渦輪引擎以氣動起動器開車時, 在起動器分離前, 若發生 hung start , 正確的處理程序為何?
(A)關車 (B)增加起動器的轉速 (C)慢慢提高油門直到引擎加速至正常怠速

原始題號:0014069 題組:0 難易度:中

- (A) 92. 引擎的滑油油濾堵塞會造成?
(A)滑油旁通開啟且不經油濾直接進入引擎 (B)滑油壓力會提高, 滑油將旁通至二級油濾 (C)滑油將旁通不經油濾, 流入滑油箱集中儲存後, 再進入引擎

原始題號:0014070 題組:0 難易度:中

- (B) 93. 乘客使用的氧氣系統為何?
(A)量控式 (B)定流式 (C)稀釋量控式

原始題號:0014071 題組:0 難易度:中

- (C) 94. 駕駛艙使用的氧氣系統為何?
(A)定流式 (B)階段稀釋 (C)稀釋量控式

原始題號:0014072 題組:0 難易度:易

- (B) 95. 使用引擎防冰裝置應參考何種溫度指示?
(A)Ram air temperature (RAT). (B)Total air temperature (TAT). (C) Outside air temperature (OAT).

原始題號:0014073 題組:0 難易度:中

- (C) 96. 下列何種情況最易發生引擎結冰?
(A)空中, 高轉速 (B)地面, 低轉速 (C)地面, 高轉速

原始題號:0014074 題組:0 難易度:易

- (B) 97. 排雨劑使用時機為何?
(A)進入降雨區前 (B)開始降雨後 (C)當擋風玻璃是乾的時

原始題號:0014075 題組:0 難易度:中

- (C) 98. 加熱駕駛艙玻璃窗的目的為何?
(A)除冰 (B)避免熱震 (C)鳥擊保護

原始題號:0014076 題組:0 難易度:易

- (C) 99. 二階段除冰程序中, 最後噴灑的除冰液或防冰液溫度應為?
(A)熱 (B)溫 (C)冷

原始題號:0014077 題組:0 難易度:易 (R20180823)

- (B) 100. 一階段除冰程序中, 地面人員噴灑的除冰液溫度應為?
(A)冷 (B)加熱過 (C)環境溫度

原始題號:0014078 題組:0 難易度:中

- (A) 101. 航機進行除冰防冰程序時, 單階段除冰程序比較二階段除冰程序有何優點?
(A)較快 (B)可待命時間較短 (C)清除航機上大面積積冰積雪時, 所需的除冰液較少

原始題號:0014079 題組:0 難易度:中

- (C) 102. 航機進行除冰防冰程序時, 單階段除冰程序比較二階段除冰程序有何缺點?
(A)較複雜 (B)可待命時間增加 (C)清除航機上大面積積冰積雪時, 所需的除冰液較多

原始題號:0014080 題組:0 難易度:易

- (C) 103. 配備進氣口及機翼前緣加熱裝置的噴射機, 防冰裝置在飛行中何時會啟動?
(A)飛行中即持續保持運作 (B)當外界溫度低於冰點 (C)預期或已遭遇結冰現象

原始題號:0014081 題組:0 難易度:中

- (C) 104. 關於排雨劑之使用, 下列何者正確?
(A)降雨後儘早使用, 以使雨水和擋風玻璃間產生屏障 (B)先使用排雨劑, 再用雨刷將其均勻分佈 (C)使用時間次數以雨量大小決定

原始題號:0014082 題組:0 難易度:中

- (C) 105. 使用移動式除冰防冰裝置時應準備何種安全措施?
(A)開啟空調包氣閥 (B)使引擎保持高於怠速以避免熄火 (C)飛行關門前, 將防冰液噴灑在機門下緣及門檻

原始題號:0014083 題組:0 難易度:易

- (C) 106. 當客艙壓力控制器為壓差模式時, 參考氣壓會藉何種裝置排出?
(A)洩壓閥 (B)等壓計量閥 (C)差壓計量閥

原始題號:0014084 題組:0 難易度:中

- (B) 107. 在加壓系統中, 洩壓閥的功能為?
(A)釋放負壓差 (B)釋放客艙之正差 (C)釋放客艙超限之壓差

原始題號:0014085 題組:0 難易度:中

- (B) 108. 客艙壓力設定是直接作用於?
(A)壓縮機速度 (B)出流閥門開啟 (C)氣動系統之壓力

原始題號:0014086 題組:0 難易度:易

- (B) 109. 艙壓控制系統中的哪個部份能避免客艙高度高於飛機高度?
(A)客艙下降率控制器 (B)負壓排氣閥 (C)壓縮比限制開關

原始題號:0014087 題組:0 難易度:易

- (B) 110. 若客艙爬升率過大, 應如何調整艙壓?
(A)緩慢打開出流閥門 (B)迅速關閉出流閥門 (C)增加進氣量

原始題號:0014088 題組:0 難易度:中

- (B) 111. 如何控制客艙艙壓
(A)壓力閥調整壓縮機輸出的壓力 (B)出流閥門依設定值排出超出的氣壓 (C)入流閥門依設定值調整進氣流量

原始題號:0014089 題組:0 難易度:易

- (A) 112. 何謂客艙壓差?
(A)客艙內與外界的壓力差 (B)客艙飛行高度的壓力與平均海平面的壓力差 (C)客艙設定艙壓與實際艙壓差

原始題號:0014090 題組:0 難易度:易

- (C) 113. 哪個儀表能指示艙壓變化率,其單位為何?
(A)壓力控制器, PSI (B)客艙垂直速率指示器, PSI (C)客艙垂直速率指示器, feet per minute

原始題號:0014091 題組:0 難易度:易

- (B) 114. 渦輪引擎的哪個部份提供加壓與空調之用?
(A)進氣口 (B)壓縮機 (C)燃燒室

原始題號:0014092 題組:0 難易度:中

- (A) 115. 空氣循環冷卻系統的哪個部份會降壓及降溫?
(A)膨脹渦輪機 (B)主熱交換器 (C)冷卻旁通閥

原始題號:0014093 題組:0 難易度:中

- (C) 116. 空氣循環冷卻系統的組成為何?
(A)加熱器,冷卻器和壓縮機 (B)衝壓氣源,壓縮機及引擎分氣 (C)壓縮空氣源,熱交換器及渦輪機

原始題號:0014094 題組:0 難易度:易

- (B) 117. 空氣循環冷卻系統如何提供冷氣?
(A)將加熱的空氣導入壓縮機 (B)將空氣導入膨脹渦輪機並吸收其熱能 (C)將空氣導入含冷煤的冷卻環

原始題號:0014095 題組:0 難易度:中

- (B) 118. 下列何種客艙空調系統使用冷煤來降低客艙溫度?
(A)空氣循環式 (B)蒸氣循環式 (C)蒸發式風箱

原始題號:0014096 題組:0 難易度:中

- (A) 119. 下列何種艙壓控制系統使用控制器內之參考機體氣壓,來調整出流閥門?
(A)等壓式及差壓式 (B)未加壓及加壓控制 (C)周圍,差壓及最大壓差

原始題號:0014097 題組:0 難易度:中

- (B) 120. 鉛酸電池使用的電解液為何?
(A)硼酸 (B)硫酸 (C)氫氧化鉀

原始題號:0014098 題組:0 難易度:中

- (B) 121. 鎳鎘電池中的電解液特性為何
(A)無腐蝕性 (B)類似家用鹼水,可能造成嚴重灼傷 (C)比鉛酸電池所使用的電解液較無害

原始題號:0014099 題組:0 難易度:中

- (C) 122. 下列何者能中和鎳鎘電池的電解液
(A)肥皂與水 (B)蘇打的碳酸氫鹽 (C)硼酸溶液, 醋, 檸檬汁或其他弱酸溶液

原始題號:0014100 題組:0 難易度:中

- (C) 123. 使用熔絲型限流器的目的為何?
(A)避免低功率迴路超載 (B)快速斷路之設計可保護敏感的裝備或迴路 (C)允許熔絲熔斷及電路中斷前的短時間超載

原始題號:0014101 題組:0 難易度:中

- (C) 124. 使用金屬材質包覆線路或電子單元之目的為何?
(A)免除地線 (B)避免靜電 (C)消除無線電電磁波干擾

原始題號:0014102 題組:0 難易度:中

- (C) 125. 何謂殘餘電壓?
(A)與電流相位不同所產生的電壓 (B)儲存在發電機激磁器輸出線圈的電壓 (C)交流發電機中, 電力輸出的永久磁鐵產生之電壓

原始題號:0014103 題組:0 難易度:中

- (B) 126. 繼電器與電磁開關有何不同?
(A)繼電器有移動的線圈 (B)電磁開關有移動的線圈 (C)繼電器是當成機械控制裝置使用

原始題號:0014104 題組:0 難易度:易

- (A) 127. 電氣系中繼電器的作用為何?
(A)能用小開關遙控大電流的遙控裝備 (B)借由接地避免靜電累積 (C)使起動器齒輪作動, 移開鎖定插銷或其他機械控制裝置

原始題號:0014105 題組:0 難易度:中

- (C) 128. 使用 115 volts, 400-Hz AC 的優點為何?
(A)可使用整流器改變電壓, 節省空間及重量 (B)高頻的誘導阻抗能提高電流, 及傳輸效率較高 (C)與相同輸出之DC馬達相比, 高電壓的AC馬達較小較輕

原始題號:0014106 題組:0 難易度:中

- (B) 129. 為何在連接或移除電池前應先關閉所有的負載及電源?
(A)避免電池放電 (B)避免火花點燃爆炸性氣體 (C)避免電源驟變造成敏感裝備跳電

原始題號:0014107 題組:0 難易度:易

- (B) 130. 飛機上的可見的靜電放電現象稱為?
(A)Corona threshold. (B)Saint Elmo's fire. (C)Precipitation static.

原始題號:0014108 題組:0 難易度:易

- (C) 131. 飛機電池輸出為 45 amperes達2.5 hours, 可換算為多少 amperes- hours rating?
(A)90.0 ampere-hour. (B)18.0 ampere-hour. (C)112.5 ampere-hour.

原始題號:0014109 題組:0 難易度:易

- (C) 132. 飛機上計算保險絲容量的單位為何?
(A)volts. (B)watts. (C)amperes.

原始題號:0014110 題組:0 難易度:易

- (A) 133. 關於飛機上的電氣系中斷路器自動重設功能, 下列何者正確?
(A)不作為迴路保護裝置使用 (B)使用在所有電氣系的迴路 (C)只應用在會暫時超載的裝備上
- 原始題號:0014111 題組:0 難易度:易
- (A) 134. 電氣系中繼電器的作用為何?
(A)磁力開關 (B)增壓器 (C)低電阻的導體
- 原始題號:0014112 題組:0 難易度:易
- (B) 135. 發電機的輸出單位為何?
(A)Watts at rated voltage. (B)Amperes at rated voltage. (C) Voltage at rated amperes.
- 原始題號:0014113 題組:0 難易度:易
- (B) 136. 直流電流的電能單位為何?
(A)Volts. (B) Watts. (C)Amperes.
- 原始題號:0014114 題組:0 難易度:中
- (B) 137. 儀表燈光系統斷電器的功能為何?
(A)保護燈光避免電流過大 (B)保護配線避免電流過大 (C)避免配線電壓過高
- 原始題號:0014115 題組:0 難易度:中
- (A) 138. 交流發電機控制器的保護功能為何?
(A)斷相, 欠激及超壓 (B)欠壓, 差速故障, 手動並聯 (C)發電機欠速, 匯流排聯絡斷路器自動關閉
- 原始題號:0014116 題組:0 難易度:中
- (B) 139. 平行匯流排電氣系的特性為何?
(A)外電源能與發電機並聯使用 (B)當某一發電機失效時能自動分配電流負載 (C)每個發電機獨立供電給對應的匯流排
- 原始題號:0014117 題組:0 難易度:易
- (A) 140. 變壓整流器的功能為何?
(A)將 115 volts AC , 400-Hz 轉換為 28 volts DC. (B)將 DC 轉為 26 volts 或 115 volts 400-Hz AC (C)利用飛機的電池來運作緊急飛行儀表及無線電
- 原始題號:0014118 題組:0 難易度:易
- (C) 141. 二十單元電池組的鎳鎘電池在充分充電後電壓應為多少?
(A) 12 volts. (B) 20 volts. (C)25 volts.
- 原始題號:0014119 題組:0 難易度:中
- (B) 142. 為何鎳鎘電池必須定期完全放電後充電?
(A)重置電解質的液面 (B)消除電池失衡及容量損失 (C)溶解正極上的鎳氧化物來恢復電池容量
- 原始題號:0014120 題組:0 難易度:中
- (C) 143. 何者會導致鎳鎘電池的電池失衡效應
(A)低溫 (B)大量快速放電 (C)定壓充電
- 原始題號:0014121 題組:0 難易度:中

(C) 144. 交流發電機的恆速傳動器功能為何?
(A)控制磁場強度 (B)調整發電機電壓 (C)保持固定的頻率

原始題號:0014122 題組:0 難易度:易

(B) 145. 頻率表(frequency meter) 直接指示何種轉速?
(A)引擎 N(2) 指示 (B)發電機 RPM. (C)恆速傳動器的輸入轉速

原始題號:0014123 題組:0 難易度:易

(C) 146. 飛機的交流發電機輸出單位為何?
(A) Volts. (B)Kilowatts (KW). (C)Kilovolt-amps (KVA).

原始題號:0014124 題組:0 難易度:中

(B) 147. 轉動式反流器(rotary inverter)的功能為何?
(A)將 115 volts ac 轉為 28 volts dc. (B)將 DC 轉為 115 volts 400-Hz 電力 (C)將 26/29 volts DC 變壓為 115/200 volts DC.

原始題號:0014125 題組:0 難易度:易

(C) 148. 反流繼電器的功能為何?
(A)避免某個發電機驅動另一個發動機 (B)調整發電機的電壓以對應本身的負荷 (C)當發電機的電壓低於電池的電壓時, 使發電機與主匯流排斷路

原始題號:0014126 題組:0 難易度:易

(B) 149. 六單元電池組的鉛酸電池在充分充電後電壓應為多少?
(A) 6 volts. (B) 12 volts. (C)24 volts.

原始題號:0014127 題組:0 難易度:易

(A) 150. 飛機主輪上之可熔栓 (fusible plugs) 是用來避免?
(A)輪胎爆破 (B)過度使用 (C)熱膨脹損壞輪胎

原始題號:0014128 題組:0 難易度:易

(B) 151. 如充氣不足會形成何胎面磨損?
(A)緩慢地平均磨損 (B)胎面兩側比中間磨損較多 (C)中間部位加快磨損

原始題號:0014129 題組:0 難易度:易

(C) 152. 如充氣過度會形成何胎面磨損?
(A)緩慢地平均磨損 (B)胎面兩側比中間磨損較多 (C)中間部位加快磨損

原始題號:0014130 題組:0 難易度:中

(C) 153. 雙鼻輪胎的脊紋(chines)應置於何處?
(A)每個輪胎的兩側 (B)只在輪胎的內側 (C)只在輪胎的外側

原始題號:0014131 題組:0 難易度:中

(C) 154. 輪胎上的脊紋(chines)的功能為何?
(A)增加在積雪或積冰跑道上的抓地力 (B)減少濕跑道上的水漂現象 (C)將積水或融雪導離引擎進氣口

原始題號:0014132 題組:0 難易度:易

(C) 155. 下列何者為飛操系統中的主要控制面?
(A)調整片 (B)襟翼 (C)外側副翼

原始題號:0014133 題組:0 難易度:易

(B) 156. 下列何者為飛操系統中的二級控制面?

(A)方向舵 (B)伺服片 (C)內側副翼

原始題號:0014134 題組:0 難易度:易

(C) 157. 當主操縱面移動時, 升降舵上的調整片如何動作?

(A)同向 (B)反向 (C)保持固定的位置

原始題號:0014135 題組:0 難易度:易

(A) 158. 駕駛桿操作時副翼的移動方向為何?

(A)駕駛桿向右時左副翼向下 (B)駕駛桿向左時右副翼向上 (C)駕駛桿向左時左副翼向下

原始題號:0014136 題組:0 難易度:易

(A) 159. 機翼前緣襟翼的作用為何?

(A)增加機翼之翼切形 (B)在空速不增加下, 減少升力 (C)在高攻角時導引氣流通過機翼上方

原始題號:0014137 題組:0 難易度:易

(B) 160. 飛行擾流板的作用為何?

(A)增加機翼之翼切形 (B)在空速不增加下, 減少升力 (C)在高攻角時導引氣流通過機翼上方

原始題號:0014138 題組:0 難易度:易

(A) 161. 地面擾流板的作用為何?

(A)著陸時減少機翼升力 (B)輔助轉彎 (C)在空速不增加下, 增加下降率

原始題號:0014139 題組:0 難易度:中

(A) 162. 機翼上的渦旋產生器的作用為何?

(A)避免震波誘發之氣流分離 (B)提高阻力驟升之速度並增加高速時副翼之效用 (C)阻斷機翼方向的氣流, 以使翼根比翼尖先失速

原始題號:0014140 題組:0 難易度:中

(A) 163. 機翼上的渦旋產生器有何缺點?

(A)低速時阻力稍微增加 (B)高速時寄生阻力顯著增加 (C)震波誘發之氣流分離會增加控制面之震顫

原始題號:0014141 題組:0 難易度:中

(A) 164. 將水平尾翼和升降舵設置在垂直尾翼上方之設計有何缺點?

(A)結構較重 (B)螺旋性能不良 (C)垂直尾及方向舵因水平尾翼位置的端板作用, 造成效能較差

原始題號:0014142 題組:0 難易度:易

(C) 165. 將水平尾翼和升降舵設置在垂直尾翼上方之設計有何優點?

(A)減輕結構重量 (B)巡航較為省油 (C)水平尾翼能避開機翼擾流

原始題號:0014143 題組:0 難易度:易

(B) 166. 液壓系統中的固定接頭有靜態滲漏時應如何處置?

(A)降低儲壓器壓力 (B)通知修護維修 (C)加壓液壓系統並測試液壓功能

原始題號:0014144 題組:0 難易度:中

(B) 167. Skydrol(液壓油)的優點為何?

(A)能抗水污染 (B)工作溫度範圍廣 (C)與植物性油基液壓油相容

原始題號:0014145 題組:0 難易度:中

(C) 168. Skydrol(液壓油)的缺點為何?

(A)與合成基礎油不相容 (B)應避免在 -40°C 以下工作 (C)會破壞某些電氣系的絕緣

原始題號:0014146 題組:0 難易度:中

(A) 169. 液壓油濾中的旁通閥作用為何?

(A)旁通阻塞物 (B)控制流量以保持液壓油正常的溫度及黏度 (C)確保在引擎開車時液壓油流量正確,直到油溫升高至液壓油可自由流動

原始題號:0014147 題組:0 難易度:易

(C) 170. 若液壓油不慎接觸到眼睛時應如何處置?

(A)使用眼影膏 (B)用肥皂與水徹底沖洗 (C)用水沖洗並送醫

原始題號:0014148 題組:0 難易度:易

(B) 171. 如何清除皮膚上的液壓油(Skydrol)?

(A)溶劑 (B)肥皂與水 (C)三氯乙烯

原始題號:0014149 題組:0 難易度:中

(A) 172. 液壓儲壓器的作用為何?

(A)在加壓下儲存液壓油 (B)收集滲漏之液壓油 (C)在液壓油流回液壓儲油槽前收集泡沫並排空氣體

原始題號:0014150 題組:0 難易度:易

(A) 173. 液壓儲壓器應填充何種氣體?

(A)氮氣 (B)乾氧 (C)二氧化碳

原始題號:0014151 題組:0 難易度:易

(C) 174. 液壓保險絲的作用原理為何?

(A)熱 (B)電 (C)壓差

原始題號:0014152 題組:0 難易度:易

(B) 175. 加壓液壓儲油槽的目的為何?

(A)提供備用壓力源 (B)確保在高空中無泡沫的液壓油能正確地流進油壓幫浦 (C)確保在產生負G時液壓油能順利地流進油壓幫浦

原始題號:0014153 題組:0 難易度:易

(C) 176. 為何必須液壓油過濾?

(A)液壓油內的水可能結冰 (B)確保無泡沫的液壓油能正確地流進油壓幫浦入口 (C)污染物可能造成油封或汽缸壁受損導致內部滲漏

原始題號:0014154 題組:0 難易度:中

(A) 177. 活塞式的儲壓器有何優點?

(A)比球型儲壓器的截面積小 (B)比囊式儲壓器的輸出壓力大 (C)比隔膜式儲壓器能儲存較多液壓油

原始題號:0014155 題組:0 難易度:中

(C) 178. 液壓系統中的順序閥和優先閥有何不同?

(A)順序閥為電動驅動 (B)優先閥以機械接觸驅動 (C)優先閥以液壓驅動

原始題號:0014156 題組:0 難易度:中

(A) 179. 液壓保險絲的作用原理為何?

(A)液壓油流量 (B)熱能上升 (C)壓力上升

原始題號:0014157 題組:0 難易度:中

(B) 180. 液壓儲壓器之作用為何?

(A)壓縮液壓油 (B)吸引驟變之壓力 (C)儲存少量因系統洩露之液壓油

原始題號:0014158 題組:0 難易度:中

(C) 181. 何種液壓裝置通常會採用"雙動作(double-acting)不平衡線性致動器"?

(A)煞車 (B)起落架 (C)自動駕駛的伺服器

原始題號:0014159 題組:0 難易度:中

(C) 182. 為何合成液壓油必須存放在氣密容器?

(A)高揮發率 (B)此油氣有劇毒 (C)易吸溼而污染

原始題號:0014160 題組:0 難易度:中

(B) 183. 何種設計的引擎驅動式液壓油泵可以調節輸出壓力?

(A)恆速轉動器 (B)可變容積幫浦 (C)線性之的可變孔口

原始題號:0014161 題組:0 難易度:中

(B) 184. 防滑煞車系統中的控制盒作用為何?

(A)感應輪速改變 (B)避免帶煞車落地 (C)量測煞車力道避免輪胎鎖死

原始題號:0014162 題組:0 難易度:中

(A) 185. 引擎驅動式液壓油泵如何調節壓力?

(A)系統旁通閥 (B)恆速轉動器 (C)管路中的可變孔口

原始題號:0014163 題組:0 難易度:易

(A) 186. 氣動系統中的濕氣可能導致?

(A)腐蝕 (B)各類異聲如爆震, 嘯聲和咯咯聲 (C)當作動時氣壓下降會導致回油管路結冰

原始題號:0014164 題組:0 難易度:易

(A) 187. 緊急氣動系統的氣瓶通常填充何種氣體?

(A)氮氣 (B)乾氧 (C)二氧化碳

原始題號:0014165 題組:0 難易度:易

(C) 188. 起落架的伸放與壓縮會啟動哪個安全裝置?

(A) Uplock switch. (B)Downlock switch. (C)Ground safety switch.

原始題號:0014166 題組:0 難易度:易

(A) 189. 飛機主輪上之可熔栓 (fusible plugs) 作用為何?

(A)避免輪胎爆炸 (B)便於快速洩氣維修 (C)保護防滑系統的電系

原始題號:0014167 題組:0 難易度:中

- (B) 190. 主輪的某一輪胎之熱熔栓熔化而洩氣, 這意謂?
(A)重煞車造成輪胎過熱, 使輪圈上的塑膠熱熔栓熔化, 如此可避免輪胎因高溫而有爆胎的危險 (B)輪胎之高溫使輪圈上的金屬熱熔栓熔化, 造成輪胎洩氣 (C)輪胎之高溫使輪胎上的溫度感應閥熔化, 造成輪胎洩氣, 如此可避免機翼受損

原始題號:0013977 題組:0 難易度:易

- (B) 191. The emergency lights on a passenger-carrying airplane must be armed or turned on during
(A)taxing, takeoff, cruise, and landing. (B)taxing, takeoff, and landing.
(C)taxing, cruise, and landing.

原始題號:0013978 題組:0 難易度:易

- (A) 192. If a passenger-carrying landplane is required to have an automatic deploying escape slide system, when must this system be armed?
(A)For taxi, takeoff, and landing. (B)Only for takeoff, and landing. (C)During taxi, takeoff, landing, and after ditching.

原始題號:0013979 題組:0 難易度:易

- (B) 193. When may two persons share one approved safety belt in a lounge seat?
(A)When one is an adult and one is a child under 3 years of age. (B)Only during the en route flight. (C)During all operations except the takeoff and landing portion of a flight.

原始題號:0013980 題組:0 難易度:中

- (B) 194. An air carrier airplane must have an operating public address system if it
(A)has a seating capacity of 19 passengers. (B)has a seating capacity for more than 19 passengers. (C)weights more than 12,500 pounds.

原始題號:0013981 題組:0 難易度:中

- (C) 195. A crewmember interphone system is required on which airplane?
(A)A larger airplane (B)A turbojet airplane. (C)An airplane with more than 19 passenger seats.

原始題號:0013982 題組:0 難易度:中 (R20190708)

- (B) 196. At which cabin pressure altitude must oxygen be provided for all passengers during the entire flight at those altitudes?
(A)20,000 feet. (B)13,000 feet. (C)10,000 feet.

原始題號:0013983 題組:0 難易度:中

- (B) 197. What is the highest flight level that operations may be conducted without the pilot at the controls wearing and using an oxygen mask, while the other pilot is away from duty station?
(A)FL 240 (B)FL 250 (C)Above FL 250

原始題號:0013984 題組:0 難易度:中

- (A) 198. A flight crewmember must be able to don and use a quick-donning oxygen mask within
(A)5 seconds. (B)10 seconds. (C)15 seconds.

原始題號:0013985 題組:0 難易度:易

- (A) 199. How will the airspeed indicator react if the ram air input to the pitot head is blocked by ice, but the drain hole and static port are not?
(A) Indication will drop to zero. (B) Indication will rise to the top of the scale.
(C) Indication will remain constant but will increase in a climb.

原始題號:0013986 題組:0 難易度:易

- (A) 200. What can a pilot expect if the pitot system ram air input and drain hole are blocked by ice?
(A) The airspeed indicator may act as an altimeter. (B) The airspeed indicator will show a decrease with an increase in altitude. (C) No airspeed indicator change will occur during climbs and descents.

原始題號:0013987 題組:0 難易度:易

- (C) 201. What should the deice/anti-ice fluid temperature be during the last step of a two-phase process?
(A) Hot. (B) Warm. (C) Cold.

原始題號:0013988 題組:0 難易度:中

- (A) 202. Which of the following will decrease the holding time during anti-ice using a two-step process?
(A) Apply heated Type 2 fluid. (B) Decrease the water content. (C) Increase the viscosity of Type 1 fluid.

原始題號:0013989 題組:0 難易度:中

- (A) 203. Which procedure increase holding time when deicing/anti-icing an airplane using a two-step process
(A) Heated Type 1 fluid followed by cold Type 2 fluid. (B) Cold Type 2 fluid followed by hot Type 2 fluid. (C) Heated Type 1 or 2 fluid followed by cold Type 1 fluid.

原始題號:0013990 題組:0 難易度:易

- (C) 204. Which is a disadvantage of the one-step over the two-step process when deicing/anti-icing an airplane?
(A) It is more complicated. (B) The holding time is increased. (C) More fluid is used with the one-step method when large deposits of ice and snow must be flushed off airplane surfaces.

原始題號:0013991 題組:0 難易度:中

- (B) 205. What is the minimum glycol content of Type 2 deicing/anti-icing fluid?
(A) 30 percent. (B) 50 percent. (C) 80 percent.

原始題號:0013992 題組:0 難易度:中

- (C) 206. What is the minimum glycol content of Type 1 deicing/anti-icing fluid?
(A) 30 percent. (B) 50 percent. (C) 80 percent.

原始題號:0013993 題組:0 難易度:中

- (B) 207. The purpose of diluting ethylene glycol deicing fluid with water in non-precipitation conditions is to
(A)raise the eutectic point. (B)Decrease the freeze point. (C)increase the minimum freezing point.

原始題號:0013994 題組:0 難易度:易

- (B) 208. Snow on top of deicing or anti-icing fluid
(A)need not be considered as adhering to the aircraft. (B)must be considered as adhering to the aircraft. (C)must be considered as adhering to the aircraft, but a safe takeoff can be made as it will blow off.

原始題號:0013995 題組:0 難易度:易

- (C) 209. Anti-icing fluid should provide freezing point protection to
(A)(-20 F ambient temperature. (B)(+32 F outside temperature or below. (C)a freezing point no greater than 20F below the ambient or airplane surface temperature.

原始題號:0013996 題組:0 難易度:易

- (B) 210. The practice developed and accepted by the North American air carrier industry using traditional North American fluid is to ensure that the freeze point of the remaining film is below ambient temperature by at least
(A)(10 F. (B)(20 F. (C)(20 C.

原始題號:0013997 題組:0 難易度:易

- (C) 211. What is the effect of Freezing Point Depressant (FPD) fluid residue on engine fan or compressor blades?
(A)It could cause FPD vapors to enter the aircraft but would have no effect on engine thrust or power. (B)It can increase performance and cause stall or surges. (C)It can reduce engine performance and cause surging and/or compressor stall.

原始題號:0013998 題組:0 難易度:易

- (B) 212. Freezing Point Depressant (FPD) fluid used for deicing
(A)provide ice protection during flight. (B)are intended to provide ice protection on the ground only. (C)on the ground, cause no performance degradation during takeoff.

原始題號:0013999 題組:0 難易度:易

- (C) 213. The adverse effect of ice, snow, or frost on aircraft performance and flight characteristics include decreased lift and
(A)increase thrust. (B)a decreased stall speed. (C)an increased stall speed.

原始題號:0014000 題組:0 難易度:易

- (A) 214. Which is an effect of ice, snow, or frost formation on an airplane?
(A)Increased stall speed. (B)Increased pitchdown tendencies. (C)No airspeed indicator change will occur during climbs and descents.

原始題號:0014001 題組:0 難易度:易

- (C) 215. Which is an effect of ice, snow, or frost formation on an airplane?
(A) Decreased stall speed. (B) Decreased pitchup tendencies. (C) Decreased angle of attack for stall.

原始題號:0014002 題組:0 難易度:易

- (C) 216. What effect, if any, landing at a higher-than-recommended touchdown speed have on hydroplaning?
(A) No effect on hydroplaning, but increases landing roll. (B) Reduces hydroplaning potential if heavy braking is applied. (C) Increases hydroplaning potential regardless of braking.

原始題號:0014003 題組:0 難易度:易

- (C) 217. What is the best method of speed reduction if hydroplaning is experienced on landing?
(A) Apply full main wheel braking only. (B) Apply nosewheel and main wheel braking alternately and abruptly. (C) Apply aerodynamic braking to the fullest advantage.

原始題號:0014004 題組:0 難易度:易

- (C) 218. At what minimum speed will dynamic hydroplaning begin if a tire has an air pressure of 70 PSI?
(A) 85 knots. (B) 80 knots. (C) 75 knots.

原始題號:0014005 題組:0 難易度:易 (R20190708)

- (B) 219. At what minimum speed (rounded off) could dynamic hydroplaning occur on main tires having a pressure of 121 PSI?
(A) 90 knots. (B) 96 knots. (C) 110 knots.

原始題號:0014006 題組:0 難易度:易

- (B) 220. How should reverse thrust propellers be used during landing for maximum effectiveness in stopping?
(A) Gradually increase reverse power to maximum as rollout speed decreases. (B) Use maximum reverse power as soon as possible after touchdown. (C) Select reverse-pitch after landing and use idle power setting of the engines.

原始題號:0014007 題組:0 難易度:易

- (A) 221. How should thrust reversers be applied to reduce landing distance for turbojet aircraft?
(A) Immediately after ground contact. (B) Immediately prior to touchdown. (C) After applying maximum wheel braking.

原始題號:0014008 題組:0 難易度:中

- (A) 222. What recovery would be appropriate in the event of compressor stall.
(A) Reduce fuel flow, reduce angle of attack, and increase airspeed. (B) Advance throttle, lower angle of attack, and reduce airspeed. (C) Reduce throttle, reduce airspeed, increase angle of attack.

原始題號:0014009 題組:0 難易度:中

- (C) 223. Which type of compressor stall has the greatest potential for severe engine damage?
(A) Intermittent "backfire" Stall. (B) Transient "backfire" stall. (C) Steady, continuous flow reversal stall.

原始題號:0014010 題組:0 難易度:中

- (A) 224. What indication that a compressor stall has developed and become steady?
(A) Strong vibrations and loud roar. (B) Occasional loud "bang" and flow reversal. (C) Complete loss of power with severe reduction in airspeed.

原始題號:0014011 題組:0 難易度:中

- (C) 225. What characterizes a transient compressor stall?
(A) Loud, Steady roar accompanied by heavy shuddering. (B) Sudden loss of thrust accompanied by a loud whine. (C) Intermittent "bang", as backfires and flow reversals take place.

原始題號:0014012 題組:0 難易度:易

- (B) 226. Minimum specific fuel consumption of the turboprop engine is normally available in which altitude range?
(A) 10,000 feet to 25,000 feet. (B) 25,000 feet to the Tropopause. (C) The Tropopause to 45,000 feet.

原始題號:0014013 題組:0 難易度:中

- (A) 227. What effect will an increase in altitude have upon the available equivalent shaft horsepower (ESHP) of a turboprop engine?
(A) Lower air density and engine mass flow will cause a decrease in power. (B) Higher propeller efficiency will cause an increase in usable power (ESHP) and thrust. (C) power will remain the same but propeller efficiency will decrease.

原始題號:0014014 題組:0 難易度:易

- (B) 228. Equivalent shaft horsepower (ESHP) of a turboprop engine is a measure of
(A) turbine inlet temperature. (B) shaft horsepower and jet thrust. (C) propeller thrust only.

原始題號:0014015 題組:0 難易度:易

- (B) 229. The most important restriction to the operation of turbojet or turboprop engines is
(A) limiting compressor speed. (B) limiting exhaust gas temperature. (C) limiting torque.

原始題號:0014016 題組:0 難易度:易

- (C) 230. As outside air pressure decreases, thrust output will
(A) increase due to greater efficiency of jet aircraft in thin air. (B) remain the same since compressor of inlet air will compensate for any decrease in air pressure. (C) decrease due to higher density altitude.

原始題號:0014017 題組:0 難易度:中

- (A) 231. What effect, if any, does high ambient temperature have upon the thrust output of a turbine engine?
(A) Thrust will be reduced due to the decrease in air density. (B) Thrust remain the same, but turbine temperature will be higher. (C) Thrust will be higher because more heat energy is extracted from the hotter air.

原始題號:0014018 題組:0 難易度:中

- (C) 232. What effect would a change in ambient temperature or air density have on gas-turbine-engine performance?
(A) As air density decreases, thrust increases. (B) As temperature increases, thrust increases. (C) As temperature increases, thrust decreases.

原始題號:0014019 題組:0 難易度:易

- (C) 233. Which place in the turbojet engine is subjected to the highest temperature?
(A) Compressor discharge. (B) Fuel spray nozzles. (C) Turbine inlet.

原始題號:0014020 題組:0 難易度:易

- (A) 234. If both the ram air input and drain hole of the pitot system are blocked by ice, what airspeed indication can be expected?
(A) No variation of indicated airspeed in level flight if large power changes are made. (B) Decrease of indicated airspeed during a climb. (C) Constant indicated airspeed during descent.

原始題號:0014021 題組:0 難易度:中

- (C) 235. Freezing Point Depressant (FPD) fluid are highly soluble in water; however,
(A) ice is slow to absorb it but fast to melt when in contact with FPD. (B) ice absorbs it very fast but is slow to melt when in contact with it. (C) ice is slow to absorb it, and to melt when in contact with it.

原始題號:0014022 題組:0 難易度:中

- (C) 236. Freezing Point Depressant (FPD) fluid residue on engine fan or compressor blades
(A) can increase performance and cause stalls or surges. (B) could cause FPD vapors to enter the aircraft but would have no effect on engine thrust or power. (C) can reduce engine performance and cause surging and/or compressor stalls.

原始題號:0014023 題組:0 難易度:易

- (b) 237. How long shall a supplemental air carrier or commercial operator retain a record of the manifest, airworthiness release, pilot route certification, flight release, and flight plan?
(A) 1 month. (B) 3 months. (C) 12 months.

原始題號:0014024 題組:0 難易度:中

- (A) 238. Which airplanes are required to be equipped with a ground proximity warning glide slope deviation alerting system?
(A) All turbine-powered airplanes. (B) Passenger-carrying turbine-powered airplanes only. (C) Large turbine-powered airplanes only.

原始題號:0014025 題組:0 難易度:中

- (A) 239. An airplane operated by a flag air carrier operator flying over uninhabited terrain must carry which emergency equipment?
(A) Suitable pyrotechnic signaling devices. (B) Colored smoke flares and a signal mirror. (C) Survival kit for each passenger.

原始題號:0014026 題組:0 難易度:中

- (B) 240. An airplane operated by a supplemental air carrier operator flying over uninhabited terrain must carry which emergency equipment?
(A) Survival kit for each passenger. (B) Suitable pyrotechnic signaling devices. (C) Colored smoke flares and a signal mirror.

原始題號:0014027 題組:0 難易度:中

- (C) 241. An airplane operated by a commercial operator flying over uninhabited terrain must carry which emergency equipment?
(A) A signal mirror and colored smoke flares. (B) Survival kit for each passenger. (C) An approved survival-type emergency locator transmitter.

原始題號:0014028 題組:0 難易度:中 (R20180823)

- (C) 242. What emergency equipment is required for a long range overwater flight operation?
(A) A potable survival emergency locator transmitter for each liferaft. (B) A pyrotechnic signaling device for each life preserve. (C) A life preserve equipped with a survivor locator light, for each person on the airplane.

原始題號:0014029 題組:0 難易度:中

- (C) 243. Life preservers required for overwater operations as stored
(A) with easy reach of each passenger. (B) under each occupant seat. (C) within easy reach of each seated occupant.

原始題號:0014030 題組:0 難易度:中

- (A) 244. How long is cockpit voice recorder and flight recorder data kept, in the event of an accident or occurrence resulting in terminating the flight?
(A) 60 days. (B) 90 days. (C) 30 days.

原始題號:0014031 題組:0 難易度:易

- (C) 245. Who is directly responsible for determining the status of each mechanical irregularity previously entered in the aircraft maintenance log?
(A) Aircraft dispatcher. (B) Line maintenance supervisor. (C) The next pilot in command.

原始題號:0014032 題組:0 難易度:易

- (A) 246. Who is responsible for submitting a mechanical reliability report?
(A) Each certificate holder. (B) Director of maintenance at the facility that discovers the reportable condition. (C) Chief inspector at the facility where the condition is found.

原始題號:0014033 題組:0 難易度:中

- (A) 247. What is the reason for variation in geometric pitch along a propeller or rotor blade?
(A) it permits a relatively constant angle of attack along its length when in cruising flight. (B) it prevents the portion of the blade near the hub or root from stalling during cruising flight. (C) it permits a relatively constant angle of incidence along its length when in cruising flight.

原始題號:0014034 題組:0 難易度:中

- (A) 248. Under normal operating conditions, which combination of MAP and RPM produce the most severe wear, fatigue, and damage to high performance reciprocating engines?
(A) High RPM and low MAP. (B) Low RPM and high MAP. (C) High RPM and high MAP.

原始題號:0014035 題組:0 難易度:易

- (B) 249. What effect does high relative humidity have upon the maximum power output of modern aircraft engines?
(A) Neither turbojet nor reciprocating engines are affected. (B) Reciprocating engines will experience a significant loss of BHP. (C) Turbojet engines will experience a significant loss of thrust.

原始題號:0014037 題組:0 難易度:中

- (C) 250. Test data indicated that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of a wing can
(A) reduce lift by as much as 40 percent and increase drag by 30 percent.
(B) increase drag and reduce lift by as much as 40 percent. (C) reduce lift by as much as 30 percent and increase drag by 40 percent.

原始題號:0014038 題組:0 難易度:中

- (A) 251. Why will the EPR indication increase falsely if the P(t) probe at the engine nose dome opening ices up?
(A) The P(t) probe vent will act as a P(s) probe. (B) Anti-ice air pressurizes the nose dome and the vent hole causing an increase in EPR. (C) The reduced inlet area causes pressure to increase, and magnifies the influence of ram air pressure.

原始題號:0014039 題組:0 難易度:中

- (A) 252. Which action should be completed immediately during the start sequence if the TIT attempts to exceed the temperature limit? Shut off the
(A) fuel. (B) starter. (C) ignition.

原始題號:0014040 題組:0 難易度:中

- (B) 253. Which is a means of controlling the fuel temperature on turbojet-powered airplanes?
(A)Electrically heated fuel filters. (B) Engine bleed air routed to a heat exchanger. (C)Fuel filters heated by engine lubricating oil.

原始題號:0014041 題組:0 難易度:中

- (B) 254. Entrained water in aviation turbine fuel is a hazard because of its susceptibility to freezing as it passes through the filters. Which is a common method of preventing this hazard?
(A)Use of micromesh fuel strainers. (B)Use of anti-icing fuel additives. (C)Adding deicing fluid to the fuel.

原始題號:0014042 題組:0 難易度:中

- (B) 255. What will cause the EPR indication to decrease falsely if the P(t) probe at the engine nose dome is iced closed?
(A)The P(t) probe vent will act as a P(s) probe. (B)Anti-ice air will pressurize the nose dome and the vent hole causing a decrease in EPR. (C)The reduced inlet area causes pressure to increase, and magnifies the influence of ram air pressure.

原始題號:0014043 題組:0 難易度:中

- (B) 256. Which engine instrument will indicate a higher than normal reading if the compressor has damage?
(A)EPR. (B)EGT or TIT. (C)Oil pressure.

原始題號:0014044 題組:0 難易度:中

- (B) 257. What condition will cause a false, high EPR indication, in flight or on the ground?
(A)Bleed valve stuck open. (B) Ice in the inlet pressure lines. (C) Loose turbine discharge pressure lines.

原始題號:0014045 題組:0 難易度:中

- (B) 258. What condition will cause a high EGT, W(f), and RPM with a normal EPR indication, at all power settings?
(A)FOD. (B) Bleed valve stuck open. (C) Ice in the inlet pressure lines.

原始題號:0014046 題組:0 難易度:中

- (B) 259. Fuel heaters should not be operated on takeoff, approach, or go-around because the
(A)EPR will decrease significantly. (B)engine may flameout from fuel vaporization. (C)oil temperature will increase significantly as fuel temperatures rise within the oil cooler.

原始題號:0014047 題組:0 難易度:中

- (B) 260. What may result from excessive operation of the fuel heater?
(A) Increased fuel consumption. (B)Heat damage to the fuel control. (C)The fuel filter screen may melt.

原始題號:0014048 題組:0 難易度:易

- (C) 261. When should manual fuel heaters normally be operated?
(A) During takeoff, approach, or go-around. (B) When ambient temperatures are below +32°F. (C) When the fuel temperature approaches +32°F.

原始題號:0014049 題組:0 難易度:中

- (A) 262. What may result if the manual fuel heater is operated excessively?
(A) Vapor lock. (B) A false increase in EPR. (C) A significant increase in fuel consumption.

原始題號:0014050 題組:0 難易度:易

- (A) 263. What is the event sequence for the continuous combustion cycle of a turbine engine?
(A) Intake, compression, combustion, and exhaust. (B) Intake, pressure, combustion, and acceleration. (C) Compression, ignition, fuel, expansion and thrust.

原始題號:0014051 題組:0 難易度:中

- (A) 264. The purpose of the engine diffuser is to
(A) decrease the velocity and increase the static pressure of the air. (B) prevent air piling up (choking) in the rear stages of the compressor. (C) increase the velocity of the air going into the combustion chamber.

原始題號:0014052 題組:0 難易度:易

- (B) 265. In a dual axial-flow compressor system the first stage turbine drives the
(A) N(1) compressor. (B) N(2) compressor. (C) N(1) and N(2) compressors.

原始題號:0014053 題組:0 難易度:中

- (B) 266. Which difference does engine pressure ratio measure?
(A) Uncorrected compressor inlet pressure and turbine discharge pressure.
(B) Compressor inlet total pressure corrected for inlet duct loss and turbine discharge total pressure. (C) Compressor outlet total pressure corrected for temperature and turbine discharge total pressure.

原始題號:0014054 題組:0 難易度:中

- (B) 267. During starting, what should prevent the engine from driving a pneumatic starter to burst speed?
(A) Drive shaft shear point. (B) Sprag clutch assembly. (C) Design of the starter turbine nozzle vanes which causes choking.

原始題號:0014055 題組:0 難易度:易

- (B) 268. During engine start, closing of the start air valve may be verified by
(A) engine RPM stabilizing at idle. (B) air manifold pressure increasing slightly. (C) air manifold pressure decreasing slightly.

原始題號:0014056 題組:0 難易度:中

- (A) 269. Why are pneumatic starters used on most large turbine engines?
(A) Less weight. (B) Simple design requires no clutch. (C) Air starters are mechanically more reliable than electrical starters.

原始題號:0014057 題組:0 難易度:中

- (C) 270. How does compressor RPM affect the power output of a turbofan engine?
(A) Power increases linearly with an increase in compressor speed. (B) Efficiency increases when compressor blade tips reach Mach 1 or slightly higher. (C) Compressor aerodynamics cause a nonlinear increase in power relative to compressor speed.

原始題號:0014058 題組:0 難易度:中

- (B) 271. Which location has the highest gas pressure in a turbine engine?
(A) Turbine outlet. (B) Compressor outlet. (C) Combustion chamber outlet.

原始題號:0014059 題組:0 難易度:中

- (B) 272. Which is the most critical parameter for a turbine engine during starting?
(A) Oil pressure. (B) EGT. (C) Starter engagement time.

原始題號:0014060 題組:0 難易度:中

- (A) 273. Why should turbine engines normally be operated at idle for a period of time before shutdown?
(A) The turbine case cools faster and may shrink down and seize the turbine blades
(B) Rapid cooling of the compressor section may cause cracking of compressor blades. (C) Temperature reduction and stabilization prevents a hot combustion chamber from igniting residual fuel.

原始題號:0014061 題組:0 難易度:易

- (A) 274. The speed (RPM or percent) of the low pressure compressor of a dual compressor engine is referred to as
(A) N(1). (B) N(2). (C) N(3).

原始題號:0014062 題組:0 難易度:中

- (A) 275. The two basic elements of the turbine section of a turbine engine are the
(A) rotor and stator. (B) bucket and expander. (C) impeller and diffuser.

原始題號:0014063 題組:0 難易度:中

- (B) 276. The purpose of the diffuser section in a turbine engine is to
(A) convert pressure to velocity. (B) increase pressure and reduce velocity. (C) reduce pressure and increase velocity.

原始題號:0014064 題組:0 難易度:中

- (C) 277. Which is the main advantage of an APU's centrifugal flow compressor?
(A) High-pressure rise per stage. (B) Low starting power requirements. (C) Shorter than an axial compressor.

原始題號:0014065 題組:0 難易度:易

- (C) 278. Dirty compressor blades may result in
(A) low RPM. (B) low EGT. (C) high EGT.

原始題號:0014066 題組:0 難易度:中

- (B) 279. If a turbine engine catches fire internally during the start cycle, what initial action should be taken?
(A) Secure all switches and leave the airplane. (B) Shut off the fuel and continue motoring the starter. (C) Discharge CO₂ into the inlet duct while continuing to motor the engine.

原始題號:0014067 題組:0 難易度:易

- (B) 280. What is the proper start sequence for a turbine engine?
(A) Ignition, starter, then fuel. (B) Starter, ignition, then fuel. (C) Starter, fuel, then ignition.

原始題號:0014068 題組:0 難易度:中

- (A) 281. While starting a turbine engine with an air starter, a hung start occurs before the starter disengages. Which procedure is correct?
(A) Shut down the engine. (B) Increase the air velocity to the starter. (C) Slowly increase the power lever until the engine accelerates to idle.

原始題號:0014069 題組:0 難易度:中

- (A) 282. What will happen if the oil filter on the engine becomes clogged?
(A) The oil screen bypass will open and unfiltered oil will go directly to the engine. (B) The oil pressure increase will cause the oil to bypass the primary filter and flow through the secondary filter. (C) The oil will bypass the filter and flow to the hopper tank where carbon sludge and dirt particles are then collected before flowing to the engine.

原始題號:0014070 題組:0 難易度:中

- (B) 283. What type of oxygen system is used for passengers?
(A) Demand. (B) Constant-flow. (C) Diluter-demand.

原始題號:0014071 題組:0 難易度:中

- (C) 284. Which type of oxygen system is the flight deck equipped with normally?
(A) Constant-flow. (B) Phase dilution. (C) Diluter-demand.

原始題號:0014072 題組:0 難易度:易

- (B) 285. Which temperature indicator, without applying a correction factor, predicates operation of in-flight engine anti-icing?
(A) Ram air temperature (RAT). (B) Total air temperature (TAT). (C) Outside air temperature (OAT).

原始題號:0014073 題組:0 難易度:中

- (C) 286. What is the most prevalent condition for engine icing?
(A) High-engine speed in flight. (B) Low-engine speed on the ground. (C) High-engine speed on the ground.

原始題號:0014074 題組:0 難易度:易

- (B) 287. When may rain repellent be applied to a windshield?
(A) Prior to entering rain. (B) After it starts raining. (C) Whenever the windshield is dirty.

原始題號:0014075 題組:0 難易度:中

- (C) 288. Which is a reason for heating cockpit windows?
(A) Deicing. (B) Prevent thermal shock. (C) Bird-impact protection.

原始題號:0014076 題組:0 難易度:易

- (C) 289. What should the deice/anti-ice fluid temperature be during the last step of a two-phase process?
(A) Hot. (B) Warm. (C) Cold.

原始題號:0014077 題組:0 難易度:易 (R20180823)

- (B) 290. What should the temperature be for deicing fluid dispensed by a ground unit during a one-phase process?
(A) Cold. (B) Heated. (C) Same as ambient.

原始題號:0014078 題組:0 難易度:中

- (A) 291. Which is an advantage of a one-step over a two-step process when deicing/anti-icing an airplane?
(A) It is quicker. (B) The holding time is minimized. (C) Less fluid is used with the one-step method when large deposits of ice and snow must be flushed off the airplane surfaces.

原始題號:0014079 題組:0 難易度:中

- (C) 292. Which is a disadvantage of the one-step over the two-step process when deicing/anti-icing an airplane?
(A) It is more complicated. (B) The holding time is increased. (C) More fluid is used with the one-step method when large deposits of ice and snow must be flushed off airplane surfaces.

原始題號:0014080 題組:0 難易度:易

- (C) 293. A turbojet aircraft is equipped with heated inlet ducts and airfoil leading edges. When is this type of anti-icing system usually activated during flight?
(A) It is operated continuously while in flight. (B) At all times when the OAT is below freezing. (C) Whenever icing conditions are first encountered or are expected to occur.

原始題號:0014081 題組:0 難易度:中

- (C) 294. Which statement is correct when applying liquid rain repellent?
(A) Begin application as soon as rain begins, to form a barrier between the rain and the windshield. (B) Apply rain repellent first, then activate the windshield wipers to spread the repellent. (C) The number of times the repellent is applied is determined by the intensity of the rain.

原始題號:0014082 題組:0 難易度:中

- (C) 295. What safeguard should be taken when using mobile ground deice/anti-ice equipment?
(A) Open the air-conditioning pack valves. (B) Operate the airplane engines above idle to prevent flameout. (C) Apply fluid to the lower door sills and the door bottoms prior to closing for flight.

原始題號:0014083 題組:0 難易度:易

- (C) 296. When the cabin pressure regulator is operating in the differential mode, reference pressure is vented to the atmosphere by the
(A) relief valve. (B) isobaric metering valve. (C) differential metering valve.

原始題號:0014084 題組:0 難易度:中

- (B) 297. In a pressurized system, what is the purpose of the dump valve?
(A) Relieve a negative pressure differential. (B) Relieve all positive pressure from the cabin. (C) Relieve any pressure in excess of maximum cabin differential.

原始題號:0014085 題組:0 難易度:中

- (B) 298. The cabin pressure control setting has a direct effect upon the
(A) compressor speed. (B) outflow valve opening. (C) pneumatic system pressure.

原始題號:0014086 題組:0 難易度:易

- (B) 299. Which component of an airplane pressurization system prevents the cabin altitude from becoming higher than the airplane altitude?
(A) Cabin rate of descent control. (B) Negative pressure relief valve. (C) Compression ratio limit switch.

原始題號:0014087 題組:0 難易度:易

- (B) 300. If the cabin rate of climb is too great, how should the pressurization controls be adjusted?
(A) Open the outflow valve slower. (B) Close the outflow valve faster. (C) Increase the amount of incoming air.

原始題號:0014088 題組:0 難易度:中

- (B) 301. How is cabin pressurization controlled?
(A) The pressure valve regulates the air output of the compressor. (B) The outflow valve dumps all air pressure in excess of the amount for which it is set. (C) The inflow valve limits the amount of air to the cabin when a pressure equivalent to cabin altitude has been reached.

原始題號:0014089 題組:0 難易度:易

- (A) 302. Which best describes cabin differential pressure?
(A) The difference between ambient and internal air pressure. (B) The difference between the cabin flight altitude pressure and MSL pressure. (C) The difference between the cabin pressure controller setting and the actual cabin pressure.

原始題號:0014090 題組:0 難易度:易

- (C) 303. Which component gives an indication of the rate of change in cabin altitude and what unit of measurement is used?
(A) Pressure controller, PSI. (B) Cabin vertical-velocity indicator, PSI.
(C) Cabin vertical-velocity indicator, feet per minute.

原始題號:0014091 題組:0 難易度:易

- (B) 304. Which section of a turbine engine provides air for the pressurization and air-conditioning systems?
(A) Intake. (B) Compressor. (C) Combustion.

原始題號:0014092 題組:0 難易度:中

- (A) 305. Which component of an air-cycle cooling system undergoes a pressure and temperature drop of air during operation?
(A) Expansion turbine. (B) Primary heat exchanger. (C) Refrigeration bypass valve.

原始題號:0014093 題組:0 難易度:中

- (C) 306. Which components make up the basic air-cycle cooling system?
(A) Heaters, coolers, and compressor. (B) Ram air source, compressors, and engine bleeds. (C) A source of compressed air, heat exchangers, and a turbine.

原始題號:0014094 題組:0 難易度:易

- (B) 307. The air-cycle cooling system produces cold air by
(A) passing heated air through a compressor. (B) passing air through an expansion turbine and extracting heat energy. (C) passing air through cooling coils that contain a volume of refrigerant.

原始題號:0014095 題組:0 難易度:中

- (B) 308. Which cabin air-conditioning system utilizes a refrigerant to carry away cabin heat?
(A) Air cycle (B) Vapor cycle. (C) Evaporative blower.

原始題號:0014096 題組:0 難易度:中

- (A) 309. Which control systems for operating cabin pressurization use reference chamber air pressure within the controller to regulate the outflow valve?
(A) Isobaric and differential. (B) Unpressurized and pressurized controls.
(C) Ambient, differential, and maximum differential.

原始題號:0014097 題組:0 難易度:中

- (B) 310. What type of electrolyte is contained in a lead-acid battery?
(A) Boric acid. (B) Sulfuric acid. (C) Potassium hydroxide.

原始題號:0014098 題組:0 難易度:中

- (B) 311. What are the characteristics of the electrolyte in a nickel-cadmium battery?
(A) Noncorrosive. (B) Much like household lye and will cause severe burns.
(C) Harmless compared to the electrolyte in a lead-acid battery.

原始題號:0014099 題組:0 難易度:中

- (C) 312. What will neutralize the electrolyte from a nickel-cadmium battery?
(A) Soap and water. (B) Bicarbonate of soda. (C) A solution of boric acid, vinegar, lemon juice, or some other mildly acid solution.

原始題號:0014100 題組:0 難易度:中

- (C) 313. What is the purpose of a fuse-type current limiter?
(A) Prevent overloads in low power circuits. (B) Fast blow design prevents damage to sensitive circuits or equipment. (C) Permit short periods of overload before the fuse link melts and breaks the circuit.

原始題號:0014101 題組:0 難易度:中

- (C) 314. What is a purpose of enclosing wires or electrical units in metal?
(A) Eliminates ground wires. (B) Prevents the buildup of static discharges.
(C) Eliminates interference with radio reception.

原始題號:0014102 題組:0 難易度:中

- (C) 315. What is residual voltage?
(A) Voltage produced that is not in phase with the current. (B) Voltage stored in the generator exciter output windings. (C) Voltage produced by permanent magnets which starts the ac generator output.

原始題號:0014103 題組:0 難易度:中

- (B) 316. What is the difference between a relay and a solenoid?
(A) Relays have movable cores. (B) Solenoids have movable cores. (C) Relays are used as mechanical control devices.

原始題號:0014104 題組:0 難易度:易

- (A) 317. What is the purpose of an electrical relay?
(A) Controls remote, high current equipment items with a small switch. (B) Prevents static buildup by connecting shock mounted equipment to ground.
(C) Engages starter gears, moves locking pins or other mechanical control devices.

原始題號:0014105 題組:0 難易度:中

- (C) 318. What is an advantage of using 115 volts, 400-Hz alternating current?
(A) The AC voltage may be changed easily by the use of rectifiers which reduces wire size and weight. (B) Inductive reactance at high frequency increases current and more efficient power transmission. (C) High-voltage AC motors are smaller and lighter than equivalent DC-powered motors.

原始題號:0014106 題組:0 難易度:中

- (B) 319. Why is it important that all electrical loads and power sources be turned off before connecting or disconnecting the battery?
(A) To prevent discharging the battery. (B) To prevent a spark from igniting explosive gas. (C) To prevent power surges from spiking sensitive equipment.

原始題號:0014107 題組:0 難易度:易

- (B) 320. What is the name for the visible discharge of static electricity from the airplane into the air?
(A) Corona threshold. (B) Saint Elmo's fire. (C) Precipitation static.

原始題號:0014108 題組:0 難易度:易

- (C) 321. If the airplane is equipped with a battery rated to deliver 45 amperes for 2.5 hours, what is the ampere-hour rating?
(A) 90.0 ampere-hour. (B) 18.0 ampere-hour. (C) 112.5 ampere-hour.

原始題號:0014109 題組:0 難易度:易

- (C) 322. Aircraft fuse capacities are rated in
(A) volts. (B) watts. (C) amperes.

原始題號:0014110 題組:0 難易度:易

- (A) 323. In aircraft electrical systems, automatic reset circuit breakers
(A) are not used as circuit protective devices. (B) are used in all circuits essential to safe operation of the aircraft. (C) are found in locations where only temporary overloads are encountered.

原始題號:0014111 題組:0 難易度:易

- (A) 324. What is an electrical relay?
(A) A magnetically operated switch. (B) A device used to increase, or step-up voltage. (C) A conductor which receives electrical energy and passes it on with little or no resistance.

原始題號:0014112 題組:0 難易度:易

- (B) 325. How are electrical generators rated?
(A) Watts at rated voltage. (B) Amperes at rated voltage. (C) Voltage at rated amperes.

原始題號:0014113 題組:0 難易度:易

- (B) 326. What unit of power is used in dc electrical circuits?
(A) Volts. (B) Watts. (C) Amperes.

原始題號:0014114 題組:0 難易度:中

- (B) 327. What is the function of the circuit breaker in the instrument lighting system?
(A) Protects the lights from too much current. (B) Protects the wiring from too much current. (C) Prevents excessive voltage from reaching the wiring.

原始題號:0014115 題組:0 難易度:中

- (A) 328. Which are protective functions of an ac generator control unit?
(A) Open phase, underexcitation, and overvoltage. (B) Undervoltage, differential fault, and manual paralleling. (C) Generator underspeed and bus-tie circuit-breaker automatic closing.

原始題號:0014116 題組:0 難易度:中

- (B) 329. Which is a feature of a parallel bus electrical system?
(A) External power may be paralleled with operating generators. (B) The electrical load is automatically redistributed when one generator fails. (C) Each generator supplies power separately from the other generators to its respective bus.

原始題號:0014117 題組:0 難易度:易

- (A) 330. Which is a purpose of a transformer rectifier?
(A) Converts 115 volts ac, 400-Hz to 28 volts dc. (B) Changes dc to alternating 26 volts or 115 volts, 400-Hz power. (C) Operates emergency flight instruments and radios from the airplane battery.

原始題號:0014118 題組:0 難易度:易

- (C) 331. What is the approximate nominal voltage rating of a fully charged nickel-cadmium battery containing twenty cells?
(A) 12 volts. (B) 20 volts. (C) 25 volts.

原始題號:0014119 題組:0 難易度:中

- (B) 332. Why is it necessary to periodically completely discharge and recharge a nickel-cadmium battery?
(A) To restore electrolyte levels. (B) To eliminate cell imbalance and loss of capacity. (C) To dissolve nickel oxide formations on positive cells to restore capacity.

原始題號:0014120 題組:0 難易度:中

- (C) 333. What causes cell imbalance in a nickel-cadmium battery?
(A) Low temperatures. (B) Deep rapid discharges. (C) Constant-potential (voltage charging).

原始題號:0014121 題組:0 難易度:中

- (C) 334. The purpose of a constant speed drive for an ac generator is to
(A) control field strength. (B) regulate generator voltage. (C) maintain a uniform frequency.

原始題號:0014122 題組:0 難易度:易

- (B) 335. What speed does a frequency meter give a direct indication of?
(A) Engine N(2). (B) Generator RPM. (C) CSD input speed.

原始題號:0014123 題組:0 難易度:易

- (C) 336. How are airplane ac generators rated?
(A) Volts. (B) Kilowatts (KW). (C) Kilovolt-amps (KVA).

原始題號:0014124 題組:0 難易度:中

- (B) 337. What is a purpose of a rotary inverter?
(A) Change 115 volts ac to 28 volts dc. (B) Convert dc to 115 volts, 400-Hz power.
(C) Transform 26/29 volts dc to 115/200 volts dc.

原始題號:0014125 題組:0 難易度:易

- (C) 338. The purpose of a reverse-current relay is to
(A) prevent one generator from driving another generator. (B) increase or decrease the voltage of a generator so it carries its share. (C) disconnect the generator from the main bus when generator voltage drops below battery voltage.

原始題號:0014126 題組:0 難易度:易

- (B) 339. What is the nominal voltage rating of a fully charged lead-acid battery containing six cells?
(A) 6 volts. (B) 12 volts. (C) 24 volts.

原始題號:0014127 題組:0 難易度:易

- (A) 340. The purpose of fusible plugs in the wheel is to prevent
(A) tire blowout. (B) overservicing the tire. (C) damage to the tire resulting from heat expansion.

原始題號:0014128 題組:0 難易度:易

- (B) 341. What tread wear will occur if tires are under-inflated?
(A) Uniform wear at a fast rate. (B) Tread worn away more on the shoulders than in the center. (C) Accelerated centerline wear while leaving rubber on the shoulder.

原始題號:0014129 題組:0 難易度:易

- (C) 342. What tread wear will occur if tires are over-inflated?
(A) Uniform wear at a slow rate. (B) Tread worn away more on the shoulders than in the center. (C) Accelerated centerline wear while leaving rubber on the shoulder.

原始題號:0014130 題組:0 難易度:中

- (C) 343. Where should the chines be located for a dual nosewheel installation?
(A) One on each side of the tires. (B) On the inside of the tires only. (C) On the outside of the tires only.

原始題號:0014131 題組:0 難易度:中

- (C) 344. The purpose of chines on tires is to
(A) increase traction on snow or ice covered runways. (B) reduce the tendency to hydroplane on wet runways. (C) deflect water or slush away from the engine intakes.

原始題號:0014132 題組:0 難易度:易

- (C) 345. Which of the following are considered primary flight controls?
(A) Tabs. (B) Flaps. (C) Outboard ailerons.

原始題號:0014133 題組:0 難易度:易

(B) 346. Which of the following is considered a secondary flight control?

(A)Rudder. (B)Servo tab. (C)Inboard aileron.

原始題號:0014134 題組:0 難易度:易

(C) 347. Which direction from the primary control surface does an elevator adjustable trim tab move when the control surface is moved?

(A)Same direction. (B) Opposite direction. (C)Remains fixed for all positions.

原始題號:0014135 題組:0 難易度:易

(A) 348. What direction should the ailerons move when the control wheel is moved?

(A)Left aileron down when the control wheel is moved right. (B) Right aileron up when the control wheel is moved left. (C)Left aileron down when the control wheel is moved left.

原始題號:0014136 題組:0 難易度:易

(A) 349. A purpose of leading edge flaps is to

(A) increase the camber of the wing. (B) reduce lift without increasing airspeed. (C) direct airflow over the top of the wing at high angles of attack.

原始題號:0014137 題組:0 難易度:易

(B) 350. A purpose of flight spoilers is to

(A) increase the camber of the wing. (B)reduce lift without increasing airspeed. (C) direct airflow over the top of the wing at high angles of attack.

原始題號:0014138 題組:0 難易度:易

(A) 351. A purpose of ground spoilers is to

(A)reduce the wing's lift upon landing. (B) aid in rolling an airplane into a turn. (C)increase the rate of descent without gaining airspeed.

原始題號:0014139 題組:0 難易度:中

(A) 352. A purpose of wing mounted vortex generators is to

(A)prevent shock induced separation of air from the wing. (B)increase the onset of drag divergence and aid in aileron effectiveness at high speed. (C) break the airflow over the wing so the stall will progress from the root out to the tip of the wing.

原始題號:0014140 題組:0 難易度:中

(A) 353. What is a disadvantage of wing mounted vortex generators?

(A)Drag is increased slightly at slow airspeeds. (B)Parasite drag increases significantly at high airspeeds. (C)Shock induced flow separation from vortex generators increases control surface buffet.

原始題號:0014141 題組:0 難易度:中

- (A) 354. What is a disadvantage of a stabilizer and elevator located at the top of the vertical fin?
(A) Heavier structure. (B) Undesirable spin characteristics. (C) Less effective fin and rudder due to the end plate action of the stabilizer location.

原始題號:0014142 題組:0 難易度:易

- (C) 355. An advantage of a stabilizer and elevator located at the top of the vertical fin is that
(A) the structural weight is decreased. (B) the cruise speed is more fuel efficient. (C) the horizontal tail is above the wing turbulence.

原始題號:0014143 題組:0 難易度:易

- (B) 356. What action should be taken if a hydraulic stationary connection has a static leak?
(A) Reduce the accumulator pressure. (B) Notify maintenance to repair it.
(C) Pressurize the system and perform an operational check.

原始題號:0014144 題組:0 難易度:中

- (B) 357. An advantage of Skydrol is that it
(A) is resistant to water contamination. (B) has a wide operating temperature range. (C) is compatible with vegetable-base hydraulic fluid.

原始題號:0014145 題組:0 難易度:中

- (C) 358. A disadvantage of Skydrol is that
(A) it is incompatible with synthetic-base fluid. (B) sustained operations below -40°C should be avoided. (C) it will break down the insulation on some electrical wiring.

原始題號:0014146 題組:0 難易度:中

- (A) 359. The purpose of a bypass valve in the hydraulic filter is to
(A) bypass a clogged element. (B) maintain the desired temperature and viscosity by controlling the amount of fluid through the unit. (C) ensure adequate flow when the engines are started until the fluid is warmed sufficiently to flow freely.

原始題號:0014147 題組:0 難易度:易

- (C) 360. What action should be taken in case of eye contact with any hydraulic fluid?
(A) Apply an aesthetic eye dressing. (B) Flush thoroughly with soap and water.
(C) Flush with water and consult a doctor.

原始題號:0014148 題組:0 難易度:易

- (B) 361. What should be used to remove Skydrol from your skin?
(A) Solvent. (B) Soap and water. (C) Trichlorethylene.

原始題號:0014149 題組:0 難易度:中

- (A) 362. The purpose of a hydraulic accumulator is to
(A)store hydraulic fluid under pressure. (B)collect hydraulic fluid from system leaks. (C) gather foam and extract the air before returning it to the reservoir.

原始題號:0014150 題組:0 難易度:易

- (A) 363. What type of gas may be used to service hydraulic accumulators?
(A)Nitrogen. (B)Dry oxygen. (C)Carbon dioxide.

原始題號:0014151 題組:0 難易度:易

- (C) 364. Which principle operates a hydraulic fuse?
(A)Heat. (B) Electrical. (C)Differential pressure.

原始題號:0014152 題組:0 難易度:易

- (B) 365. The purpose of pressurizing a hydraulic reservoir is to
(A)provide an alternate source of pressure in case of a hydraulic pump failure.
(B)assure a positive feed of foam free fluid to the hydraulic pump at high altitudes. (C) insure an adequate supply of fluid to the hydraulic pump inlet during negative-G flight.

原始題號:0014153 題組:0 難易度:易

- (C) 366. Why should hydraulic fluid be filtered?
(A)Water in the fluid could freeze. (B) It assures a positive feed of foam free fluid to the hydraulic pump inlet. (C)Contaminants may damage the seals and cylinder walls causing internal leakage.

原始題號:0014154 題組:0 難易度:中

- (A) 367. An advantage of a piston-type accumulator is that it
(A)takes up less area than a sphere-type accumulator. (B) may be used with higher pressure than a bladder-type accumulator. (C)can store more hydraulic fluid than a diaphragm-type accumulator.

原始題號:0014155 題組:0 難易度:中

- (C) 368. What is the difference between a hydraulic sequence valve and a priority valve?
(A) Sequence valves are electrically actuated. (B) Mechanical contact opens a priority valve. (C)Priority valves are opened by hydraulic pressure.

原始題號:0014156 題組:0 難易度:中

- (A) 369. Which principle operates a hydraulic fuse?
(A)Quantity of flow. (B)Thermal increase. (C)Pressure increase.

原始題號:0014157 題組:0 難易度:中

- (B) 370. One purpose of a hydraulic accumulator is to
(A) compress hydraulic fluid. (B)absorb sudden pressure surges. (C) store hydraulic fluid from small system leaks.

原始題號:0014158 題組:0 難易度:中

(C) 371. Which hydraulic operation normally uses a double-acting, balanced linear actuator?

(A) Brakes. (B) Landing gear. (C) Automatic pilot servo.

原始題號:0014159 題組:0 難易度:中

(C) 372. Why should synthetic hydraulic fluid be stored in an airtight container?

(A) High evaporation rate. (B) Vapor is extremely toxic. (C) Atmospheric moisture contamination.

原始題號:0014160 題組:0 難易度:中

(B) 373. How may pressure from an engine-driven hydraulic pump be regulated?

(A) Constant speed drive. (B) Variable-displacement pump. (C) In-line variable restrictor orifice.

原始題號:0014161 題組:0 難易度:中

(B) 374. The purpose of the antiskid system control box is to

(A) sense wheel speed change. (B) prevent landing with the brakes applied. (C) meter the brake pressure to prevent stoppage of wheel rotation.

原始題號:0014162 題組:0 難易度:中

(A) 375. Pressure from an engine-driven hydraulic pump may be regulated by a

(A) system bypass valve. (B) constant speed drive. (C) in-line variable restrictor orifice.

原始題號:0014163 題組:0 難易度:易

(A) 376. Moisture in a pneumatic system may cause

(A) corrosion. (B) a variety of sounds including banging, squealing and chattering. (C) return lines to freeze when the pressure of the air drops during actuation.

原始題號:0014164 題組:0 難易度:易

(A) 377. What type of gas is normally used to service the air-storage bottles of an emergency pneumatic system?

(A) Nitrogen. (B) Dry oxygen. (C) Carbon dioxide.

原始題號:0014165 題組:0 難易度:易

(C) 378. What safety device is actuated by the compression and extension of a landing gear strut?

(A) Uplock switch. (B) Downlock switch. (C) Ground safety switch.

原始題號:0014166 題組:0 難易度:易

(A) 379. The purpose of fusible plugs in aircraft wheels is to

(A) prevent tire blowouts. (B) quickly deflate tires for repair. (C) protect the antiskid electrical system.

原始題號:0014167 題組:0 難易度:中

- (B) 380. One of the main gear tires has deflated as a result of a thermal fuse melt. What does this mean?
- (A) Heavy braking has overheated the wheel, melted a plastic fuse in the rim, and prevented the danger of a tire blowout. (B) High tire temperatures have melted a fusible metal plug installed in the aircraft wheel and caused the tire to deflate. (C) High temperatures in the wheel well have caused the tire's temperature sensitive valve core to melt, deflated the tire, and prevented damage to the wing.