

(A14) PPL飛機飛航原理

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- (C) 1. 下列何者為主要飛操系？
(A)調整片 (B)襟翼 (C)外側副翼

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- (C) 2. 下列何者為次要飛操系？
(A)方向/升降舵 (B)上方向舵 (C)前緣襟翼

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- (C) 3. 內側副翼通常用於？
(A)低速飛行 (B)高速飛行 (C)低速及高速飛行

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- (A) 4. 外側副翼通常用於？
(A)低速飛行 (B)高速飛行 (C)低速及高速飛行

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- (B) 5. 為何安裝內/外側副翼之飛機，只在低速時使用外側副翼？
(A)增加的翼面積配合襟翼伸放，提供較佳的操控性 (B)高速時，作用於外側副翼的氣動力負荷促使翼尖扭曲 (C)高速時鎖住外側副翼，提供可變的操控感

原始題號:0011092 題組:0 難易度:中

- (A) 6. 控制調整片的目的是？
(A)恢復手控時，可打動飛操系 (B)藉著偏轉適當的角度打動主飛操系，以減少控制翼面上的氣動力 (C)因氣動力之故，防止控制翼面移至全行程偏轉位置

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- (C) 7. 打動控制翼面(例如:升降舵)時，(升降舵)調整片會朝那個方向移動？
(A)和控制翼面同方向 (B)反方向 (C)對控制翼面所有位置皆保持固定

原始題號:0011094 題組:0 難易度:易

- (B) 8. 打動伺服調整片後，主要控制翼面會朝那個方向移動？
(A)同方向 (B)反方向 (C)對所有位置皆保持固定

原始題號:0011095 題組:0 難易度:中

- (B) 9. (控制翼面) 伺服調整片的目的是？
(A)自動操控飛行時，用以打動飛操系 (B)藉著偏轉適當的角度打動主飛操系，以減少飛行員的操作施力 (C)因氣動力之故，防止控制翼面移至全行程偏轉位置

原始題號:0011096 題組:0 難易度:易

- (A) 10. 翼前緣襟翼的目的是？
(A)增加翼曲面彎度 (B)減升力而不加速 (C)高攻角時，導引氣流通過翼上緣

原始題號:0011097 題組:0 難易度:易

- (A) 11. 著陸前的仰轉階段中，落地外形之翼前緣襟翼主要功能是？
(A)防止氣流分離 (B)減低下降率 (C)增加翼形阻力

原始題號:0011098 題組:0 難易度:中

(B) 12. 翼前緣翼縫在性能上的效應是 ?

(A)減少翼形阻力 (B)增加失速攻角 (C)減低上翼面邊界層氣流速度

原始題號:0011099 題組:0 難易度:中

(A) 13. 高性能機翼之前緣縫翼的目的是 ?

(A)低速時增加升力 (B)低攻角時, 改善副翼操作 (C)導引翼前緣下方的低壓氣流通過翼上緣

原始題號:0011100 題組:0 難易度:易

(C) 14. 如攻角及其它因素保持恆定而速度加倍, 則空速與升力之比值為 ? 升力

(A)相同 (B)增加為2倍 (C)增加為4倍

原始題號:0011101 題組:0 難易度:中

(B) 15. 高度上升時為保持相同升力, 應如何改變真空速及攻角 ?

(A)相同真空速及攻角 (B)對任何已知攻角, 使用較高的真空速 (C)較低的真空速及較高的攻角

原始題號:0011102 題組:0 難易度:易

(B) 16. 飛機於地面效應中, 如何產生與無地面效應相同的升力 ?

(A)相同攻角 (B)較低的攻角 (C)較高的攻角

原始題號:0011103 題組:0 難易度:易

(A) 17. 平飛時, 如空速低於最大升/阻比速度, 則對飛機總阻力的效應是 ?

(A)增加, 因誘導阻力增加 (B)增加, 因寄生阻力增加 (C)減少, 因誘導阻力較小

原始題號:0011104 題組:0 難易度:易

(A) 18. 當飛機脫離地面效應時, 預期會有何狀況產生 ?

(A)誘導阻力增加, 需要較高的攻角 (B)寄生阻力減少, 容許較低的攻角 (C)增加動態安定性

原始題號:0011105 題組:0 難易度:中

(B) 19. 飛機總重增加時, 誘導阻力與寄生阻力之間的關係為 ?

(A)寄生阻力比誘導阻力增加更大 (B)誘導阻力比寄生阻力增加更大 (C)誘導阻力與寄生阻力增加量相同

原始題號:0011106 題組:0 難易度:易

(A) 20. 安裝於機翼上的渦流產生器的目的是 ?

(A)減少超音速氣流通過翼面時所產生的阻力 (B)增加阻力及高速時具有輔助副翼效果 (C)使翼面上的空氣分流, 因此失速由翼根向翼尖延伸

原始題號:0011107 題組:0 難易度:中

(A) 21. 影響失速速度的因素是 ?

(A)重量, 負荷因數及動力 (B)負荷因數, 攻角及動力 (C)攻角, 重量及空氣密度

原始題號:0011108 題組:0 難易度:易

(A) 22. 亂流如何造成失速速度增加 ?

(A)相對風突然改變 (B)攻角降低 (C)負荷因數突然減小

原始題號:0011109 題組:0 難易度:中

(C) 23. 翼面氣流分離可藉由渦流產生器之何種特性，使其延緩發生？

- (A)引導高壓氣流通過上翼面或襟翼翼縫，而使機翼表面平滑 (B)引導上翼面或襟翼翼縫產生吸力，而使機翼表面平滑 (C)使翼面粗糙，且/或引導高壓氣流通過上翼面或襟翼翼縫

原始題號:0011110 題組:0 難易度:易

(C) 24. 何謂負荷因數？

- (A)升力乘以總重 (B)升力減總重 (C)升力除以總重

原始題號:0011111 題組:0 難易度:易

(B) 25. 於穩定氣流中作協調轉彎時，機翼負荷與何因素有關？

- (A)轉彎率 (B)坡度 (C)真空速

原始題號:0011112 題組:0 難易度:中

(C) 26. 平飛轉彎對總升力及負荷因數造成的結果為？

- (A)升力保持恆定且負荷因數增加 (B)升力增加且負荷因數減少 (C)總升力及負荷因數增加

原始題號:0011113 題組:0 難易度:易

(B) 27. 在何種速度下，增加上仰姿態會促使飛機爬升？

- (A)低速 (B)高速 (C)任何速度

原始題號:0011114 題組:0 難易度:中

(A) 28. 相對於最大升/阻比速度，噴射機之最大爬升率速度為？

- (A)大於最大升/阻比速度 (B)等於最大升/阻比速度 (C)小於最大升/阻比速度

原始題號:0011115 題組:0 難易度:中

(C) 29. 保持固定坡度及高度作協調轉彎時，增加空速有何影響？

- (A)轉彎率降低，導致負荷因數減小 (B)轉彎率增加，導致負荷因數增加 (C)轉彎率降低，負荷因數不變

原始題號:0011116 題組:0 難易度:易

(C) 30. 當坡度增加而駕駛員未採取改正動作時，則升力之垂直分量及下沉率會有何影響？

- (A)升力增加且下沉率增加 (B)升力減少且下沉率減少 (C)升力減少且下沉率增加

原始題號:0011117 題組:0 難易度:易

(A) 31. 以固定坡度加速，轉彎率與轉彎半徑之間的關係為何？

- (A)轉彎率減少且轉彎半徑增加 (B)轉彎率增加且轉彎半徑減少 (C)轉彎率及轉彎半徑增加

原始題號:0011118 題組:0 難易度:易

(B) 32. 駕駛員如何能在增加轉彎率的同時又減少轉彎半徑？

- (A)增加坡度及空速 (B)增加坡度及減速 (C)減少坡度及加速

原始題號:0011119 題組:0 難易度:中

(A) 33. 飛機載重置於重心後限有何特性？

- (A)失速速度最低，巡航速度最高，安定性最低 (B)失速速度最高，巡航速度最高，安定性最低 (C)失速速度最低，巡航速度最低，安定性最高

原始題號:0011120 題組:0 難易度:中

- (A) 34. 與溫度，風及飛機重量等有關的條件相比，著陸於高高度之機場對地速有何影響？
(A)高於低高度機場 (B)低於低高度機場 (C)兩者相同

原始題號:0011121 題組:0 難易度:易

- (A) 35. 於落地滾行階段，何種情況可使主輪煞車達到最大效益？
(A)翼面升力減少 (B)高的地速 (C)輪子鎖死且側滑

原始題號:0011122 題組:0 難易度:中

- (A) 36. 向上的跑道坡度對於起飛性能有何影響？
(A)增加起飛距離 (B)降低起飛速度 (C)縮短起飛距離

原始題號:0011123 題組:0 難易度:易

- (C) 37. 何種情況會縮短起飛所需跑道長度？
(A)高於建議的空速仰轉 (B)低於標準大氣密度 (C)增加頂風分量

原始題號:0011124 題組:0 難易度:中

- (A) 38. 就一已知跑道而言，當飛機總重增加時，那項性能因數會減小？
(A)臨界發動機失效速度 (B)仰轉速度 (C)加速-剎停距離

原始題號:0011125 題組:0 難易度:易

- (C) 39. 當遭遇順風時，駕駛員應如何操作以保持最大航程之飛機性能？
(A)加速 (B)保持速度 (C)減速

原始題號:0011126 題組:0 難易度:中

- (C) 40. 當重量減輕時，那項最大航程因數會減小？
(A)攻角 (B)高度 (C)空速

原始題號:0011127 題組:0 難易度:中

- (A) 41. 就巡航飛行中的某一航段而言，何種程序可獲得最省油？
(A)頂風時加速 (B)順風時加速 (C)頂風時爬高，順風時下降高度

原始題號:0011128 題組:0 難易度:中

- (C) 42. 相對於最大升/阻比速度，噴射機的最大航程速度為？
(A)小於最大升/阻比速度 (B)等於最大升/阻比速度 (C)大於最大升/阻比速度

原始題號:0011129 題組:0 難易度:易

- (B) 43. 當飛機重量減輕時，渦輪噴射飛機的最大航程性能是藉由那項程序獲得？
(A)加速或爬高 (B)爬高或減速 (C)加速或下降高度

原始題號:0011130 題組:0 難易度:中

- (A) 44. 就一輕型雙發動機飛機的駕駛員而言，在臨界發動機失效之最低操作速度(VMC)條件下，可保持那項性能？
(A)航向 (B)航向及高度 (C)航向，高度及50呎/秒爬升率

原始題號:0011131 題組:0 難易度:中

- (A) 45. 於何種情況下，臨界發動機失效之最低操作速度(VMC)為最大？
(A)最大許可總重 (B)重心在許可的最後端位置上 (C)重心在許可的最前端位置上

原始題號:0011132 題組:0 難易度:中

- (A) 46. 何種情況會對減低臨界發動機失效速度(VI)有影響？
(A)跑道上的雪泥或防側滑系統失效 (B)輕重量 (C)密度高的高度

原始題號:0011133 題組:0 難易度:易

- (C) 47. 就一輕型雙發動機的飛機而言，最安全且最有效之起飛及初期爬升程序為？
(A)於地面上時，以發動機失效之最佳爬升率速度離地及爬升 (B)以臨界發動機失效之最低操作速度(VMC)離地，並以最大爬升角速度爬升 (C)以略高於臨界發動機失效之最低操作速度(VMC)離地，並以最大爬升率速度爬升

原始題號:0011134 題組:0 難易度:中

- (A) 48. 單發動機失效時之進場及落地的建議程序為？
(A)大致與正常進場及落地之航路及程序相同 (B)比正常進場之高度及空速為高 (C)除通過跑道頭前不可伸放起落架及襟翼外，其餘與正常進場相同

原始題號:0011135 題組:0 難易度:易

- (A) 49. 外界溫度高，對渦輪發動機輸出推力影響為何？
(A)由於空氣密度減小，故推力下降 (B)維持相同推力，但渦輪溫度升高 (C)因為吸取高溫空氣之熱能，故推力較大

原始題號:0011136 題組:0 難易度:易

- (C) 50. 當外界壓力降低時，輸出推力
(A)增加，因噴射機於稀薄空氣中效率較佳 (B)維持不變，因受壓縮之進氣道空氣將補償降低的大氣壓力 (C)降低，因高密度高度之故

原始題號:0011137 題組:0 難易度:易

- (B) 51. 使用渦輪噴射或渦輪螺旋槳發動機之最重要的限制為
(A)限制壓縮器轉速 (B)限制排氣溫度 (C)限制扭力

原始題號:0011138 題組:0 難易度:中

- (B) 52. 渦輪螺旋槳發動機之最小燃油消耗比，通常適用的高度範圍是？
(A)10,000呎至25,000呎 (B)25,000呎至對流層頂 (C)對流層頂至45,000呎

原始題號:0011139 題組:0 難易度:中

- (A) 53. 如發生壓縮器失速時，適當之改正處置為？
(A)減少燃油流量，降低攻角及加速 (B)推油門，降低攻角及減速 (C)收油門，減速及增加攻角

原始題號:0011140 題組:0 難易度:易

- (A) 54. 次音速飛行之馬赫數範圍發生於？
(A)低於.75馬赫 (B)介於.75至1.2馬赫之間 (C)介於1.2至2.5馬赫之間

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- (B) 55. 穿音速飛行區之馬赫數範圍是介於
(A).5至.75馬赫之間 (B)介於.75至1.2馬赫之間 (C)介於1.2至2.5馬赫之間

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- (B) 56. 翼面未產生超音速氣流前的最大速度為？
(A)初始顫震速度 (B)臨界馬赫數 (C)穿音速指數

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- (B) 57. 後掠翼飛機於翼根對稱處，因為震波誘導所產生之氣流分離的結果是？
(A)高速失速且突然上仰 (B)嚴重力矩或下俯 (C)嚴重前後振動(海豚跳)

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(B) 58. 後掠翼飛機於翼尖對稱處，因為失速所產生之氣流分離的結果，會使機翼的壓力中心向何方移動？

(A)向內且向後 (B)向內且向前 (C)向外且向前

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(A) 59. 後掠翼設計優於平直翼設計，主要是因為？

(A)臨界馬赫數明顯的增加 (B)因為空氣壓縮性之故，後掠翼增加力量係數變化量 (C)後掠翼加速壓縮性效應的發生

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(B) 60. 後掠翼設計之缺點是？

(A)翼根比翼尖先失速 (B)翼尖比翼根先失速 (C)壓力中心前移時，造成嚴重之下俯力距

原始題號:0011147 題組:0 難易度:中

(C) 61. 當陣風使後掠翼飛機機翼一邊滾轉而機頭往另一邊偏航之情況，稱為？

(A)前後振動(海豚跳) (B)翼反轉 (C)荷蘭滾(飄擺)

原始題號:0011148 題組:0 難易度:中

(B) 62. 黏性水漂之定義

(A)飛機滾行於積水上 (B)跑道油漆過部份覆蓋一層潮濕之水份或輪胎屑 (C)飛機滾行於混合水蒸氣與融化之輪胎上

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(B) 63. 當飛機著陸於光滑且潮濕的跑道上時，黏性水漂與動力水漂之速度比為？

(A)約為動力水漂速度的 2 倍 (B)比動力水漂速度低 (C)與動力水漂速度相同

原始題號:0011150 題組:0 難易度:中

(B) 64. 主輪胎壓為121磅/平方英吋，滾行中可能發生動力水漂之最低速度為？

(A)90哩 (B)96哩 (C)110哩

原始題號:0011151 題組:0 難易度:中

(C) 65. 落地時如發生水漂現象，則減速之最佳方法為？

(A)只能使用全(最大)主輪煞車 (B)瞬間交互使用鼻輪及主輪煞車 (C)使用氣動力煞車達最大效益

原始題號:0011152 題組:0 難易度:易

(C) 66. 落地時如高於建議之著陸速度，對水漂現象有何影響？

(A)對水漂無影響，但增加落地滾行距離 (B)如使用較大煞車可降低水漂可能性 (C)增加水漂可能性而與煞車無關

原始題號:0011153 題組:0 難易度:易

(C) 67. 冰，雪或霜的形成，對飛機有何影響？

(A)降低失速速度 (B)減少上仰傾向 (C)降低失速攻角

原始題號:0011154 題組:0 難易度:中

(B) 68. 飛機以固定推力及俯仰姿態於航路下降過程中，動靜壓系之衝壓口及排水孔完全被冰堵住，預期空速會如何改變？

(A)指示空速增加 (B)指示空速減少 (C)指示空速與結冰前相同

原始題號:0011155 題組:0 難易度:中

- (A) 69. 如空速管之衝壓口被冰堵住，但排水孔及靜壓口未結冰，空速表將有何反應？
(A)指示空速降至零 (B)指示空速上升至頂點 (C)指示空速保持恆定，但爬升時將增加

原始題號:0011156 題組:0 難易度:易

- (C) 70. 當頂風轉為靜風時，駕駛員應瞭解駕駛艙內會有那些初期指示？
(A)指示空速下降，飛機上仰，且高度下降 (B)指示空速增加，飛機下俯，且高度上升
(C)指示空速下降，飛機下俯，且高度下降

原始題號:0011157 題組:0 難易度:易

- (C) 71. 當恆定順風轉為靜風時，駕駛員應瞭解駕駛艙內會有那些初期指示？
(A)高度上升，俯仰姿態及指示空速降低 (B)高度，俯仰姿態及指示空速降低 (C)高度，俯仰姿態及指示空速增加

原始題號:0011158 題組:0 難易度:易

- (A) 72. 起飛階段中遭遇增強之順風風切，會察覺到那些飛機性能特性？
(A)空速性能損失或減少 (B)縮短起飛距離 (C)起飛後立刻增加爬升性能

原始題號:0011159 題組:0 難易度:中

- (B) 73. 與中度頂風時進場相較，當航行於下滑道下降時由於頂風減弱，可能之風切指示為何？
(A)需要較少之動力 (B)需要較高之仰角 (C)需要較小之下降率

原始題號:0011160 題組:0 難易度:中

- (C) 74. 為改正因風切所造成之空速及升力的損失，建議之操作技術為？
(A)降低俯仰姿態，恢復損失之空速 (B)避免飛機應力過度，調整俯仰姿態保持空速，使用最大動力 (C)使用最大動力，保持或增加俯仰姿態，並許可低於正常空速之指示

原始題號:0011161 題組:0 難易度:中

- (B) 75. 如遭遇強烈亂流，建議之程序為？
(A)保持固定高度 (B)保持固定俯仰姿態 (C)保持定速及高度

原始題號:0011162 題組:0 難易度:中

- (A) 76. 大型噴射機於何種情況下會產生最強之翼尖渦流，而造成最嚴重的飛安？
(A)重型，低速，起落架及襟翼收起 (B)重型，低速，起落架及襟翼放下 (C)重型，高速，起落架及襟翼放下

原始題號:0011163 題組:0 難易度:中

- (A) 77. 輕微側風對剛起飛之大型飛機所產生之翼尖渦流有何影響？
(A)上風邊之渦流停留在跑道上的時間比下風邊者長 (B)側風將迅速消散兩邊之渦流強度 (C)下風邊之渦流停留在跑道上的時間比上風邊者長

原始題號:0011164 題組:0 難易度:中

- (B) 78. 如果於剛落地之重型噴射機之後起飛，應計劃於何處離地？
(A)於噴射機著陸點前 (B)於噴射機著陸點後 (C)於噴射機著陸點，並在跑道上風邊

原始題號:0011165 題組:0 難易度:易

- (C) 79. 下列何者為飛操系統中的基本控制面？
(A)調整片 (B)襟翼 (C)外側副翼

原始題號:0011166 題組:0 難易度:易

(B) 80. 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:0011167 題組:0 難易度:易

(A) 81. 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:0011168 題組:0 難易度:易

(A) 82. 起飛時尾風增加之風切, 會如何影響航機性能?

(A)空速減少 (B)減少起飛距離 (C)增加爬升性能

原始題號:0011169 題組:0 難易度:易

(B) 83. 飛行擾流板的作用為何?

(A)增加機翼曲度 (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:0011170 題組:0 難易度:易

(A) 84. 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:0011171 題組:0 難易度:中

(A) 85. 將水平尾翼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:0011172 題組:0 難易度:易

(C) 86. 將水平尾翼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:0011173 題組:0 難易度:易

(B) 87. 雙引擎飛機單發失效時性能損失為何?

(A)巡航空速減少50% (B)爬升性能至少減少50% (C)所有性能減少50%

原始題號:0011174 題組:0 難易度:易

(A) 88. 高海拔機場落地時航機的地速有何特性?

(A)較平地為高 (B)較平地為低 (C)與平地相同

原始題號:0011175 題組:0 難易度:易

(C) 89. 如何減少起飛距離?

(A)晚帶桿 (B)稀薄的空氣 (C)頂風增加

原始題號:0011176 題組:0 難易度:易

(C) 90. 何種情況會造成空速及仰角增加, 及下沉率減少?

(A)頂風突然減少 (B)尾風突然增加 (C)頂風突然增加

原始題號:0011177 題組:0 難易度:中

- (C) 91. 遭遇風切空速及昇力減少時飛行員應做何處置？
(A)減低仰角重新獲得空速 (B)避免航機應力過度, 使用最大馬力, 以姿態控制空速 (C)保持或增加仰角, 允許比正常較低的空速指示

原始題號:0011178 題組:0 難易度:易

- (A) 92. 起飛時尾風增加之風切, 會如何影響航機性能？
(A)空速減少 (B)減少起飛距離 (C)增加爬昇性能

原始題號:0011179 題組:0 難易度:易

- (B) 93. 航機在下滑道上下降, 油門正保持空速, 何種儀表顯示可代表遭遇尾風轉頂風之風切？
(A)姿態: 增加 下降率: 增加 空速: 減少後增加 (B)姿態: 增加 下降率: 減少 空速: 增加 (C)姿態: 減少 下降率: 減少 空速: 減少後增加

原始題號:0011180 題組:0 難易度:中

- (C) 94. 積冰, 積雪及積霜會造成航機性能如何？
(A)失速速度降低 (B)仰角有降低傾向 (C)失速攻角減少

原始題號:0011181 題組:0 難易度:中

- (A) 95. 何種力對螺旋槳產生最大的應力？
(A)離心力 (B)扭力撓曲 (C)氣動力扭曲

原始題號:0011182 題組:0 難易度:易

- (C) 96. 何種飛行狀態會使螺旋槳槳葉保持最大的角度？
(A)初始爬升階段 (B)進場落地 (C)高空高速巡航

原始題號:0011183 題組:0 難易度:易

- (B) 97. 何種速度條件下, 增加仰角能使航機爬升？
(A)低速 (B)高速 (C)任何速度

原始題號:0011184 題組:0 難易度:易

- (B) 98. 航機重量增加時, 寄生阻力與誘導阻力如何變化？
(A)寄生阻力增加較多 (B)誘導阻力增加較多 (C)寄生阻力與誘導阻力皆大約等量增加

原始題號:0011185 題組:0 難易度:易

- (C) 99. 在平飛時保持固定坡度及coordinated turn, Load factor如何變化？
(A)與航機重量成正比 (B)與轉彎率成正比 (C)保持固定

原始題號:0011186 題組:0 難易度:易

- (B) 100. 高升力裝置的基本目的為何？
(A)增加L/D(MAX) (B)低速時增加升力 (C)增加阻力和減速.

原始題號:0011187 題組:0 難易度:中

- (B) 101. 航機攻角改變時, 哪些飛航條件會同時改變？
(A)升力, 重量和阻力 (B)升力, 空速和阻力 (C)升力, 空速, 但不影響阻力.

原始題號:0011188 題組:0 難易度:易

- (B) 102. 航機進入地面效應時, 為獲得相同的升力, 攻角如何變化？
(A)不變 (B)減少 (C)增加

原始題號:0011189 題組:0 難易度:中

(A) 103. 當航機脫離地面效應時, 哪些飛行條件會改變?

(A)誘導阻力增加, 需要更大的攻角 (B)寄生阻力減少, 需要的攻角減少 (C)動態穩定度增加

原始題號:0011190 題組:0 難易度:中

(B) 104. 當鬆桿時, 航機傾向返回原來姿態者, 為何種穩定度?

(A)正向的動態穩定度 (B)正向的靜態穩定度 (C)中性的動態穩定度.

原始題號:0011191 題組:0 難易度:易

(A) 105. 航機保持固定坡度轉彎時, 空速增加時, 轉彎率和轉彎半徑如何變化?

(A)轉彎率減少, 轉彎半徑增加 (B)轉彎率增加, 轉彎半徑減少 (C)轉彎率和轉彎半徑都增加

原始題號:0011192 題組:0 難易度:易

(B) 106. 如何同時增加轉彎率, 並減少轉彎半徑?

(A)增加坡度並加速 (B)增加坡度並減速 (C)減少坡度並加速

原始題號:0011193 題組:0 難易度:易

(A) 107. 航機平飛轉彎時為何攻角必須增加?

(A)用以補償升力垂直分量的損失 (B)增加升力的水平分量, 使其等於垂直分量 (C)補償阻力的增加.

原始題號:0011194 題組:0 難易度:中

(A) 108. 影響失速速度的因素為何?

(A)重量, 負荷因數及動力 (B)負荷因數, 攻角及動力 (C)攻角, 重量及空氣密度

原始題號:0011195 題組:0 難易度:易

(A) 109. 保持平飛時, 當空速下降到最大升力阻力比值以下, 航機的總阻力如何變化?

(A)增加, 因為增加誘導阻力。 (B)增加, 因為增加寄生阻力。 (C)減少, 因為較低的誘導阻力。

原始題號:0011196 題組:0 難易度:中

(C) 110. 升降舵條整片(elevator trim tab)的功能為何?

(A)在空速增加時, 可提供水平方向的平衡, 進而允許鬆手飛行 (B)在空速變化時, 可用以調整機尾的速度負載, 以允許中性的操控施力 (C)在空速變化時, 可用以調整機尾的下壓負載, 以消除飛行操控所需施力

原始題號:0011197 題組:0 難易度:中

(B) 111. 當飛航高度增加時, 真空速與攻角應如何變化以獲得相同的升力?

(A)真空速與攻角保持不變 (B)固定攻角, 真空速增加 (C)降低真空速, 增加攻角

原始題號:0011087 題組:0 難易度:易

(C) 112. Which of the following are considered primary flight controls ?

(A)tabs (B)flaps (C)outboard ailerons

原始題號:0011088 題組:0 難易度:易

(C) 113. Which of the following is considered an auxiliary flight control ?

(A)ruddervator (B)upper rudder (C)leading edge flaps

原始題號:0011089 題組:0 難易度:易

- (C) 114. When are inboard ailerons normally used ?
(A)low-speed flight only (B)high-speed flight only (C)low-speed and high-speed flight

原始題號:0011090 題組:0 難易度:易

- (A) 115. When are outboard ailerons normally used ?
(A)low-speed flight only (B)high-speed flight only (C)low-speed and high-speed flight

原始題號:0011091 題組:0 難易度:中

- (B) 116. Why do some airplanes equipped with inboard/outboard ailerons use the outboards for slow flight only ?
(A)increased surface area provides greater controllability with flap extension
(B)aerodynamic loads on the outboard ailerons tend to twist the wingtips at high speeds (C)locking out the outboard ailerons in high-speed flight provides variable flight control feel

原始題號:0011092 題組:0 難易度:中

- (A) 117. What is the purpose of a control tab ?
(A)move the flight controls in the event of manual reversion (B)reduce control forces on a control surface by deflecting in the proper direction to move a primary flight control (C)prevent a control surface from moving to a full-deflection position due to aerodynamic forces

原始題號:0011093 題組:0 難易度:中

- (C) 118. 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:0011094 題組:0 難易度:易

- (B) 119. Which direction from the primary control surface does a servo tab move ?
(A)same direction (B)opposite direction (C)remains fixed for all positions

原始題號:0011095 題組:0 難易度:中

- (B) 120. What is the purpose of a servo tab ?
(A)move the flight controls in the auto flight mode (B)reduce pilot's applied control forces by deflecting in the proper direction to move a primary flight control (C)prevent a control surface from moving to a full-deflection position due to aerodynamic forces

原始題號:0011096 題組:0 難易度:易

- (A) 121. Which is a purpose of leading-edge flaps ?
(A)increase the camber of the wing (B)reduce lift without increasing airspeed (C)direct airflow over the top of wing at high angles of attack

原始題號:0011097 題組:0 難易度:易

- (A)¹²² What is the primary function of the leading-edge flaps in landing configuration during the flare before touchdown ?
(A)prevent flow separation (B)decrease rate of sink (C)increase profile drag

原始題號:0011098 題組:0 難易度:中

- (B)¹²³ What effect does the leading edge slot in the wing have on performance ?
(A)decreases profile drag (B)changes the stalling angle of attack to a higher angle (C)decelerates the upper surface boundary layer air

原始題號:0011099 題組:0 難易度:中

- (A)¹²⁴ Which is a purpose of a leading-edge slat on high performance wings ?
(A)increase lift at relative slow speeds (B)improve aileron control during low angles of attack (C)direct air from the low-pressure area under the leading edge along the top of the wing

原始題號:0011100 題組:0 難易度:易

- (C)¹²⁵ What will be the ratio between airspeed and lift if the angle of attack and other factors remain constant and airspeed is doubled ? Lift will be
(A)the same (B)two times greater (C)four times greater

原始題號:0011101 題組:0 難易度:中

- (B)¹²⁶ What true airspeed and angle of attack should be used to generate the same amount of lift as altitude is increased ?
(A)the same true airspeed and angle of attack (B)a higher true airspeed for any given angle of attack (C)a lower true airspeed and higher angle of attack

原始題號:0011102 題組:0 難易度:易

- (B)¹²⁷ How can an airplane produce the same lift in ground effect as when out of ground effect ?
(A)the same angle of attack (B)a lower angle of attack (C)a higher angle of attack

原始題號:0011103 題組:0 難易度:易

- (A)¹²⁸ What is the effect on total drag of an aircraft if the airspeed decreases in level flight below that speed for max L/D ?
(A)drag increases because of increased induced drag (B)drag increases because of increased parasite drag (C)drag decreases because of lower induced drag

原始題號:0011104 題組:0 難易度:易

- (A)¹²⁹ What flight condition should be expected when an aircraft leaving ground effect ?
(A)an increase in induced drag requiring a higher angle of attack (B)a decrease in parasite drag permitting a lower angle of attack (C)an increase in dynamic stability

原始題號:0011105 題組:0 難易度:中

(B) 130. What is the relationship between induced and parasite drag when the gross weight is increased ?

- (A) parasite drag increases more than induced drag (B) induced drag increases more than parasite drag (C) both parasite and induced drag are equally increased

原始題號:0011106 題組:0 難易度:易

(A) 131. Which is a purpose of wing-mounted vortex generators ?

- (A) reduce the drag caused by supersonic flow over portions of 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:0011107 題組:0 難易度:中

(A) 132. What affects indicated stall speed ?

- (A) weight, load factor, and power (B) load factor, angle of attack, and power
(C) angle of attack, weight, and air density

原始題號:0011108 題組:0 難易度:易

(A) 133. How can turbulence air cause an increase in stalling speed of an airfoil ?

- (A) an abrupt change in relative wind (B) a decrease in angle of attack (C) sudden decrease in load factor

原始題號:0011109 題組:0 難易度:中

(C) 134. Airflow separation over the wing can be delayed by using vortex generators

- (A) directing high pressure air over the top of the wing or flap through slots and making the wing surface smooth (B) directing a suction over the top of the wing or flap through slots and making the wing surface smooth (C) making the wing surface rough and/or directing high pressure air over the top of the wing or flap through slots

原始題號:0011110 題組:0 難易度:易

(C) 135. What is load factor ?

- (A) lift multiplied by the total weight (B) lift subtracted from the total weight
(C) lift divided by the total weight

原始題號:0011111 題組:0 難易度:易

(B) 136. Upon which factor does wing loading during a coordinated turn in smooth air depend ?

- (A) rate of turn (B) angle of bank (C) true airspeed

原始題號:0011112 題組:0 難易度:中

(C) 137. What result does a level turn have on the total lift and load factor ?

- (A) lift force remains constant and the load factor increases (B) lift force increases and the load factor decreases (C) both total lift force and load factor increase

原始題號:0011113 題組:0 難易度:易

- (B) 138. At which speed will increasing the pitch attitude cause an airplane to climb ?
(A)low speed (B)high speed (C)any speed

原始題號:0011114 題組:0 難易度:中

- (A) 139. At what speed, with reference to L/D_{max} does max rate of climb for a jet airplane occur ?
(A)a speed greater than that for L/D_{max} (B)a speed equal to that for L/D_{max} (C)a speed less than that for L/D_{max}

原始題號:0011115 題組:0 難易度:中

- (C) 140. What effect does an increase in airspeed have on a coordinated turn while maintaining a constant angle of bank and altitude ?
(A)the rate of turn will decrease resulting in a decreased load factor (B)the rate of turn will increase resulting in an increased load factor (C)the rate of turn will decrease resulting in no changes in load factor

原始題號:0011116 題組:0 難易度:易

- (C) 141. If no corrective action is taken by the pilot as angle of bank is increased, how is the vertical component of lift and sink rate affected ?
(A)lift increases and the sink rate increases (B)lift decreases and the sink rate decreases (C)lift decreases and the sink rate increases

原始題號:0011117 題組:0 難易度:易

- (A) 142. What is the relationship of the rate of turn with the radius of turn with a constant angle of bank but increasing airspeed ?
(A)rate will decrease and radius will increase (B)rate will increase and radius will decrease (C)rate and radius will increase

原始題號:0011118 題組:0 難易度:易

- (B) 143. How can the pilot increase the rate of turn and decrease the radius at the same time ?
(A)steepen the bank and increase airspeed (B)steepen the bank and decrease airspeed (C)shallow the bank and increase airspeed

原始題號:0011119 題組:0 難易度:中

- (A) 144. What are some characteristics of an airplane loaded with the C.G. at the aft limit ?
(A)lowest stall speed, highest cruise speed, and least stability (B)highest stall speed, highest cruise speed, and least stability (C)lowest stall speed, lowest cruise speed, and highest stability

原始題號:0011120 題組:0 難易度:中

- (A) 145. What effect does landing at high elevation airports have on ground speed with comparable conditions relative to temperature, wind and airplane weight ?
(A)higher than at low elevation (B)lower than at low elevation (C)the same as at low elevation

原始題號:0011121 題組:0 難易度:易

- (A) 146. Under which condition during the landing roll are the main wheel brakes at maximum effectiveness ?
(A)when wing lift has been reduced (B)at high groundspeeds (C)when the wheels are locked and skidding

原始題號:0011122 題組:0 難易度:中

- (A) 147. What effect does an uphill runway slope have upon takeoff performance ?
(A)increases takeoff distance (B)decreases takeoff speed (C)decreases takeoff distance

原始題號:0011123 題組:0 難易度:易

- (C) 148. Which condition reduces the required runway for takeoff ?
(A)higher-than-recommended airspeed before rotation (B)lower-than-standard air density (C)increased headwind component

原始題號:0011124 題組:0 難易度:中

- (A) 149. Which performance factor decreases as airplane gross weight increases, for a given runway ?
(A)critical engine failure speed (B)rotation speed (C)accelerate-stop distance

原始題號:0011125 題組:0 難易度:易

- (C) 150. What should a pilot do to maintain "best range" airplane performance when a tailwind is encountered ?
(A)increase speed (B)maintain speed (C)decrease speed

原始題號:0011126 題組:0 難易度:中

- (C) 151. Which max range factor decreases as weight decreases ?
(A)angle of attack (B)altitude (C)airspeed

原始題號:0011127 題組:0 難易度:中

- (A) 152. Which procedure produces the min fuel consumption for a given leg of the cruise flight ?
(A)increase speed for a headwind (B)increase speed for a tailwind (C)increase altitude for a headwind, decrease altitude for a tailwind

原始題號:0011128 題組:0 難易度:中

- (C) 153. At what speed, with reference to L/D_{max} does max range for a jet airplane occur ?
(A)a speed less than that for L/D_{max} (B)a speed equal to that for L/D_{max} (C)a speed greater than that for L/D_{max}

原始題號:0011129 題組:0 難易度:易

- (B) 154. Max range performance of a turbojet aircraft is obtained by which procedure as aircraft weight decreases ?
(A)increasing speed or altitude (B)increasing altitude or decreasing speed
(C)increasing speed or decreasing altitude

原始題號:0011130 題組:0 難易度:中

- (A) 155. What performance should a pilot of a light, twin-engine airplane be able to maintain at VMC ?
(A)heading (B)heading and altitude (C)heading, altitude, and ability to climb to 50 ft/min

原始題號:0011131 題組:0 難易度:中

- (A) 156. Under what condition is VMC the highest ?
(A)gross weight is at the max allowable value (B)C.G. is at the most rearward allowable position (C)C.G. is at the most forward allowable position

原始題號:0011132 題組:0 難易度:中

- (A) 157. Which condition has the effect of reducing critical engine failure speed ?
(A)slush on the runway or inoperative antiskid (B)low gross weight (C)high density altitude

原始題號:0011133 題組:0 難易度:易

- (C) 158. What is the safest and most efficient takeoff and initial climb procedure in a light, twin-engine airplane ?
(A)best engine-out, rate-of-climb airspeed while on the ground, then lift off and climb at that speed (B)VMC, then lift off at that speed and climb at max angle of climb speed (C)an airspeed slightly above VMC, then lift off and climb at the best rate-of-climb airspeed

原始題號:0011134 題組:0 難易度:中

- (A) 159. What procedure is recommended for an engine-out approach and landing ?
(A)the flightpath and procedures should be almost identical to a normal approach and landing (B)the altitude and airspeed should be considerably higher than normal throughout the approach (C)a normal approach, except do not extend the landing gear or flaps until over the runway threshold

原始題號:0011135 題組:0 難易度:易

- (A) 160. 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 will 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:0011136 題組:0 難易度:易

- (C) 161. 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 compression of inlet air will compensate for any decrease in air pressure (C)decrease due to higher density altitude

原始題號:0011137 題組:0 難易度:易

- (B) 162. 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:0011138 題組:0 難易度:中

- (B) 163. Minimum specific fuel consumption of the turboprop engine is normally available in which altitude range ?
(A)10,000 ft to 25,000ft (B)25,000 ft to tropopause (C)tropopause to 45,000 ft

原始題號:0011139 題組:0 難易度:中

- (A) 164. 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, and increase angle of attack

原始題號:0011140 題組:0 難易度:易

- (A) 165. At what Mach range does the subsonic flight range normally occur ?
(A)below .75 Mach (B)from .75 to 1.2 Mach (C)from 1.2 to 2.5 Mach

原始題號:0011141 題組:0 難易度:易

- (B) 166. Within what Mach range does transonic flight regimes usually occur ?
(A).50 to .75 Mach (B).75 to 1.2 Mach (C)1.2 to 2.5 Mach

原始題號:0011142 題組:0 難易度:中

- (B) 167. What is the highest speed possible without supersonic flow over the wing ?
(A)initial buffet speed (B)critical Mach number (C)transonic index

原始題號:0011143 題組:0 難易度:中

- (B) 168. What is the result of a shock-induced separation of airflow occurring symmetrically near the wing root of a sweeping aircraft ?
(A)a high-speed stall and sudden pitch up (B)a severe moment or "tuck under" (C)severe porpoising

原始題號:0011144 題組:0 難易度:中

- (B) 169. What is the movement of the center of pressure when the wintips of a sweptwing airplane are shock-stalled first ?
(A)inward and aft (B)inward and forward (C)outward and forward

原始題號:0011145 題組:0 難易度:中

(A) 170. What is the principal advantage of a sweepback design wing over a straight-wing design ?

- (A)the critical Mach number will increase significantly (B)sweepback will increase changes in the magnitude of force coefficient due to compressibility (C)sweepback will accelerate the onset of compressibility effect

原始題號:0011146 題組:0 難易度:易

(B) 171. What is one disadvantage of a swept-wing design ?

- (A)the wing root stalls prior to the wingtip section (B)the wingtip section stalls prior to the wing root (C)severe pitchdown moment when the center of pressure shifts forward

原始題號:0011147 題組:0 難易度:中

(C) 172. What is the condition known as when gusts cause a sweptwing-type airplane to roll in one direction while yawing in the other ?

- (A)porpoise (B)wingover (C)Dutch roll

原始題號:0011148 題組:0 難易度:中

(B) 173. A definition of the term "viscous hydroplaning" is where

- (A)the airplane rides on standing water (B)a film of moisture covers the painted or rubber-coated portion of the runway (C)the tires of the airplane are actually riding on a mixture of steam and melted rubber

原始題號:0011149 題組:0 難易度:易

(B) 174. Compared to dynamic hydroplaning, at what speed does viscous hydroplaning occur when landing on a smooth, wet runway ?

- (A)at approximately 2 times the speed that dynamic hydroplaning occurs (B)at a lower speed than dynamic hydroplaning (C)at same speed as dynamic hydroplaning

原始題號:0011150 題組:0 難易度:中

(B) 175. At what minimum speed (rounded off) could dynamic hydroplaning occur on main tires having a pressure of 121 PSI ?

- (A)90 kts (B)96 kts (C)110 kts

原始題號:0011151 題組:0 難易度:中

(C) 176. 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:0011152 題組:0 難易度:易

- (C) 177. What effect, if any, will 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:0011153 題組:0 難易度:易

- (C) 178. What 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:0011154 題組:0 難易度:中

- (B) 179. During an en route descent in a fixed-thrust and fixed-pitch attitude configuration, both the ram air input and the drain hole of the pitot system become completely blocked by ice. What airspeed can be expected ?
(A)increase in indicated airspeed (B)decrease in indicated airspeed
(C)indicated airspeed remains at the value prior to icing

原始題號:0011155 題組:0 難易度:中

- (A) 180. 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:0011156 題組:0 難易度:易

- (C) 181. Which initial cockpit indications should a pilot be aware of when a headwind shears to a calm wind ?
(A)indicated airspeed decreases, aircraft pitches up, and altitude decreases
(B)indicated airspeed increases, aircraft pitches down, and altitude increases
(C)indicated airspeed decreases, aircraft pitches down, and altitude decreases

原始題號:0011157 題組:0 難易度:易

- (C) 182. Which initial cockpit indications should a pilot be aware of when a constant tailwind shears to a calm wind ?
(A)altitude increases; pitch and indicated airspeed decrease (B)altitude, pitch and indicated airspeed decrease (C)altitude, pitch, and indicated airspeed increase

原始題號:0011158 題組:0 難易度:易

- (A) 183. Which airplane performance characteristics should be recognized during takeoff when encountering a tailwind shear that increases in intensity ?
(A)loss of, or diminished, airspeed performance (B)decreased takeoff distance
(C)increased climb performance immediately after takeoff

原始題號:0011159 題組:0 難易度:中

- (B) 184. In comparison to an approach in a moderate headwind, which is an indication of a possible windshear due to a decreasing headwind when descending on the glide slope ?
(A)less power is required (B)higher pitch attitude is required (C)lower descent rate is required

原始題號:0011160 題組:0 難易度:中

- (C) 185. What is the recommended technique to counter the loss of airspeed and resultant lift from windshear ?
(A)lower the pitch attitude and regain lost airspeed (B)avoid overstressing the aircraft, "pitch to airspeed", and apply max power (C)Apply max power, maintain, or increase, pitch attitude and accept the lower-than-normal airspeed indications

原始題號:0011161 題組:0 難易度:中

- (B) 186. If severe turbulence is encountered, which procedures is recommended ?
(A)maintain a constant altitude (B)maintain a constant attitude (C)maintain a constant airspeed and altitude

原始題號:0011162 題組:0 難易度:中

- (A) 187. Which flight conditions of a large jet airplane create the most severe flight hazard by generating wingtip vortices of the greatest strength ?
(A)heavy, slow, gear and flaps up (B)heavy, slow, gear and flaps down (C)heavy, fast, gear and flaps down

原始題號:0011163 題組:0 難易度:中

- (A) 188. What effect would a light crosswind have on the wingtip vortices generated by a large airplane that has just taken off ?
(A)the upwind vortex will tend to remain on the runway longer than the downwind vortex (B)a crosswind will rapidly dissipate the strength of both vortices (C)the downwind vortex will tend to remain on the runway longer than the upwind vortex

原始題號:0011164 題組:0 難易度:中

- (B) 189. If you takeoff behind a heavy jet that just landed, you should plan to lift off
(A)prior to the point where the jet touched down (B)beyond the point where the jet touched down (C)at the point where the jet touched down and on the upwind edge of the runway

原始題號:0011165 題組:0 難易度:易

- (C) 190. Which of the following are considered primary flight controls?
(A)Tabs. (B)Flaps. (C)Outboard ailerons.

原始題號:0011166 題組:0 難易度:易

- (B) 191. Which of the following is considered a secondary flight control?
(A)Rudder. (B)Servo tab. (C)Inboard aileron.

原始題號:0011167 題組:0 難易度:易

- (A) 192. 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:0011168 題組:0 難易度:易

- (A) 193. Which airplane performance characteristics should be recognized during takeoff when encountering a tailwind shear that increases in intensity?
(A) Loss of, or diminished, airspeed performance. (B) Decreased takeoff distance. (C) Increased climb performance immediately after takeoff.

原始題號:0011169 題組:0 難易度:易

- (B) 194. 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:0011170 題組:0 難易度:易

- (A) 195. 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:0011171 題組:0 難易度:中

- (A) 196. 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:0011172 題組:0 難易度:易

- (C) 197. 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:0011173 題組:0 難易度:易

- (B) 198. What is the resulting performance loss when one engine on a twin-engine fails?
(A) Reduction of cruise airspeed by 50 percent. (B) Reduction of climb by 50 percent or more. (C) Reduction of all performance by 50 percent.

原始題號:0011174 題組:0 難易度:易

- (A) 199. What effect does landing at high elevation airports have on groundspeed with comparable conditions relative to temperature, wind, and airplane weight?
(A) Higher than at low elevation. (B) Lower than at low elevation. (C) The same as at low elevation.

原始題號:0011175 題組:0 難易度:易

- (C) 200. Which condition reduces the required runway for takeoff?
(A)Higher-than-recommended airspeed before rotation. (B) Lower-than-standard air density. (C)Increased headwind component.

原始題號:0011176 題組:0 難易度:易

- (C) 201. Which condition would INITIALLY cause the indicated airspeed and pitch to increase and the sink rate to decrease?
(A)Sudden decrease in a headwind component. (B)Tailwind which suddenly increases in velocity. (C) Sudden increase in a headwind component.

原始題號:0011177 題組:0 難易度:中

- (C) 202. What is the recommended technique to counter the loss of airspeed and resultant lift from wind shear?
(A) Lower the pitch attitude and regain lost airspeed. (B)Avoid overstressing the aircraft, 'pitch to airspeed,' and apply maximum power. (C)Maintain, or increase, pitch attitude and accept the lower-than-normal airspeed indications.

原始題號:0011178 題組:0 難易度:易

- (A) 203. Which airplane performance characteristics should be recognized during takeoff when encountering a tailwind shear that increases in intensity?
(A) Loss of, or diminished, airspeed performance. (B)Decreased takeoff distance. (C)Increased climb performance immediately after takeoff.

原始題號:0011179 題組:0 難易度:易

- (B) 204. Thrust is being managed to maintain desired indicated airspeed and the glide slope is being flown. Which characteristics should be observed when a tailwind shears to a constant headwind?
(A)PITCH ATTITUDE: Increases. VERTICAL SPEED: Increases. INDICATED AIRSPEED: Decreases, then increases to approach speed. (B) PITCH ATTITUDE: Increases. VERTICAL SPEED: Decreases. INDICATED AIRSPEED: Increases. (C)PITCH ATTITUDE: Decreases. VERTICAL SPEED: Decreases. INDICATED AIRSPEED: Decreases, then increases to approach speed.

原始題號:0011180 題組:0 難易度:中

- (C) 205. 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 stalls.

原始題號:0011181 題組:0 難易度:中

- (A) 206. Which operational force creates the greatest stress on a propeller?
(A)Centrifugal. (B)Torque bending. (C)Aerodynamic twisting.

原始題號:0011182 題組:0 難易度:易

- (C) 207. Which flight conditions will result in the largest propeller blade angle?
(A)Initial climb-out. (B)Approach to landing. (C)High-speed, high-altitude cruise flight.

原始題號:0011183 題組:0 難易度:易

- (B) 208. At which speed will increasing the pitch attitude cause an airplane to climb?
(A) Low speed. (B) High speed. (C) Any speed.

原始題號:0011184 題組:0 難易度:易

- (B) 209. What is the relationship between induced and parasite drag when the gross weight is increased?
(A) Parasite drag increases more than induced drag. (B) Induced drag increases more than parasite drag. (C) Both parasite and induced drag are equally increased.

原始題號:0011185 題組:0 難易度:易

- (C) 210. For a given angle of bank, the load factor imposed on both the aircraft and pilot in a coordinated constant-altitude turn
(A) is directly related to the airplane's gross weight. (B) varies with the rate of turn. (C) is constant.

原始題號:0011186 題組:0 難易度:易

- (B) 211. The primary purpose of high-lift devices is to increase the
(A)L/D(MAX). (B) lift at low speeds. (C) drag and reduce airspeed.

原始題號:0011187 題組:0 難易度:中

- (B) 212. By changing the angle of attack of a wing, the pilot can control the airplane's
(A) lift, gross weight, and drag. (B) lift, airspeed, and drag. (C) lift and airspeed, but not drag.

原始題號:0011188 題組:0 難易度:易

- (B) 213. How can an airplane produce the same lift in ground effect as when out of ground effect?
(A)The same angle of attack. (B) A lower angle of attack. (C) A higher angle of attack.

原始題號:0011189 題組:0 難易度:中

- (A) 214. What flight condition should be expected when an aircraft leaves ground effect?
(A) An increase in induced drag requiring a higher angle of attack. (B) A decrease in parasite drag permitting a lower angle of attack. (C) An increase in dynamic stability.

原始題號:0011190 題組:0 難易度:中

- (B) 215. Identify the type stability if the aircraft attitude tends to return to its original position after the controls have been neutralized.
(A)Positive dynamic stability. (B) Positive static stability. (C) Neutral dynamic stability.

原始題號:0011191 題組:0 難易度:易

- (A) 216. What is the relationship of the rate of turn with the radius of turn with a constant angle of bank but increasing airspeed?
(A)Rate will decrease and radius will increase. (B)Rate will increase and radius will decrease. (C)Rate and radius will increase.

原始題號:0011192 題組:0 難易度:易

- (B) 217. How can the pilot increase the rate of turn and decrease the radius at the same time?
(A)Steepen the bank and increase airspeed. (B) Steepen the bank and decrease airspeed. (C) Shallow the bank and increase airspeed.

原始題號:0011193 題組:0 難易度:易

- (A) 218. Why must the angle of attack be increased during a turn to maintain altitude?
(A) Compensate for loss of vertical component of lift. (B) Increase the horizontal component of lift equal to the vertical component. (C) Compensate for increase in drag.

原始題號:0011194 題組:0 難易度:中

- (A) 219. What affects indicated stall speed?
(A)Weight, load factor, and power. (B) Load factor, angle of attack, and power. (C)Angle of attack, weight, and air density.

原始題號:0011195 題組:0 難易度:易

- (A) 220. What is the effect on total drag of an aircraft if the airspeed decreases in level flight below that speed for maximum L/D?
(A) Drag increases because of increased induced drag. (B)Drag increases because of increased parasite drag. (C)Drag decreases because of lower induced drag.

原始題號:0011196 題組:0 難易度:中

- (C) 221. What is the purpose of an elevator trim tab?
(A)Provide horizontal balance as airspeed is increased to allow hands-off flight
(B)Adjust the speed tail load for different airspeeds in flight allowing neutral control forces. (C) Modify the downward tail load for various airspeeds in flight eliminating flight-control pressures.

原始題號:0011197 題組:0 難易度:中

- (B) 222. What true airspeed and angle of attack should be used to generate the same amount of lift as altitude is increased?
(A)The same true airspeed and angle of attack. (B)A higher true airspeed for any given angle of attack. (C)A lower true airspeed and higher angle of attack.