

(A51) PPL直昇機一般維護

最近更新日期：無；更新題號：無

原始題號:0014421 題組:0 難易度:易

- (B) 1. 直昇機駕駛員的位置通常位在直昇機的哪一邊？
(A)左邊 (B)右邊 (C)中間 (D)沒有一個答案正確

原始題號:0014422 題組:0 難易度:易

- (D) 2. 當使用拖桿拖移直昇機時，有些注意事項要遵守：
a) 要有足夠的人力來確保直昇機的所有組件都在視線範圍內。
b) 拖機過程要很平順沒有顛簸的拖行。
c) 所有轉動的組件要固定好。
d) 拖機轉彎半徑要在規定範圍內。
哪個答案正確？
(A)僅a, b和c正確 (B)僅b, c和d正確 (C)僅a, c和d正確 (D)a, b, c和d全正確

原始題號:0014423 題組:0 難易度:中

- (C) 3. 直昇機上的大型組件通常提供了什麼裝置來方便拆裝組件
(A)頂點 (B)支撐點 (C)吊升點 (D)不需要

原始題號:0014424 題組:0 難易度:易

- (D) 4. 軸承可用來承載什麼種類的負載：
(A)推力負載 (B)轉動負載 (C)振盪負載 (D)以上三項都可

原始題號:0014425 題組:0 難易度:中

- (B) 5. 何者最可能是決定軸承壽命長短的因素？
(A)軸承的材質 (B)軸承的潤滑 (C)軸承的型別 (D)軸承在直昇機上的位置

原始題號:0014426 題組:0 難易度:中

- (C) 6. 軸承的變色通常是超溫的現象，其導致的原因是
(A)超速 (B)安裝不當 (C)缺乏潤滑 (D)不正常的高頻振動

原始題號:0014427 題組:0 難易度:中

- (D) 7. 齒輪可用來：
a) 傳輸動力
b) 改變方向
c) 改變速度
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014428 題組:0 難易度:中

- (D) 8. 主旋翼系統在操作時會承受一些應力，其應力為：
a) 離心力
b) 振動力
c) 扭力
d) 屈曲力
(A)僅a, b和c正確 (B)僅b, c和d正確 (C)僅a, c和d正確 (D)a, b, c和d全正確

原始題號:0014429 題組:0 難易度:易

(B) 9. 現今最廣為使用的旋翼系為:

- (A)硬式與半硬式系 (B)半硬式與全關節式系 (C)硬式與全關節式系 (D)沒有一個答案正確

原始題號:0014430 題組:0 難易度:中

(B) 10. 裝置了蹺板軸(Seesaw axis)或蹣動軸(Flapping axis)的旋翼系屬於

- (A)硬式旋翼 (B)半硬式旋翼 (C)全關節式旋翼 (D)硬式與全關節式旋翼

原始題號:0014431 題組:0 難易度:中

(C) 11. 趨前(Lead)與趨後(Lag)動作的控制主要是藉由何者來完成

- (A)致動器 (B)彈簧連桿 (C)緩衝器 (D)趨前-趨後鉸鏈

原始題號:0014432 題組:0 難易度:易

(D) 12. 旋翼的材質可為 :

- a) 木材
b) 金屬
c) 複合材料

- (A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014433 題組:0 難易度:中

(C) 13. 當旋翼葉片重新噴漆後, 旋翼系的哪個程序是必須要執行的?

- (A)動力微調 (B)變距微調 (C)重新平衡 (D)不需要執行任何程序

原始題號:0014434 題組:0 難易度:中

(A) 14. 試比較旋翼葉片在翼根與葉片外部損傷的嚴重性.

- (A)在接近翼根部位的損傷嚴重性比葉片外部來得嚴重. (B)在接近葉片外部的損傷嚴重性比翼根部位來得嚴重. (C)在接近翼根部位的損傷嚴重性和葉片外部一樣嚴重. (D)在接近翼根部位的損傷嚴重性比葉片外部來得輕微.

原始題號:0014435 題組:0 難易度:中

(B) 15. 旋翼頭是高應力集中的組件, 通常包含了哪類零件?

- (A)高價件 (B)定更件 (C)平衡件 (D)修護件

原始題號:0014436 題組:0 難易度:中

(D) 16. 旋翼系在何者情況下要執行特殊檢查?

- a) 超速
b) 突然停止
c) 重落地

- (A)僅 c 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014437 題組:0 難易度:中

(B) 17. 當拆除旋翼頭時, 變距組件有個步驟要執行, 以避免拆除過程中損傷到. 試問此步驟為何?

- (A)使用特殊保護套保護. (B)使用特殊固定架固定. (C)使用特殊潤滑劑潤滑. (D)不需要執行任何程序

原始題號:0014438 題組:0 難易度:易

(C) 18. 拆卸下來的旋翼片應該要擺放在哪裡以避免儲存過程中造成損傷。

- (A)地面上 (B)長型桌板 (C)葉片型架 (D)以上答案皆可

原始題號:0014439 題組:0 難易度:中

(A) 19. 葉片校準(Blade alignment)主要是要確定何者之間的正確關係。

(A)重心與中心壓力 (B)重心與葉片翼展中心 (C)重心與葉片翼張中心 (D)沒有一個答案正確

原始題號:0014440 題組:0 難易度:易

(C) 20. 半硬式旋翼系需要執行哪種靜態平衡。

(A)僅翼張(Chordwise)靜態平衡 (B)僅翼展(Spanwise)靜態平衡 (C)翼張與翼展靜態平衡 (D)不需要執行靜態平衡

原始題號:0014441 題組:0 難易度:中

(B) 21. 在一些旋翼系中, 翼張平衡的獲得, 可藉由移動一片葉片上的校準點往哪個方向?

(A)往前 (B)往後 (C)向內 (D)向外

原始題號:0014442 題組:0 難易度:中

(C) 22. 何項因素是導致組件變形的主因?

(A)超速 (B)超載 (C)過度振動 (D)不平衡

原始題號:0014443 題組:0 難易度:中

(D) 23. 導致旋轉組件產生振動的情況為何?

(A)超速 (B)超載 (C)不當安裝 (D)不平衡

原始題號:0014444 題組:0 難易度:易

(D) 24. 就直昇機而言, 振動的範圍可分為:

- a) 極低頻振動
- b) 低頻振動
- c) 中頻振動
- d) 高頻振動
- e) 超高頻振動

(A)僅a, b和c正確 (B)僅b, c和d正確 (C)僅b, c, d和e正確 (D)僅a, b, c和d正確

原始題號:0014445 題組:0 難易度:易

(C) 25. 簡單的說, 旋翼的振動可區分為:

(A)垂向振動 (B)橫向振動 (C)垂向與橫向振動 (D)沒有一個答案正確

原始題號:0014446 題組:0 難易度:中

(C) 26. 橫向振動的產生通常與旋翼系的哪個情況有關?

(A)超速 (B)超載 (C)不平衡 (D)缺乏潤滑

原始題號:0014447 題組:0 難易度:中

(D) 27. 旋翼系定軌的方法可為:

- a) 標竿法
- b) 旗幟法
- c) 光反射法
- d) 預先定軌法
- e) 電子閃光法

(A)a, b和c正確 (B)a, b, c和d正確 (C)a, b, c和e正確 (D)a, b, c, d和e都正確

原始題號:0014448 題組:0 難易度:易

(C) 28. 在定軌(Tracking)開始階段, 配平補片必須擺放在什麼位置?
(A)朝上 (B)朝下 (C)中間歸零 (中性) (D)沒有一個答案正確

原始題號:0014449 題組:0 難易度:中

(C) 29. 大多數的全關節式旋翼使用緩衝器來調節旋翼葉片的哪一軸向的動作?
(A)垂直軸向 (B)水平軸向 (C)趨前趨後軸向 (D)縱軸向

原始題號:0014450 題組:0 難易度:易

(C) 30. 一個失效的緩衝器會因為葉片一直處在不正確的位置而在旋翼上有什麼現象?
(A)超速 (B)超載 (C)不平衡 (D)超溫

原始題號:0014451 題組:0 難易度:易

(B) 31. 當自動旋轉的轉速如何時, 後退葉片(Retreating Blade)的失速就可能會產生?
(A)過於慢 (B)過於快 (C)超速 (D)超載

原始題號:0014452 題組:0 難易度:易

(A) 32. 當自動旋轉的轉速如何時, 升力的產生將不足以維持直昇機的飛行。
(A)過於慢 (B)過於快 (C)超速 (D)超載

原始題號:0014453 題組:0 難易度:中

(B) 33. 自動旋轉的轉速受何者影響?
a) 直昇機的總重量
b) 動力轉速
c) 高度密度
d) 高度溫度
(A)a 和 b 正確 (B)a 和 c 正確 (C)b 和 c 正確 (D)c 和 d 正確

原始題號:0014454 題組:0 難易度:易

(C) 34. 主承桿通常承載了哪種負載力?
(A)扭力負載 (B)張力負載 (C)扭力與張力負載 (D)主承桿並不承載任何負載力

原始題號:0014455 題組:0 難易度:易

(A) 35. 水平安定桿(Stabilizer bar)需要完成何種平衡以確保操作時的平順。
(A)靜態平衡 (B)動態平衡 (C)靜態與動態平衡 (D)不需要

原始題號:0014456 題組:0 難易度:易

(A) 36. 緩衝器(Dampener)的動作過於如何時, 會導致直昇機的操控反應時間延遲, 而有過於穩定的結果。
(A)太軟 (B)太硬 (C)適中 (D)任何情況均會

原始題號:0014457 題組:0 難易度:易

(B) 37. 緩衝器(Dampener)的動作過於如何時, 會導致直昇機的操控反應時間太快, 而有不穩定的結果。
(A)太軟 (B)太硬 (C)適中 (D)任何情況均會

原始題號:0014458 題組:0 難易度:易

(C) 38. 迴旋控制(Cyclic control)動作要能讓旋翼偏向何方:

- a) 向左
- b) 向右
- c) 向前
- d) 向後
- e) 向上
- f) 向下

(A)a 和 b 正確 (B)c 和 d 正確 (C)a, b, c 和 d 正確 (D)a, b, e 和 f 正確

原始題號:0014459 題組:0 難易度:易

(B) 39. 往復式引擎直昇機的集體桿(Collective)配置了一組扭轉握柄(Twist grip)，其目的是用來控制:

(A)直昇機的方向 (B)引擎的油門 (C)直昇機的高度 (D)直昇機的飛行速度

原始題號:0014460 題組:0 難易度:易

(C) 40. 許多新式的過濾器系統(Filtering systems)，附有何種裝置來作為過濾器發生旁通時的指示?

(A)壓力指示器 (B)壓力表 (C)警告按鈕/警告指示器 (D)警告燈

原始題號:0014461 題組:0 難易度:易

(C) 41. 液壓油的高使用率說明了什麼現象?

(A)超溫 (B)超壓 (C)洩漏 (D)正常

原始題號:0014462 題組:0 難易度:中

(B) 42. a) 在更換過濾器之前，過濾系要在有壓力的狀況下來檢查過濾器的洩漏。
b) 過濾器更換後，過濾系要在有壓力的狀況下來檢查過濾器的洩漏。
c) 過濾器更換後，過濾系要在無壓力的狀況下來檢查過濾器的洩漏。
何項敘述正確?

(A)a 正確 (B)b 正確 (C)c 正確 (D)沒有一個答案正確

原始題號:0014463 題組:0 難易度:易

(D) 43. 大多數的直昇機，其迴旋控制系(Cyclic control)在裝調時，要將迴旋桿擺在什麼位置?

(A)前方到底 (B)後方到底 (C)左右任一方到底 (D)中間不受力位置

原始題號:0014464 題組:0 難易度:中

(B) 44. 旋翼不能如同引擎在高轉速下操作的原因為何:

- a) 旋翼的材質
- b) 旋翼的翼尖速度
- c) 後退葉片的失速

(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全正確

原始題號:0014465 題組:0 難易度:易

- (A) 45. a) 傳動箱(Transmissions)是用來降低引擎的速度以配合旋翼的速度。
b) 傳動箱(Transmissions)是用來增加引擎的速度以配合旋翼的速度。
c) 傳動箱(Transmissions)是用來降低旋翼的速度以配合引擎的速度。
d) 傳動箱(Transmissions)是用來增加旋翼的速度以配合引擎的速度。
何項說明正確?
(A)a 正確 (B)b 正確 (C)c 正確 (D)d 正確

原始題號:0014466 題組:0 難易度:易

- (B) 46. 傳動軸系(Drive shaft system)在一些直昇機中，安裝在直昇機的哪兩個組件之間？當使用了傳動軸系時，會配合傳動軸系裝置一個離合器。
(A)引擎與旋翼之間 (B)引擎與傳動箱之間 (C)傳動箱與旋翼之間 (D)沒有一個答案正確

原始題號:0014467 題組:0 難易度:中

- (B) 47. 在啟動引擎時，哪個裝置是用來消除引擎因轉動旋翼所需的動力負載。
(A)空轉器(Free wheeling unit) (B)離合器 (C)變距件 (D)變向盤組

原始題號:0014468 題組:0 難易度:中

- (B) 48. a) 空轉器(Free wheeling unit)可允許傳動箱驅動旋翼但能避免旋翼驅動引擎。
b) 空轉器(Free wheeling unit)可允許引擎驅動傳動箱但能避免旋翼驅動引擎。
c) 空轉器(Free wheeling unit)可允許旋翼驅動傳動箱但能避免旋翼驅動引擎。
d) 空轉器(Free wheeling unit)可允許引擎驅動傳動箱但能避免傳動箱驅動旋翼。
何項說明正確?
(A)a 正確 (B)b 正確 (C)c 正確 (D)d 正確

原始題號:0014469 題組:0 難易度:易

- (B) 49. 空轉器(Free wheeling unit)的操作通常是：
(A)手動 (B)自動 (C)手動或自動 (D)手動與自動同時

原始題號:0014470 題組:0 難易度:易

- (B) 50. 不論空轉器(Free wheeling unit)處在什麼位置，在自動旋轉時，哪個旋翼要能轉動？
(A)主旋翼 (B)尾旋翼 (C)主旋翼與尾旋翼 (D)沒有一個答案正確

原始題號:0014471 題組:0 難易度:中

- (C) 51. 在液壓機械式的離合器中，哪個組件是當旋翼轉速到達時，作為機械耦合用的？
(A)傳動箱 (Transmission unit) (B)驅動組件(Drive unit) (C)空轉器(Free wheeling unit) (D)沒有一個答案正確

原始題號:0014472 題組:0 難易度:中

- (C) 52. a) 止輪組件(Sprag unit)是現今最通用的空轉器(Free wheeling unit)。
b) 止輪組件(Sprag unit)可雙向傳動。
c) 止輪組件(Sprag unit)的潤滑油來自於傳動箱。
何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014473 題組:0 難易度:中

- (A) 53. 有些直昇機裝有旋翼煞車(Rotor brake)，此裝置裝在哪兩個組件之間？
(A)引擎與傳動箱 (B)傳動箱與主旋翼 (C)傳動箱與尾旋翼 (D)引擎與旋翼

原始題號:0014474 題組:0 難易度:易

(D) 54. 旋翼煞車(Rotor brake)的作用是用來?

- (A)引擎啟動前使旋翼停止 (B)引擎關車前使旋翼停止 (C)引擎啟動後使旋翼停止 (D)引擎關車後使旋翼停止

原始題號:0014475 題組:0 難易度:中

(B) 55. 大多數的操作員會限制旋翼煞車(Rotor brake)的使用，是因為煞車組件的什麼因素所致?

- (A)溫度 (B)磨損 (C)材質 (D)以上答案皆正確

原始題號:0014476 題組:0 難易度:中

(B) 56. a) 當沒有旋翼煞車時，主旋翼的慣性會使主旋翼於引擎開車後繼續的旋轉。
b) 煞車組件通常安裝在到傳動箱的輸入位置。
c) 煞車可以是液壓或是手動操作。

何項說明正確?

- (A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014477 題組:0 難易度:中

(A) 57. a) 啟動時，引擎轉速會超前旋翼轉速直到離合器完全接合時。
b) 啟動時，旋翼轉速會超前引擎轉速直到離合器完全接合時。
c) 啟動時，引擎轉速會超前旋翼轉速直到離合器完全脫離時。
d) 啟動時，旋翼轉速會超前引擎轉速直到離合器完全脫離時。

何項說明正確?

- (A)a 正確 (B)b 正確 (C)c 正確 (D)d 正確

原始題號:0014478 題組:0 難易度:中

(D) 58. a) 空轉器(Free wheeling unit)故障時，直昇機將有自動旋轉失效的問題。 b) 空轉器(Free wheeling unit)於起飛前的啟動檢查是藉由轉速表得知的。 c) 有些空轉器(Free wheeling unit)自備滑油供給系，此滑油供給系需要保養。

何項說明正確?

- (A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014479 題組:0 難易度:易

(C) 59. a) 傳動箱通常安裝在半彈性式的基座上，以期能緩衝振動。

b) 除了基座要有彈性的要求外，基座還要能承載直昇機的重量以及吸收旋翼基座所產生的扭力負載。

何項說明正確?

- (A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014480 題組:0 難易度:中

(A) 60. a) 止輪基座(Sprag mount)上的螺牙式連桿末端是用來校準主軸承的。

b) 止輪系(Sprag system)的不當調整會影響直昇機的地面操作性能，同時會造成不正常的振動。

何項說明正確?

- (A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014481 題組:0 難易度:中

- (D) 61. a) 空轉器(Free wheeling unit)的內側環圈，在引擎正在驅動旋翼的過程，其作用為自由旋轉齒輪。 b) 若當旋翼在轉動時，內側環圈的作用改為固定齒輪。
何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014482 題組:0 難易度:易

- (C) 62. a) 現今製造的傳動箱(Transmissions)，已從傳動箱的潤滑系中，將引擎的潤滑系區隔開了。
b) 滑油溫度一直是得知傳動箱(Transmissions)狀況的最佳指示依據。
何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014483 題組:0 難易度:易

- (D) 63. 附件傳動齒輪(Accessory drive gear)，轉動下列何項組件:
a) 傳動箱滑油泵
b) 液壓泵
c) 旋翼轉速器
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014484 題組:0 難易度:中

- (C) 64. a) 從壓力泵出來的滑油會流入滑油冷卻器。 b) 當滑油溫度過高時，進入滑油冷卻器的滑油會被旁通掉。 c) 滑油冷卻器的鼓風器是由主傳動軸帶動的。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014485 題組:0 難易度:易

- (D) 65. a) 操作手冊有時也稱做飛行手冊。 b) 操作手冊的第一節內容包含了直昇機的操作限制規範。 c) 操作手冊的第二節內容則包含了程序步驟。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014486 題組:0 難易度:中

- (D) 66. a) 增加最大速度是增加馬力的方法之一。 b) 所有的往復式引擎都需要使用風扇來作為冷卻的裝置。 c) 主旋翼通常都在恆定的轉速下操作。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014487 題組:0 難易度:易

- (A) 67. a) 在直昇機組裝時，引擎的動力要事先配調好，以期能維持旋翼的轉速。 b) 在直昇機組裝時，慢車所需要的是低的轉速。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014488 題組:0 難易度:易

- (D) 68. 冷卻風扇的振動通常以唧唧響(Buzz)被認定，其產生的原因來至?
(A)極低頻 (B)低頻 (C)中頻 (D)高頻

原始題號:0014489 題組:0 難易度:中

- (C) 69. a) 集體桿(Collective)上的扭轉握柄(Twist grip)很相似於摩托車上所使用的油門，除了他們的動作方向相反外。 b) 扭轉握柄(Twist grip)減速的位置是在手握握柄時朝拇指的方向。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014490 題組:0 難易度:易

- (A) 70. a) 引擎更換後，相關系統的重新裝調是需要的。 b) 集體桿的裝調不會影響其他系統。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014491 題組:0 難易度:易

- (B) 71. a) 試飛前，相關裝調要做微調的動作。 b) 試飛後，相關裝調要做微調的動作。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014492 題組:0 難易度:易

- (C) 72. 使用在直昇機上的渦輪引擎屬於：
a) 噴射渦輪(Turbo jet)
b) 扇型渦輪(Turbo fan)
c) 軸式渦輪(Turbo shaft)
(A)a 正確 (B)b 正確 (C)c 正確 (D)沒有一個答案正確

原始題號:0014493 題組:0 難易度:易

- (C) 73. a) 軸式渦輪引擎(Turboshaft engines)通常內裝一組齒輪減速裝置，用來降低渦輪的轉速。 b) 軸式渦輪引擎(Turboshaft engines)可再區分為直軸式渦輪與自由式渦輪。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014494 題組:0 難易度:中

- (A) 74. a) 自由式渦輪(Free turbine)的動力傳動來自於渦輪，而不連接於壓縮器。 b) 直軸式渦輪引擎(Direct drive turbine)的轉速與渦輪一樣，是因為他們共用同一轉軸。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014495 題組:0 難易度:中

- (A) 75. a) 現今大多數的直昇機渦輪所使用的壓縮器，是一種軸式(Axial)與離心式(Centrifugal)壓縮器組成一體的壓縮器。 b) 此壓縮器的第一部份屬於離心式，後級則為軸式。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014496 題組:0 難易度:易

- (C) 76. a) 軸式壓縮器(Axial compressor)的每一級是由一組定子與一組轉子組成的。 b) 轉子用來增加氣流的速度，定子則用來產生壓力。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014497 題組:0 難易度:易

- (A) 77. a) 進入燃燒室的空氣是用來幫助燃燒與冷卻用的。 b) 進入燃燒室的空氣僅用來幫助燃燒。 c) 進入燃燒室的空氣僅用來幫助冷卻。何項說明正確？
(A)a 正確 (B)b 正確 (C)c 正確 (D)沒有一個答案正確

原始題號:0014498 題組:0 難易度:中

- (C) 78. a) 往復式引擎的動力是藉由歧管壓力表量測得知的。 b) 軸式渦輪引擎的引擎輸出動力是藉由扭力表量測得知的。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014499 題組:0 難易度:易

- (A) 79. a)在自由式渦輪(Free turbines)中使用了兩組轉速表:一組讀取壓縮器的轉速,另一組讀取動力渦輪的轉速。 b)使用在軸式渦輪引擎的轉速表,通常都是以最低轉速的百分比來讀取的。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014500 題組:0 難易度:易

- (A) 80. a)自由式渦輪(Free turbines)在運轉時,N1與N2轉速表的讀數是不同的。 b)於地面操作時,壓縮器轉速表的讀數會比動力渦輪來得高。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014501 題組:0 難易度:中

- (D) 81. 引擎尾溫表在什麼時候要很謹慎地監視: a) 引擎啟動時 b) 以高承載情況起飛時 c) 外圍溫度很高時
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014502 題組:0 難易度:中

- (B) 82. 多數的直昇機在渦輪引擎的進氣口處都需要裝置粉塵分離器(Particle separator)。收集的粉塵是以何種力量排出過濾器的?
(A)慣性力 (B)離心力 (C)加速力 (D)扭力

原始題號:0014503 題組:0 難易度:中

- (A) 83. a) 粉塵分離器(Particle separator)通常都是打開的。 b) 粉塵分離器(Particle separator)自動關閉的時機是當N1轉速增高到某一轉速時及滅火器手柄拉開時。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014504 題組:0 難易度:易

- (C) 84. a) 造成壓縮器損壞的原因為外物損傷與腐蝕。 b) 刻痕與刮痕會導致壓縮器葉片失去效用。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014505 題組:0 難易度:易

- (B) 85. a) 一個污穢的壓縮器會導致一個低的操作溫度。 b) 流經引擎的氣流受阻時會導致失速與引擎熄火。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014506 題組:0 難易度:中

- (C) 86. a) 為了加快引擎啟動時的加速時間,多數的軸式渦輪引擎使用了洩放瓣、洩放口或可調式定子組系統。 b) 這些系統於引擎加速時移除了渦輪的負載。 c) 所有的這些系統的操作,通常都是藉由燃油的調控與空氣壓力比值的方式來完成。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014507 題組:0 難易度:易

- (C) 87. a) 多數直昇機的引擎,裝置的是環式的並有反流特性的燃燒室。 b) 多數的直昇機於引擎啟動後會將點火動作停止。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014508 題組:0 難易度:中

(B) 88. 何項說明正確?

(A)注氣與注油在燃燒室開始點火之前就已經開始動作了。(B)注氣與點火在燃燒室開始注油之前就已經開始動作了。(C)點火與注油在燃燒室開始注氣之前就已經開始動作了。(D)沒有一個答案正確

原始題號:0014509 題組:0 難易度:中

(B) 89. a) 當集體桿拉高時,調速器(Governor)會感應到低速的情況,進而需要較少的燃油。b) 當集體桿拉高時,調速器(Governor)會感應到低速的情況,進而需要較多的燃油。c) 當集體桿拉高時,調速器(Governor)會感應到超速的情況,進而需要較多的燃油。何項說明正確?

(A)a 正確 (B)b 正確 (C)c 正確 (D)沒有一個答案正確

原始題號:0014510 題組:0 難易度:易

(C) 90. a) 多數的點火系統都是高壓電容放電系統(High capacitance discharge systems)。b) 許多點火系統為了避免熄火所造成的困擾而配有自動重新點火裝置。何項說明正確?

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014511 題組:0 難易度:易

(C) 91. 可調式進氣導片(Variable inlet guide vanes)的作用是用來改變進入壓縮器空氣的哪種特性?

(A)速度 (B)壓力 (C)攻角 (D)溫度

原始題號:0014512 題組:0 難易度:易

(C) 92. a) 直昇機的油門控制桿裝在扭轉握柄內(Twist grip)。b) 扭轉握柄(Twist grip)的基本動作位置有關斷、地面慢車及全開。何項說明正確?

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014513 題組:0 難易度:易

(B) 93. TOT是什麼字的縮寫?

(A)Total Outlet Temperature (B)Turbine Outlet Temperature (C)True Outlet Temperature (D)沒有一個答案正確

原始題號:0014514 題組:0 難易度:中

(C) 94. a) 手動的燃油控制件(FCU)是由動力控制桿操控的。b) 自動燃油控制的燃油行程設定,是根據動力需求的量來建立的。何項說明正確?

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014515 題組:0 難易度:中

(C) 95. a) 多數以渦輪驅動的直昇機都裝有引擎失效警告系統,這個系統於N1轉速失去作用時,會有指示燈與警告聲提供警示。b) 渦輪的使用壽命是根據引擎的使用時間與引擎的使用次數作依準的。何項說明正確?

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014516 題組:0 難易度:中

(C) 96. a) 引擎與傳動箱之間的校準若不正確時,會減短兩者之間傳動軸的使用壽命。b) 校準的方法通常是藉由調整引擎支架點的墊片厚度來完成的。何項說明正確?

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014517 題組:0 難易度:中

- (C) 97. a) 使用手柄來做為調節N1轉速的直昇機，正常的情況下會有三種操作位置，此三種操作位置為：Ground idle, Flight idle and Full N1. b) 在直軸式渦輪的直昇機，其集體桿與燃油控制之間並沒有連桿連結。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014518 題組:0 難易度:易

- (D) 98. 集體桿上的扭轉握柄(Twist grip)的功能有哪些？ a) 關斷瓣作用 b) 慢車速度調節 c) 全開自動動力調節 d) 緊急動力控制
(A)a, b和c正確 (B)b, c和d正確 (C)a, b和d正確 (D)a, b, c和d全正確

原始題號:0014519 題組:0 難易度:易

- (C) 99. a) 尾旋翼必須配有與主旋翼一樣的修正功能，此功能有變距(Pitch change)與葉片蹣動(Flapping)修正功能。 b) 尾旋翼葉片有正向與負向傾斜動作。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014520 題組:0 難易度:中

- () 100. a) 直昇機方向的控制是藉由腳踏板的動作來改變尾旋翼葉片的傾斜角而達成的。 b) 直昇機尾旋翼的動力傳動是經由傳動箱來完成的。 c) 當引擎沒有在傳動時，尾旋翼是由主旋翼傳動的。何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014521 題組:0 難易度:中

- (A) 101. a) 由於振動的因素，尾旋翼傳動軸的校準是很重要的。 b) 尾旋翼齒輪箱可以用來增加或降低尾旋翼的轉速。 c) 主旋翼的轉速比尾旋翼來得快。何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014522 題組:0 難易度:中

- (C) 102. a) 一個快要失效的軸承，其軸承組件總是會有溫度升高的現象。 b) 尾旋翼系的軸承失效，總是會有低頻振動的產生。 c) 密封式的傳動軸常使用溫度偵測條來作為警告的裝置。何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014523 題組:0 難易度:中

- (A) 103. a) 在做檢查時，傳動軸的末端要特別留意插銷、鉚釘與接合的情況。 b) 尾旋翼傳動軸的失準將會使振動的情形降低。 c) 尾旋翼傳動軸的脫位檢查，要於傳動軸拆離直昇機時執行。何項說明正確？
(A)僅a 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014524 題組:0 難易度:易

- (C) 104. a) 尾旋翼上有許多零件都有使用壽命的限制，其原因是因為有應力集中在這些零件的關係。 b) 新式直昇機的尾旋翼並不需要潤滑，其原因是使用了合成橡膠製與密封式的軸承。何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014525 題組:0 難易度:中

(C) 105. a) 在機場上運作的尾旋翼需要執行靜態與動態的平衡。 b) 在尾旋翼上未經核可的位置，改變了原有位置的重量時，將會危及尾旋翼。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014526 題組:0 難易度:易

(C) 106. 尾旋翼所產生的振動問題，通常可以藉由操作哪個控制件來區隔此振動是由傳動系或變距系所造成的？

(A)集體桿 (B)迴旋桿 (C)腳踏板 (D)沒有一個答案正確

原始題號:0014527 題組:0 難易度:易

(B) 107. a) 所有的靜態平衡必須在一個開放式的空間內完成，以期達到最精確的結果。 b) 靜態平衡越精確，所引發的動態平衡問題越少。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014528 題組:0 難易度:易

(C) 108. a) 直昇機的結構與固定翼的飛機不同的地方，在於他們的負載與應力的位置。 b) 直昇機構造，於同一點上，會同時有推力與昇力的作用。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014529 題組:0 難易度:中

(A) 109. 輪式與滑橇式起落架都各有優缺點，其優缺點為： a) 輪式起落架比較難維修 b) 輪式起落架比較難於地面上執行操作 c) 滑橇式起落架比較複雜 d) 滑橇式起落架比較容易於地面上執行操作 何項說明正確？

(A)僅 a 正確 (B)a 和 b 都正確 (C)a, b, c 和 d 全都正確 (D)a, b, c 和 d 全都不正確

原始題號:0014530 題組:0 難易度:易

(D) 110. 尾衍連接了下列哪些組件： a) 尾旋翼齒輪箱 b) 傳動軸 c) 直尾翅 d) 水平安定面

(A)a 和 c 都正確 (B)b, c和d正確 (C)a, b和d正確 (D)a, b, c和d全正確

原始題號:0014531 題組:0 難易度:易

(C) 111. a)結構修理的相關訊息可在維修手冊或結構修理手冊內找得到。 b) 從事重大修理時，校準所使用的裝配架是必須要有的裝備。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014532 題組:0 難易度:易

(C) 112. a)重落地後要對結構做特別檢查。 b) 重落地也可能會造成旋轉組件損傷。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014533 題組:0 難易度:易

(A) 113. a)主旋翼急停的定義為旋翼在碰觸到外物後的突然減速。 b) 急停所產生的力量不會傳達到機身和旋轉組件。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014534 題組:0 難易度:易

(C) 114. a) 貨物掛勾使用的時機，在當直昇機運載外部負載的時候。 b) 貨物吊掛可為手動釋放與電動釋放兩種。 何項說明正確？

(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014535 題組:0 難易度:易

- (C) 115. a) 許多渦輪動力的直昇機於引擎啟動階段，配置有同時使用兩個鎳鎘電池的系統。 b) 多數於海上飛行的直昇機都裝配有浮筒以供緊急使用。 何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014536 題組:0 難易度:中

- (C) 116. a) 昇力會隨著攻角的角度增加而增加，直到失速角度到達為止。 b) 昇力不會隨著空氣的密度狀況而改變。 c) 空氣密度受溫度、高度與溼度影響。 何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014537 題組:0 難易度:中

- (C) 117. a) 直昇機可以在海平面高度滯空但不能在高高度滯空。 b) 冷天氣時用來維持昇力所需要的動力比熱天氣時要來得多。 c) 直昇機愈重在滯空時所需的傾斜角與動力愈多。 何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014538 題組:0 難易度:易

- (B) 118. a) 離心力是用來使直昇機移動到所需方向的力量。 b) 推力要比阻力大才能使直昇機移動。 何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014539 題組:0 難易度:中

- (B) 119. a) 變距的動作是藉由操作迴旋控制來完成的。 b) 變距操作時，會使每片旋翼葉片的變距量都一致。 c) 每個單獨葉片的動作是藉由操作集體控制來完成的。 何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014540 題組:0 難易度:中

- (D) 120. a) 旋翼轉動時穿過空氣的速度在旋翼的所有部位都不一樣。 b) 旋翼轉動時最快速的位置在旋翼葉片的尖端，最慢速的位置在根部。 c) 葉片上愈慢速的部位，其攻角的角度配置會比愈快速的部位來得大。 何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014541 題組:0 難易度:中

- (D) 121. a) 旋翼盤所產生的不同昇力被定義為不對稱的昇力(Dissymmetry of lift)。 b) 為了能改善不同昇力所造成的影響，有些旋翼系裝置了蹣動鉸鏈(Flapping Hinge)。 c) 配有兩片葉片的旋翼，總是使用蹣板式(Seesaw)旋翼系來改正不對稱的昇力問題。 何項說明正確？
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014542 題組:0 難易度:中

- (A) 122. a) 地面效應(Ground effect)的發生是在當直昇機距離地面的範圍在旋翼直徑一半以內的距離時。 b) 發生地面效應(Ground effect)時，空氣密度會減少，同時會在直昇機下方形成一種空氣墊狀物(Air Cushion)的現象。 何項說明正確？
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014543 題組:0 難易度:中

- (C) 123. 翼面的失速是因為： a) 不足的速度 b) 攻角角度太小 c) 機翼負載太重
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014544 題組:0 難易度:中

- (C) 124. 當發生失速時要如何處置: a) 減低前進速度 b) 增加旋翼的傾斜角 c) 增加旋翼的轉速
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014545 題組:0 難易度:中

- (C) 125. a) 在正常的操作情形下, 流經旋翼的氣流是往下的方向。 b) 在自動旋轉的情形下, 流經旋翼的氣流是往上的方向。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014546 題組:0 難易度:易

- (C) 126. a) 在自動旋轉時, 旋翼的轉速必須要控制在適當的範圍。 b) 在自動旋轉時, 最大的昇力值, 可以藉由將迴旋往後方移動時所造成的效果獲得。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014547 題組:0 難易度:易

- (D) 127. 地面共振的現象會因下列何者而加劇: a) 僅一個輪子落地 b) 斜坡落地 c) 平面的支架或洩氣的輪胎
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014548 題組:0 難易度:易

- (D) 128. 用來控制直昇機飛行的基本控制有: a) 迴旋桿 b) 集體桿 c) 反扭力踏板
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014549 題組:0 難易度:易

- (C) 129. a) 迴旋控制是用來使每片旋翼葉片的翼尖徑面偏斜(Tilt)的。 b) 偏斜是藉由改變每片旋翼葉片的傾斜角來完成的。 何項說明正確?
(A)僅 a 正確 (B)僅 b 正確 (C)a 和 b 都正確 (D)a 和 b 都不正確

原始題號:0014550 題組:0 難易度:中

- (B) 130. a) 反扭力踏板改變的是尾旋翼的轉速。 b) 起飛時, 尾旋翼要有最大的正向傾斜角。 c) 尾旋翼的傾斜(Pitch)除了有扭力改正的功用外, 還可用來做為方向的控制。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014551 題組:0 難易度:易

- (D) 131. a) 維修手冊有兩種格式, 一為航空運輸協會制定的系統(ATA system), 另一為廠家自制格式。 b) 在ATA系統格式中, 每個飛機的系統, 都會指定一個編號來做為手冊的章節分類。 c) ATA系統使用數字的方式來呈現各個分類, 其分類包含了章節、系統與科目。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014552 題組:0 難易度:易

- (A) 132. a) 技術通報(Service Bulletins)包含了有關直昇機維修的額外維修訊息。 b) 技術通報通常是直接來自於現場實務問題或是為了改善這些問題所引生出來的解決方案。 c) 技術通報的重要性若是不嚴重時, 往往會轉成適航指令。 何項說明正確?
(A)a 和 b 正確 (B)b 和 c 正確 (C)a 和 c 正確 (D)a, b 和 c 全都正確

原始題號:0014421 題組:0 難易度:易

(B) 133. The pilot of helicopter is often located on which hand side of the helicopter
(A)Left (B)Right (C)Center (D)No answer is correct.

原始題號:0014422 題組:0 難易度:易

(D) 134. Certain precaution must be observed when moving helicopters with a towbar which include:
a) sufficient help must be available to view all parts of the helicopter.
b) towing must be accomplished smoothly with no jerky motion.
c) all rotating components must
(A)Only a, b and c are correct. (B)Only b, c and d are correct. (C)Only a, c and d are correct. (D)The a,b,c and d are all correct.

原始題號:0014423 題組:0 難易度:中

(C) 135. Large components on the helicopter are usually provided with what device for the removal of the component.
(A)Jack points (B)Supporting points (C)Lifting points (D)No device required.

原始題號:0014424 題組:0 難易度:易

(D) 136. Bearings are used to carry which loads :
(A)Thrust loads (B)Rotational loads (C)Oscillating loads (D)All of above three.

原始題號:0014425 題組:0 難易度:中

(B) 137. Which is probably the greatest contributing factor to the life of the bearing?
(A)Material of the bearing. (B)Lubrication of the bearing. (C)Type of the bearing
(D)Location of the bearing on helicopter.

原始題號:0014426 題組:0 難易度:中

(C) 138. Discoloration of the bearing is always an indication of excessive heat. this may be caused by
(A)overspeed. (B)improper installation. (C)a lack of lubrication. (D)abnormal vibration in high frequency range.

原始題號:0014427 題組:0 難易度:中

(D) 139. Gears are used to :
a) transmit power.
b) change direction.
c) change speed.
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014428 題組:0 難易度:中

- (D) 140. The main rotor system is exposed to many stresses during operation which include:
a) centrifugal
b) vibration
c) twisting
d) flexing
(A)Only a, b and c are correct. (B)Only b, c and d are correct. (C)Only a, c and d are correct. (D)The a,b,c and d are all correct.

原始題號:0014429 題組:0 難易度:易

- (B) 141. Today the most widely used rotors are the :
(A)rigid and semi- rigid systems (B)semi-rigid and fully articulating systems
(C)rigid and fully articulating systems (D)No answer is correct.

原始題號:0014430 題組:0 難易度:中

- (B) 142. The rotor system utilizing the seesaw or flapping axis system is known as
(A)rigid rotor (B)semi-rigid rotor (C)fully articulating rotor (D)rigid and fully articulating systems

原始題號:0014431 題組:0 難易度:中

- (C) 143. Lead and lag action is controlled by the use of
(A)an actuator (B)a spring linkage (C)a dampener (D)lead-lag hinge

原始題號:0014432 題組:0 難易度:易

- (D) 144. Rotor blades may be made of :
a) wood
b) metal
c) composite
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014433 題組:0 難易度:中

- (C) 145. When the rotor blade is repainted, what procedure will be necessary on the rotor system?
(A)Power trim (B)Pitch trim (C)Rebalance (D)No procedure required

原始題號:0014434 題組:0 難易度:中

- (A) 146. Compare the damage between the root and the outboard portion of blade.
(A)Damage which is near the root of the blade is more critical than at the outboard portion of the blade. (B)Damage which is near the outboard portion of the blade is more critical than at the root of the blade. (C)Damage which is near the root of the blade is as the same as at the outboard portion of the blade. (D)Damage which is near the root of the blade is less critical than at the outboard portion of the blade.

原始題號:0014435 題組:0 難易度:中

- (B) 147. The rotor head is highly stressed unit and often contains what items:
(A)expensive items (B)time change items (C)balance items (D)repair items

原始題號:0014436 題組:0 難易度:中

- (D) 148. Special inspections of the rotor system are required in the event of
a) overspeed
b) sudden stoppage
c) hard landings.
(A)Only c is correct. (B)Both b and c are correct. (C)Both a and c are correct.
(D)All a, b and c are correct.

原始題號:0014437 題組:0 難易度:中

- (B) 149. When removing a rotor head, one procedure is often necessary on the pitch change in order to prevent damage during removal. The procedure is :
(A)Protected by special cover. (B)Locked by special holders. (C)Lubricated by special lubricant. (D)No procedure required

原始題號:0014438 題組:0 難易度:易

- (C) 150. Removed rotor blades should always be stored in where in order to prevent damage during storage.
(A)ground (B)long table (C)blade racks (D)All answers are correct

原始題號:0014439 題組:0 難易度:中

- (A) 151. Blade alignment established the correct relationship of which ?
(A)the center of gravity and the center of pressure (B)the center of gravity and the center of blade spanwise (C)the center of gravity and the center of blade chordwise (D)No answer is correct.

原始題號:0014440 題組:0 難易度:易

- (C) 152. Semi-rigid rotors will require which static balance.
(A)Only chordwise static balance. (B)Only spanwise static balance. (C)Both chordwise and spanwise static balance. (D)No static balance required.

原始題號:0014441 題組:0 難易度:中

- (B) 153. On some rotor systems, chordwise balance is obtained by moving one blade to which way of the alignment point.
(A)fore (B)aft (C)inboard (D)outboard

原始題號:0014442 題組:0 難易度:中

- (C) 154. What is the major contributor to component deterioration?
(A)Overspeed (B)Overload (C)Excessive vibration (D)Imbalance

原始題號:0014443 題組:0 難易度:中

- (D) 155. What condition is the cause of vibration on rotation components?
(A)Overspeed (B)Overload (C)Improper installation (D)Imbalance

原始題號:0014444 題組:0 難易度:易

- (D) 156. In helicopters, vibrations are classified into which groups?
- a) very low frequency
 - b) low frequency
 - c) medium frequency
 - d) high frequency
 - e) very high frequency vibrations.
- (A)Only a, b and c are correct. (B)Only b, c and d are correct. (C)Only b, c, d and e are correct. (D)Only a, b, c and d are correct.

原始題號:0014445 題組:0 難易度:易

- (C) 157. In nature, rotor vibration may either be:
- (A)vertical (B)lateral (C)vertical and lateral (D)No answer is correct.

原始題號:0014446 題組:0 難易度:中

- (C) 158. Lateral vibration is usually associated with which condition of the rotor?
- (A)Overspeed (B)Overload (C)Imbalance (D)Lack of lubrication

原始題號:0014447 題組:0 難易度:中

- (D) 159. The methods which may be used for tracking are:
- a) stick method
 - b) flag method
 - c) light reflector method
 - d) pre-track method
 - e) electronic strobe method
- (A)a, b and c are correct (B)a, b, c and d are correct (C)a, b, c and e are correct (D)a, b, c, d and e are all correct

原始題號:0014448 題組:0 難易度:易

- (C) 160. During initial tracking, the trim tabs should be placed in which position?
- (A)Upward (B)Downward (C)Neutral (D)No answer is correct.

原始題號:0014449 題組:0 難易度:中

- (C) 161. Most fully articulated rotors use dampeners to control movement about which axis of the rotor blades.
- (A)Vertical (B)Horizontal (C)Lead lag (D)Longitudinal

原始題號:0014450 題組:0 難易度:易

- (C) 162. A faulty dampener will cause which condition of the rotor by the blade seeking the wrong position.
- (A)Overspeed (B)Overload (C)Imbalance (D)Overheat

原始題號:0014451 題組:0 難易度:易

- (B) 163. If the autorotation speed is in what condition, the retreating blade stall may occur.
- (A)too slow (B)too fast (C)overspeed (D)overload

原始題號:0014452 題組:0 難易度:易

(A) 164. If the autorotation speed is in what condition, the lift developed will not support the helicopter.

(A)too slow (B)too fast (C)overspeed (D)overload

原始題號:0014453 題組:0 難易度:中

(B) 165. The autorotation rpm is affected by :

a) a gross weight of the helicopter

b) power rpm

c) density altitude

d) temperature altitude

(A)Both a and b are correct. (B)Both a and c are correct. (C)Both b and c are correct. (D)Both c and d are correct.

原始題號:0014454 題組:0 難易度:易

(C) 166. The mast usually absorbs which kinds of load?

(A)torsional load (B)tensional load (C)torsional and tensional load (D)The mast doesn't absorb any kind of load.

原始題號:0014455 題組:0 難易度:易

(A) 167. The stabilizer bar required which kind of balance in order to insure a smooth operation.

(A)Static balance (B)Dynamic balance (C)Static and Dynamic balance (D)No balance required

原始題號:0014456 題組:0 難易度:易

(A) 168. A dampener which is in what condition will result in an over stable helicopter with delayed control response.

(A)too soft (B)too hard (C)neutral (D)any condition

原始題號:0014457 題組:0 難易度:易

(B) 169. A dampener which is in what condition will result in an unstable helicopter with delayed control response.

(A)too soft (B)too hard (C)neutral (D)any condition

原始題號:0014458 題組:0 難易度:易

(C) 170. Cyclic control movement require the rotor to tilt:

a) Left

b) Right

c) Fore

d) Aft

e) Up

f) Down

(A)Both a and b are correct. (B)Both c and d are correct. (C)a, b, c and d are correct. (D)a, b, e and f are correct.

原始題號:0014459 題組:0 難易度:易

- (B) 171. On reciprocating engine helicopters, the collective has a twist grip which controls:
(A)the direction of helicopter (B)the throttle of engine (C)the altitude of helicopter (D)the flight speed of helicopter

原始題號:0014460 題組:0 難易度:易

- (C) 172. Many of the newer filtering systems have what device to indicate when the filter is bypassing.
(A)Pressure indicators (B)Pressure gauges (C)Warning buttons/indicators (D)Warning lights

原始題號:0014461 題組:0 難易度:易

- (C) 173. High usage of hydraulic fluid is an indication of what condition?
(A)Overheat (B)Overpressure (C)Leakage (D)Normal

原始題號:0014462 題組:0 難易度:中

- (B) 174. a) Before filters changing, the system must be checked under pressure for filter leaks.
b) When filters are changed, the system must be checked under pressure for filters leaks.
c) When filters are changed, the system must be checked without pressure for
(A)a is correct (B)b is correct (C)c is correct (D)No answer is correct.

原始題號:0014463 題組:0 難易度:易

- (D) 175. On most helicopters, the cyclic control system is rigged with the cyclic stick in which position.
(A)Fore end (B)Aft end (C)Either left end or right end (D)Neutral

原始題號:0014464 題組:0 難易度:中

- (B) 176. Rotors cannot operate at engine rpm because of :
a) Materials of the rotors
b) Rotor tip speed
c) Retreating blade stall.
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014465 題組:0 難易度:易

- (A) 177. a) Transmissions are used to reduce engine speed in order to be compatible with rotor speeds.
b) Transmissions are used to increase engine speed in order to be compatible with rotor speeds.
c) Transmissions are used to reduce rotor speed in order to be co
(A)a is correct (B)b is correct (C)c is correct (D)d is correct

原始題號:0014466 題組:0 難易度:易

- (B) 178. A drive shaft system is used on some helicopters between which parts of the helicopter. When drive shafts are used, they often incorporate a clutch with the drive shaft.
(A)Engine and Rotor (B)Engine and Transmission (C)Transmission and Rotor (D)No answer is correct.

原始題號:0014467 題組:0 難易度:中

- (B) 179. What device is necessary to unload the engine during starting because of the forces required to move the rotor.
(A)The free wheeling unit (B)The clutch (C)The pitch change unit (D)The swash plate assembly

原始題號:0014468 題組:0 難易度:中

- (B) 180. a) The free wheeling unit allows the transmission to drive the rotor but prevent the rotor from driving the engine.
b) The free wheeling unit allows the engine to drive the transmission but prevent the rotor from driving the engine.
c) The free wheeling u
(A)a is correct (B)b is correct (C)c is correct (D)d is correct

原始題號:0014469 題組:0 難易度:易

- (B) 181. The operation of the free wheeling unit is always :
(A)Manual (B)Automatic (C)Manual or Automatic (D)Manual and Automatic

原始題號:0014470 題組:0 難易度:易

- (B) 182. Regardless of the location of the free wheeling unit, which rotor must rotate during autorotation.
(A)Main rotor (B)Tail rotor (C)Main and Tail rotor (D)No answer is correct.

原始題號:0014471 題組:0 難易度:中

- (C) 183. In the hydro mechanical clutch, which unit makes a mechanical coupling when rotor rpm is obtained.
(A)Transmission unit (B)Drive unit (C)Free wheeling unit (D)No answer is correct.

原始題號:0014472 題組:0 難易度:中

- (C) 184. a) The sprag unit is the most common free wheeling unit in use.
b) The sprag unit allows movement to be transmitted in both direction.
c) The oil for lubrication of the sprag unit is supplied by the transmission.
Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014473 題組:0 難易度:中

- (A) 185. Some helicopters have a rotor brake located between which part of the helicopter?
(A)Engine and Transmission (B)Transmission and Main Rotor (C)Transmission and Tail Rotor (D)Engine and Rotor

原始題號:0014474 題組:0 難易度:易

- (D) 186. The rotor brake is used to?
(A)Stop the rotor before engine start. (B)Stop the rotor before engine shutdown
(C)Stop the rotor after engine start. (D)Stop the rotor after engine shutdown.

原始題號:0014475 題組:0 難易度:中

- (B) 187. Most operators limit the use of the rotor brake because of what factors of the brake unit?
(A)Temperature (B)Wear (C)Material (D)All answers are correct

原始題號:0014476 題組:0 難易度:中

- (B) 188. a) Without the rotor brake, the inertial of the main rotor will continue to move the main rotor after engine starting.
b) Brake units are normally attached to the input to the transmission.
c) The brake may be either hydraulically or manually operated.
Wh
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014477 題組:0 難易度:中

- (A) 189. a) During starting, the engine rpm will be ahead of the rotor rpm until the clutch is fully engaged. b) During starting, the rotor rpm will be ahead of the engine rpm until the clutch is fully engaged. c) During starting, the engine rpm will be ahead of t
(A)a is correct (B)b is correct (C)c is correct (D)d is correct

原始題號:0014478 題組:0 難易度:中

- (D) 190. a) The free wheeling unit is inoperative, the helicopter would have problems with autorotation.
b) The wheeling unit is checked during pre-flight run up with the use of the tachometer.
c) Some free wheeling units carry their oil supply which requires serv
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014479 題組:0 難易度:易

- (C) 191. a) Transmissions are usually mounted of semi-flexible mounts in order to dampen vibration.
b) In addition to the requirement of the mount to have flexibility, it must also carry the weight of the helicopter and absorb the torsioinal loads of the rotor mou
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014480 題組:0 難易度:中

- (A) 192. a) The threaded rod ends of the sprag mount are used to align the mast. b) Incorrect adjustment of the sprag system can affect the ground characteristics and cause abnormal vibrations. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014481 題組:0 難易度:中

- (D) 193. a) The inner ring of the free wheeling unit acts as a free gear while the engine is driving the rotor.
b) When the rotor is driving, the inner ring acts as a fixed gear.
Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014482 題組:0 難易度:易

- (C) 194. a) Transmissions built today separate the engine oil system from the transmission oil system.
b) Oil temperature is always a good indicator of the condition of the transmission.
Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014483 題組:0 難易度:易

- (D) 195. The accessory drive gear turns the following:
a) transmission oil pump
b) hydraulic pump
c) rotor tachometer.
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014484 題組:0 難易度:中

- (C) 196. a) Oil from the pressure pump goes to the oil cooler. b) Oil bypasses the oil cooler when the oil temperature is too high. c) The oil cooler blower is powered by the main drive shaft. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014485 題組:0 難易度:易

- (D) 197. a) The operator's manual is sometimes referred to as the flight manual. b) The first section of the operator's manual contains the helicopter operating limitations. c) The second section of the operating manual would contain procedures. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014486 題組:0 難易度:中

- (D) 198. a) Increasing the maximum speed is one method of increasing the horsepower. b) All reciprocating engines require a fan for cooling. c) Main rotor usually operate at a constant rpm. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014487 題組:0 難易度:易

- (A) 199. a) On helicopter installations, the engine power is controlled in order to maintain the rotor rpm. b) Low rpm for idle is required on helicopter installations. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014488 題組:0 難易度:易

- (D) 200. Vibration from the cooling fans is usually felt as a buzz because of ?
(A)Very low frequency (B)Low frequency (C)Medium frequency (D)High frequency

原始題號:0014489 題組:0 難易度:中

- (C) 201. a) The twist grip of collective is similar to those used on motorcycles except the action is in the opposite direction. b) The decrease position of the twist grip is towards the thumb as the hand grips the collective. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014490 題組:0 難易度:易

- (A) 202. a) Replacement of the engine will require rerigging the correlation system. b) Collective rigging will not affect the correlation rigging. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014491 題組:0 難易度:易

- (B) 203. a) The fine adjustments are made to the correlation rigging before the test flight
b) The fine adjustments are made to the correlation rigging after the test flight.
Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014492 題組:0 難易度:易

- (C) 204. The turbines used in helicopters are referred to as:
a) Turbo jet
b) Turbo fan
c) Turbo shaft
(A)a is correct (B)b is correct (C)c is correct (D)No answer is correct.

原始題號:0014493 題組:0 難易度:易

- (C) 205. a) The turboshaft engines usually contain a gear reduction to reduce turbine speed. b) Turboshaft engines are further classified as direct shaft turbines or free shaft turbines. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014494 題組:0 難易度:中

- (A) 206. a) The free turbine delivers power from a turbine not connected to the compressor. b) The direct drive turbine engine turns at the same speed as the turbine because they share a common shaft. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014495 題組:0 難易度:中

- (A) 207. a) Most of the helicopter turbines, today, use a compressor which is a combination of axial and centrifugal compressors. b) The first portion of the compressor will be centrifugal and the last stage is axial. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014496 題組:0 難易度:易

- (C) 208. a) Each stage of the axial compressor is made up of one stator and one rotor. b) The rotor increases the velocity of the airflow and the stator develops the pressure. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014497 題組:0 難易度:易

- (A) 209. a) Air entering the combustor is used to support combustion and cooling purposes. b) Air entering the combustor is used to support combustion purposes only. c) Air entering the combustor is used to support cooling purposes only. Which statement is correct
(A)a is correct (B)b is correct (C)c is correct (D)No answer is correct.

原始題號:0014498 題組:0 難易度:中

- (C) 210. a) Power is measured by the manifold pressure gauge on reciprocating engines. b) The power output of turbine is measured by a torquemeter on turboshaft engines. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014499 題組:0 難易度:易

- (A) 211. a) On free turbines, two tachometers are used: one reads compressor speed and the other reads power turbine speed. b) The tachometers used on turboshaft engines often reads in percent of minimum rpm. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014500 題組:0 難易度:易

- (A) 212. a) Free turbines often operate with different readings on the N1 and N2 tachometers. b) During ground operation, the compressor tachometer will read higher than the power turbine tachometer. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014501 題組:0 難易度:中

- (D) 213. The EGT gauges is carefully monitored during: a) Starting b) Takeoffs with heavy loads c) High ambient temperatures
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014502 題組:0 難易度:中

- (B) 214. Most helicopters require a particle separator on the inlet of the turbine engine. The particles move to the outside of the filter by which force?
(A)Inertial (B)Centrifugal (C)Accelerated (D)Torsional

原始題號:0014503 題組:0 難易度:中

- (A) 215. a) The particle separator is usually open. b) The particle separator automatically closes when the N1 rpm increases above certain percent of rpm and fire extinguisher handle is pulled. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014504 題組:0 難易度:易

- (C)²¹⁶ a) Damage to the compressor may be the result of foreign object damage and erosion
b) Nicks and scratched can lead to compressor blade failure. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014505 題組:0 難易度:易

- (B)²¹⁷ a) A dirty compressor will result in low operating temperatures. b) Blockage of the airflow to the engine can result in stall and flame out of the engine. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014506 題組:0 難易度:中

- (C)²¹⁸ a) To assist in acceleration time, most turbo shaft engines use one of the bleed valves, bleed ports and variable stators systems. b) These systems unload the turbine during acceleration. c) All of these systems are usually operated by the fuel control an
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014507 題組:0 難易度:易

- (C)²¹⁹ a) Most of the helicopter engines utilize an annular combustor with reverse flow. b) Most turbine engines deactivate the ignition once the engine is running. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014508 題組:0 難易度:中

- (B)²²⁰ Which statement is correct?
(A)The airflow and fuel flow system are in operation prior to ignite to the combustor. (B)The airflow and ignition system are in operation prior to fuel flow to the combustor. (C)The ignition and fuel flow system are in operation prior to air flow to the combustor. (D)No answer is correct.

原始題號:0014509 題組:0 難易度:中

- (B)²²¹ a) When collective is raised, the governor senses an under speed condition which demands less fuel. b) When collective is raised, the governor senses an under speed condition which demands more fuel c) When collective is raised, the governor senses an ove
(A)a is correct (B)b is correct (C)c is correct (D)No answer is correct.

原始題號:0014510 題組:0 難易度:易

- (C)²²² a) Most ignition systems are high capacitance discharge systems. b) Many ignition systems have an automatic relight device in case of flame out. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014511 題組:0 難易度:易

- (C) 223. The purpose of the variable inlet guide vanes is to change what characteristic of the air entering the compressor?
(A)Speed (B)Pressure (C)Angle of attack (D)Temperature

原始題號:0014512 題組:0 難易度:易

- (C) 224. a) The fuel control lever of helicopter is positioned by the twist grip. b) The basic positions of the twist grip are cut-off, ground idle and full open. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014513 題組:0 難易度:易

- (B) 225. TOT is the abbreviation for?
(A)Total Outlet Temperature (B)Turbine Outlet Temperature (C)True Outlet Temperature (D)No answer is correct.

原始題號:0014514 題組:0 難易度:中

- (C) 226. a) The manual fuel control unit is controlled by the power control lever. b) The automatic fuel control established the fuel schedule in response to the power requirements. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014515 題組:0 難易度:中

- (C) 227. a) Many turbine powered helicopter have an engine out warning system. this system usually has a light and horn when N1 deteriorates. b) The life of a turbine is based on the hours of operation and the cycles of the engines. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014516 題組:0 難易度:中

- (C) 228. a) Misalignment between the engine and transmission will shorten the short shaft life. b) Alignment is usually accomplished by shimming the engine mount. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014517 題組:0 難易度:中

- (C) 229. a) Helicopters using a lever arrangement for N1 speed normally have three operating positions. These are : Ground idle, Flight idle and Full N1. b) On direct shaft turbines, no linkage connects the collective and fuel control. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014518 題組:0 難易度:易

- (D) 230. The functions of the twist grip of the collective are: a) shut off valve b) idle speed c) full automatic power d) emergency power control
(A)a, b and c are correct (B)b, c and d are correct (C)a, b and d are correct (D)a, b, c and d are all correct

原始題號:0014519 題組:0 難易度:易

- (C) 231. a) Tail rotors must use some of the same features which are found in main rotors which include pitch change and blade flapping. b) Tail rotor blades have negative and positive pitch. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014520 題組:0 難易度:中

- () 232. a) Direction control is obtained by using foot pedals to change the blade pitch of tail rotor. b) The power for the tail rotor is furnished through the transmission of the helicopter. c) When the engine is not operating, the tail rotor is driven by the ma
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014521 題組:0 難易度:中

- (A) 233. a) Alignment of the tail rotor shafting is important because of vibration. b) The tail rotor gear box may be used to increase or decrease speed for the tail rotor. c) The main rotor always turns faster than the tail rotor. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014522 題組:0 難易度:中

- (C) 234. a) The impending failure of a bearing will always be indicated by a rise in temperature of the bearing package. b) Bearing failures of the tail rotor system are always accompanied with low frequency vibration. c) Enclosed shafts often use heat sensitive s
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014523 題組:0 難易度:中

- (A) 235. a) Particular attention to the ends of the drive shafts should be taken during inspection to check the pins, rivets and bonding. b) Misalignment of the tail rotor shafting will cause vibration levels to decrease. c) Runout checked of the tail rotor shafti
(A)Only a is correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014524 題組:0 難易度:易

- (C) 236. a) Many parts of the tail rotor are assigned a finite life due to the stresses placed on them. b) Tail rotor on newer helicopters often require no lubrication due to the use of electrometric and sealed bearings. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014525 題組:0 難易度:中

- (C) 237. a) The tail rotor will require static balance and dynamic balance in the field. b) The placement of weight in other than authorized locations on the tail rotor would be dangerous. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014526 題組:0 難易度:易

- (C) 238. The vibration problem of the tail rotor can often be isolated to the drive system or pitch change system by moving which control?
(A)Collective (B)Cyclic (C)Pedals (D)No answer is correct.

原始題號:0014527 題組:0 難易度:易

- (B) 239. a) All static balancing must be accomplished in an opened room in order to insure accuracy. b) The greater accuracy in the static balance, the less dynamic balance problems will occur. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014528 題組:0 難易度:易

- (C) 240. a) The structure of helicopters varies from fixed wing aircraft because of the load and stress locations. b) The helicopter has both the thrust and lift acting on the same point. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014529 題組:0 難易度:中

- (A) 241. The wheel and skid gear have advantages and disadvantages which are: a) wheel gear is difficult to maintain. b) wheel gear is difficult to ground handle. c) skid gear is more complex. d) skid gear simplifies ground handling. Which statement is correct?
(A)Only a is correct. (B)Both a and b are correct. (C)All a, b, c and d are correct (D)All a, b, c and d are incorrect.

原始題號:0014530 題組:0 難易度:易

- (D) 242. The tail boom has the following items attached: a) tail rotor gearbox. b) drive shafting. c) vertical fin. d) horizontal stabilizer.
(A)Both a and c are correct (B)b, c and d are correct (C)a, b and d are correct (D)a, b, c and d are all correct

原始題號:0014531 題組:0 難易度:易

- (C) 243. a) Structure repair information may be found either in the maintenance manual or in a structural repair manual. b) Jigs are often necessary for major repairs because of alignment. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014532 題組:0 難易度:易

- (C) 244. a) Hard landings often require special inspections of the structure. b) Hard landings may also result in damage to rotating components. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014533 題組:0 難易度:易

- (A) 245. a) Sudden stoppage of the main rotor is defined as sudden deceleration of the rotor after contact with an object. b) Sudden stoppage forces can not be transmitted throughout the airframe and rotating components. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014534 題組:0 難易度:易

- (C) 246. a) Cargo hooks are used when external loads are carried by the helicopter. b) The cargo hoist has both a manual and electric release. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014535 題組:0 難易度:易

- (C) 247. a) Many turbine powered helicopters utilize a system in which two Ni-Ca batteries are used during starting. b) Most helicopters which make over water flights will be equipped with floats for emergencies. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014536 題組:0 難易度:中

- (C) 248. a) The lift is increased with the angle of attack until the stall angle is reached. b) Lift will not vary with the density of the air. c) Air density is affected by temperature, altitude and humidity. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014537 題組:0 難易度:中

- (C) 249. a) A helicopter is often capable of hover at sea level but not at high altitude. b) On a cold day more power is required to maintain lift than on a hot day. c) The heavier the helicopters, the greater will be the pitch angle and power requirement to hover
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014538 題組:0 難易度:易

- (B) 250. a) Centrifugal is the force moving the helicopter in the desired direction. b) Thrust must be greater than drag in order to move the helicopter. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014539 題組:0 難易度:中

- (B) 251. a) Pitch change may be accomplished by the movement of the cyclic control. b) The movement of pitch change changes the pitch of each rotor blade as equal amount c) The movement of each individual blade is accomplished by the collective control. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014540 題組:0 難易度:中

- (D) 252. a) The speed at which the rotor moves through the air is not the same on all parts of the rotor. b) The fastest portion of the rotor is at the tip of the rotor blade and the slowest portion is at the root. c) The slower portion of the blade has a greater angle of attack
(A)Only a is correct. (B)Only b is correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014541 題組:0 難易度:中

- (D) 253. a) The difference in lift produced by the rotor disc is referred to as dissymmetry of lift. b) In order to correct for the difference in lift, the rotor must be provided with a flapping hinge on some rotor systems. c) Two bladed rotors often use the seesaw principle
(A)Only a is correct. (B)Only b is correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014542 題組:0 難易度:中

- (A) 254. a) Ground effect occurs when the helicopter is within one half of the rotor diameter from the ground. b) During ground effect, the air becomes less dense and forms an air cushion under the helicopter. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014543 題組:0 難易度:中

- (C) 255. An airfoil may stall due to: a) insufficient airspeed b) too small of an angle of attack c) heavy wing load
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)The a, b and c are all correct.

原始題號:0014544 題組:0 難易度:中

- (C) 256. When a stall is experienced, one should : a) reduce forward speed b) increase pitch of the rotor c) increase rotor speed
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)The a, b and c are all correct.

原始題號:0014545 題組:0 難易度:中

- (C) 257. a) During normal operation, the airflow through the rotor is in a downward direction. b) During autorotation, the airflow is in an upward direction. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014546 題組:0 難易度:易

- (C) 258. a) During autorotation, the rotor rpm must be controlled. b) During autorotation, the greatest amount of lift may be produced in a flare with the cyclic moved aft. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014547 題組:0 難易度:易

- (D) 259. Ground resonance can be aggravated by : a) one wheel landings b) slope landings c) a flat strut or tire
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)The a, b and c are all correct.

原始題號:0014548 題組:0 難易度:易

- (D) 260. The basic controls that are used to control flight of helicopter are : a) cyclic b) collective c) anti-torque pedals
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)The a, b and c are all correct.

原始題號:0014549 題組:0 難易度:易

- (C) 261. a) The cyclic control is used to tilt the tip path plane of each individual rotor blade. b) The tilt is accomplished by changing the pitch of each individual rotor blade. Which statement is correct?
(A)Only a is correct. (B)Only b is correct. (C)Both a and b are correct. (D)Both a and b are incorrect.

原始題號:0014550 題組:0 難易度:中

- (B)²⁶² a) The anti-torque pedals change the rpm of the tail rotor. b) The highest positive pitch of the tail rotor is required during take off. c) In addition to torque correction, the tail rotor pitch is used for directional control. Which statement is correct?
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014551 題組:0 難易度:易

- (D)²⁶³ a) The maintenance manuals are written in two basic formats which are: ATA system and the manufacturer's format. b) Using the ATA system, each system is assigned a number representing a section of the manual. c) The ATA system uses a digit system to cover
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.

原始題號:0014552 題組:0 難易度:易

- (A)²⁶⁴ a) Service Bulletins contain additional information regarding the maintenance of the helicopter. b) Service Bulletins are usually the direct result of field problems or improvements as required by such problems. c) Service Bulletins often become Airworthiness
(A)Both a and b are correct. (B)Both b and c are correct. (C)Both a and c are correct. (D)All a, b and c are correct.