The following sample exam for Commercial Pilot-Helicopter (CRH) is suitable study material for the Commercial Pilot-Helicopter Rating. These questions are a representation of questions that can be found on all Private Pilot-Helicopter Rating tests. The applicant must realize that these questions are to be used as a study guide, and are not necessarily actual test questions. The full CRH test contains 100 questions. The Application Identification, Information Verification and Authorization Requirements Matrix lists all FAA exams. It is available at:
http://www.faa.gov/training_testing/testing/airmen/media/testing_matrix.pdf

The FAA testing system is supported by a series of supplement publications. These publications include the graphics, legends, and maps that are needed to successfully respond to certain test questions. FAA-CT-8080-1, Computer Testing Supplement Commercial Pilot is available at:
http://www.faa.gov/training_testing/testing/airmen/test_questions/media/FAA-CT-8080-1C.pdf

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. Matching the learning statement codes with the codes listed on your Airman Knowledge Test Report assists in the evaluation of knowledge areas missed on your exam. It is available at:
http://www.faa.gov/training_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf

SAMPLE CRH EXAM:

1. PLT018
If the airspeed is increased from 89 knots to 98 knots during a coordinated level 45° banked turn, the load factor will
A) decrease, and the radius of turn will decrease.
B) remain the same, but the radius of turn will increase.
C) increase, but the rate of turn will decrease.

2. PLT242
The unequal lift across the rotor disc that occurs in horizontal flight as a result of the difference in velocity of the air over the advancing half of the disc area and the air passing over the retreating half of the disc area is known as
A) coning.
B) disc loading.
C) dissymmetry of lift.

3. PLT004
(Refer to figure 44.)
GIVEN:

Ambient temperature	°F
Pressure altitude	2,000 ft

What is the rate of climb?
A) 705 ft/min.
B) 630 ft/min.
C) 755 ft/min.

4. PLT134
The performance tables of an aircraft for takeoff and climb are based on
A) pressure/density altitude.
B) cabin altitude.
C) true altitude.

5. PLT011
(Refer to figure 41.)
GIVEN:

Helicopter gross weight	1275 lb
Ambient temperature	9 °F

Determine the in ground effect hover ceiling.
A) 6,600 feet.
B) 7,900 feet.
C) 8,750 feet.

6. PLT012
If an aircraft is consuming 9.5 gallons of fuel per hour at a cruising altitude of 6,000 feet and the groundspeed is 135 knots, how much fuel is required to travel 420 NM?
A) 27 gallons.
B) 30 gallons.
C) 35 gallons.

7. PLT127
Density altitude is the vertical distance above mean sea level in the standard atmosphere at which
A) pressure altitude is corrected for standard temperature.
B) a given atmospheric density is to be found.
C) temperature, pressure, altitude, and humidity are considered.

8. PLT470
The primary purpose of the tail rotor system is to
A) assist in making coordinated turns.
B) maintain heading during forward flight.
C) counteract the torque effect of the main rotor.

9. PLT343
Frequent inspections should be made of aircraft exhaust manifold-type heating systems to minimize the possibility of
A) exhaust gases leaking into the cockpit.
B) a power loss due to back pressure in the exhaust system.
C) a cold-running engine due to the heat withdrawn by the heater.

10. PLT343
An abnormally high engine oil temperature indication may be caused by
A) a defective bearing.
B) the oil level being too low.
C) operating with an excessively rich mixture.

11. PLT112
During level flight, if the manifold pressure is high and the RPM is low, what initial corrective action should be made?
A) Decrease the throttle.
B) Increase the throttle.
C) Lower the collective pitch.

12. PLT166
To determine pressure altitude prior to takeoff, the altimeter should be set to
A) the current altimeter setting.
B) 29.92 inches Hg and the altimeter indication noted.
C) the field elevation and the pressure reading in the altimeter setting window noted.

13. PLT215
Which statement is true about magnetic deviation of a compass? Deviation
A) varies over time as the agonic line shifts.
B) varies for different headings of the same aircraft.
C) is the same for all aircraft in the same locality.

14. PLT343
Applying carburetor heat will
A) not affect the mixture.
B) lean the fuel/air mixture.
C) enrich the fuel/air mixture.

15. PLT251
Consider a reciprocating aircraft engine. Detonation can be caused by
A) a `rich` mixture.
B) low engine temperatures.
C) using a lower grade of fuel than recommended.

16. PLT343
At high altitudes, an excessively rich mixture will cause the
A) engine to overheat.
B) fouling of spark plugs.
C) engine to operate smoother even though fuel consumption is increased.

17. PLT444
Who has the final authority to accept or decline any `land and hold short` (LAHSO) clearance?
A) ATC approach controller.
B) ATC tower controller.
C) Pilot-in-command.

18. PLT141
The 'yellow demarcation bar' marking indicates
A) runway with a displaced threshold that precedes the runway.
B) a hold line from a taxiway to a runway.
C) the beginning of available runway for landing on the approach side.

19. PLT141
The runway holding position sign is located on
A) runways that intersect other runways.
B) taxiways protected from an aircraft approaching a runway.
C) runways that intersect other taxiways.

20. PLT141
`Runway Holding Position Markings` on taxiways
A) identify where aircraft are prohibited to taxi when not cleared to proceed by ground control.
B) identify where aircraft are supposed to stop when not cleared to proceed onto the runway.
C) allow an aircraft permission onto the runway.

21. PLT141
(Refer to figure 57.) You are directed to taxi to runway 10. You see this sign at a taxiway intersection while taxiing. Which way should you proceed?
A) Left.
B) Right.
C) Straight ahead.

22. PLT141
(Refer to figure 64.) If cleared for an intersection takeoff on runway 8, you see this sign at the intersection hold short position. Which way should you turn when taxiing onto the runway?
A) Left.
B) Right.
C) Need more information.

23. PLT141
This taxiway sign would be expected
A) at the intersection of runway 04/22 departure end and the taxiway.
B) near the intersection of runways 04 and 22.
C) at a taxiway intersecting runway 04/22.

24. PLT141
This sign is a visual clue that
A) confirms the aircraft`s location to be on taxiway "B."
B) warns the pilot of approaching taxiway "B."
C) indicates "B" holding area is ahead.

25. PLT141
This sign confirms your position on
A) runway 22.
B) routing to runway 22.
C) taxiway 22.

26. PLT141
From the cockpit, this marking confirms the aircraft to be
A) on a taxiway, about to enter runway zone.
B) on a runway, about to clear.
C) near an instrument approach clearance zone.

27. PLT141
This signage and pavement markings confirms you are
A) at the approach end of runway 22.
B) about to enter a runway at the intersection of intersecting crossing runways.
C) about to leave the taxiway and enter the runway at an intersection.

28. PLT040
(Refer to figure 53)
GIVEN:
Location -Madera Airport (MAE)

Altitude	1,000 ft AGL
Position	7 NM north of Madera (MAE)
Time	3 p.m. local
Flight visibility	1 SM

You are VFR approaching Madera Airport for a landing from the north. You
A) are in violation of the CFR's; you need 3 miles of visibility under VFR.
B) are required to descend to below 700 feet AGL to remain clear of Class E airspace and may continue for landing.
C) may descend to 800 feet AGL (Pattern Altitude) after entering Class E airspace and continue to the airport.

29. PLT162
Which is true regarding flight operations in Class A airspace?
A) May conduct operations under visual flight rules.
B) Aircraft must be equipped with approved distance measuring equipment (DME).
C) Aircraft must be equipped with an ATC transponder and altitude reporting equipment.

30. PLT162
Which is true regarding flight operations in Class B airspace?
A) The pilot must receive an ATC clearance before operating an aircraft in that area.
B) Flight under VFR is not authorized unless the pilot in command is instrument rated.
C) Solo student pilot operations are not authorized.

31. PLT064
When a dashed blue circle surrounds an airport on a sectional aeronautical chart, it will depict the boundary of
A) special VFR airspace.
B) Class D airspace.
C) Class B airspace.

32. PLT434
When operating an aircraft in the vicinity of an airport with an operating control tower, in Class E airspace, a pilot must establish communications prior to
A) 5 NM, and up to and including 3,000 feet AGL.
B) 8 NM, and up to and including 3,000 feet AGL.
C) 4 NM, and up to and including 2,500 feet AGL.

33. PLT162
Which is true regarding flight operations in Class B airspace?
A) The pilot in command must hold at least a private pilot certificate with an instrument rating.
B) The pilot in command must hold at least a student pilot certificate.
C) The aircraft must be equipped with an ATC transponder and altitude reporting equipment.

34. PLT040
(Refer to figure 52, point 5) The floor of the Class E airspace over University Airport (0O5) is
A) the surface.
B) 700 feet AGL.
C) 1,200 feet AGL.

35. PLT162
Which is true regarding flight operations in Class A airspace?
A) Must conduct operations under instrument flight rules.
B) Aircraft must be equipped with approved distance measuring equipment (DME).
C) Aircraft must be equipped with an approved ATC transponder.

36. PLT044
When approaching to land at an airport with an ATC facility, in Class D airspace, the pilot must establish communications prior to
A) 4 NM, up to and including 2,500 feet AGL.
B) 10 NM, up to and including 3,000 feet AGL.
C) 30 SM, and be transponder equipped.

37. PLT161
The radius of the uncharted Outer Area of Class C airspace is normally
A) 20 NM.
B) 30 NM.
C) 40 NM.

38. PLT161
Which is true regarding pilot certification requirements for operations in Class B airspace?
A) The pilot in command must hold at least a private pilot certificate with an instrument rating.
B) The pilot in command must hold at least a private pilot certificate.
C) Solo student pilot operations are not authorized.

39. PLT201
Which is true concerning a running takeoff?
A) If a helicopter cannot be lifted vertically, a running takeoff should be made.
B) One advantage of a running takeoff is that the additional airspeed can be converted quickly to altitude.
C) A running takeoff may be possible when gross weight or density altitude prevents a sustained hover at normal hovering altitude.

40. PLT486
Which flight technique is recommended for use during hot weather?
A) During takeoff, accelerate quickly into forward flight.
B) During takeoff, accelerate slowly into forward flight.
C) Use minimum allowable RPM and maximum allowable manifold pressure during all phases of flight.

41. PLT509
Which is true with respect to vortex circulation in the wake turbulence generated by an aircraft?
A) Helicopters generate downwash turbulence only, not vortex circulation.
B) The vortex strength is greatest when the generating aircraft is heavy, clean, and slow.
C) When vortex circulation sinks into ground effect, it tends to dissipate rapidly and offer little danger.

42. PLT509
Which procedure should you follow to avoid wake turbulence if a large jet crosses your course from left to right approximately 1 mile ahead and at your altitude?
A) Make sure you are slightly above the path of the jet.
B) Slow your airspeed to VA and maintain altitude and course.
C) Make sure you are slightly below the path of the jet and perpendicular to the course.

43. PLT420
What type approach should be made to a pinnacle under conditions of relatively high wind and turbulence?
A) A normal approach.
B) A steeper-than-normal approach.
C) A shallower-than-normal approach.

44. PLT194
How can you determine if another aircraft is on a collision course with your aircraft?
A) The nose of each aircraft is pointed at the same point in space.
B) The other aircraft will always appear to get larger and closer at a rapid rate.
C) There will be no apparent relative motion between your aircraft and the other aircraft.

45. PLT208
Which statement is true about an autorotative descent?
A) Generally, only the cyclic control is used to make turns.
B) The pilot should use the collective pitch control to control the rate of descent.
C) The rotor RPM will tend to decrease if a tight turn is made with a heavily loaded helicopter.

46. PLT259
Ground resonance is less likely to occur with helicopters that are not equipped with
A) rigid rotor systems.
B) fully articulated rotor systems.
C) semi-rigid rotor systems.

47. PLT268
A pilot is hovering during calm wind conditions. The greatest amount of engine power will be required when
A) ground effect exists.
B) making a left-pedal turn.
C) making a right-pedal turn.

48. PLT208
When diverting to an alternate airport because of an emergency, pilots should
A) rely upon radio as the primary method of navigation.
B) climb to a higher altitude because it will be easier to identify checkpoints.
C) apply rule-of-thumb computations, estimates, and other appropriate shortcuts to divert to the new course as soon as possible.

49. PLT175
If complete power failure should occur while cruising at altitude, the pilot should
A) partially lower the collective pitch, close the throttle, then completely lower the collective pitch.
B) lower the collective pitch as necessary to maintain proper rotor RPM, and apply right pedal to correct for yaw.
C) close the throttle, lower the collective pitch to the full-down position, apply left pedal to correct for yaw, and establish a normal power-off glide.

50. PLT022
What are some of the hazardous attitudes dealt with in Aeronautical Decision Making (ADM)?
A) Risk management, stress management, and risk elements.
B) Poor decision making, situational awareness, and judgment.
C) Antiauthority (don't tell me), impulsivity (do something quickly without thinking), macho (I can do it).

51. PLT103
When a pilot recognizes a hazardous thought, he or she then should correct it by applying the corresponding antidote. Which of the following is the antidote for the ANTIAUTHORITY/DON'T TELL ME hazardous attitude?
A) It won't happen to me. It could happen to me.
B) Not so fast. Think first.
C) Follow the rules. They are usually right.

52. PLT103
Most pilots have fallen prey to dangerous tendencies or behavior problems at some time. Some of these dangerous tendencies or behavior patterns which must be identified and eliminated include:
A) Deficiencies in instrument skills and knowledge of aircraft systems or limitations.
B) Peer pressure, get-there-itis, loss of positional or situation awareness, and operating without adequate fuel reserves.
C) Performance deficiencies from human factors such as, fatigue, illness or emotional problems.

53. PLT272
What does good cockpit stress management begin with?
A) Knowing what causes stress.
B) Good life stress management.
C) Eliminating life and cockpit stress issues.

54. PLT103
Examples of classic behavioral traps that experienced pilots may fall into are: trying to
A) assume additional responsibilities and assert PIC authority.
B) promote situational awareness and then necessary changes in behavior.
C) complete a flight as planned, please passengers, meet schedules, and demonstrate the 'right stuff.'

55. PLT104
While on an IFR flight, a pilot emerges from a cloud to find himself within 300 feet of a helicopter. Which of the following alternatives best illustrates the 'MACHO' reaction?
A) He is not too concerned; everything will be alright.
B) He flies a little closer, just to show him.
C) He quickly turns away and dives, to avoid collision.

56. PLT022
An early part of the Aeronautical Decision Making (ADM) process involves
A) taking a self-assessment hazardous attitude inventory test.
B) understanding the drive to have the 'right stuff.'
C) obtaining proper flight instruction and experience during training.

57. PLT083
(Refer to figure 30) When approaching the VOR/DME-A, the symbol [2800] in the MSA circle represents a minimum safe sector altitude within 25 NM of
A) DEANI intersection.
B) White Cloud VORTAC.
C) Baldwin Municipal Airport.

58. PLT083
(Refer to figure 30.) What minimum navigation equipment is required to complete the VOR/DME-A procedure?
A) One VOR receiver.
B) One VOR receiver and DME.
C) Two VOR receivers and DME.

59. PLT083
(Refer to figure 27.) The symbol [9200] in the MSA circle of the ILS RWY 35R procedure at DEN represents a minimum safe sector altitude within 25 NM of
A) Denver VORTAC.
B) Dymon outer marker.
C) Cruup I-AQD DME fix.

60. PLT420
A pilot performing a published instrument approach is not authorized to perform a procedure turn when
A) maneuvering at radar vectoring altitudes.
B) receiving a radar vector to a final approach course or fix.
C) maneuvering at minimum safe altitudes.

61. PLT393
The pilot in command of an aircraft operated under IFR, in controlled airspace, shall report as soon as practical to ATC when
A) experiencing any malfunctions of navigational, approach, or communications equipment, occurring in flight.
B) requested to contact a new controlling facility.
C) climbing or descending to assigned altitudes.

62. PLT101
(Refer to figure 53, point 1) This thin black shaded line is most likely
A) an arrival route.
B) a military training route.
C) a state boundary line.

63. PLT090
An aircraft 60 miles from a VOR station has a CDI indication of one-fifth deflection, this represents a course centerline deviation of approximately
A) 6 miles.
B) 2 miles.
C) 1 mile.

64. PLT012
GIVEN:

Wingtip bearing change	15°
Elapsed time between bearing change	7.5 min
True airspeed	85 kts
Rate of fuel consumption	9.6 gal/hr

The time, distance, and fuel required to fly to the station is
A) 30 minutes; 42.5 miles; 4.80 gallons.
B) 32 minutes; 48 miles; 5.58 gallons.
C) 48 minutes; 48 miles; 4.58 gallons.

65. PLT014
If the relative bearing changes from 090° to 100° in 2.5 minutes of elapsed time, the time to the station would be
A) 12 minutes.
B) 15 minutes.
C) 18 minutes.

66. PLT064
(Refer to figure 55) En route on V448 from YKM VORTAC to BTG VORTAC, what minimum navigation equipment is required to identify ANGOO intersection?
A) One VOR receiver.
B) One VOR receiver and DME.
C) Two VOR receivers.

67. PLT014
The ADF is tuned to a radiobeacon. If the magnetic heading is 040° and the relative bearing is 290°, the magnetic bearing TO that radiobeacon would be
A) 150°.
B) 285°.
C) 330°.

68. PLT012
Inbound on the 190 radial, a pilot selects the 195 radial, turns 5° to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 10 minutes. The ETE to the station is
A) 10 minutes.
B) 15 minutes.
C) 20 minutes.

69. PLT056
(Refer to figure 17.) Which statement is true regarding illustration 2, if the present heading is maintained? The aircraft will
A) cross the 180 radial at a 45° angle outbound.
B) intercept the 225 radial at a 45° angle.
C) intercept the 360 radial at a 45° angle inbound.

70. PLT014
(Refer to figure 21.) If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time to the station?
A) 13 minutes.
B) 17 minutes.
C) 26 minutes.

71. PLT091
(Refer to figure 16.) At the position indicated by instrument group 1, what would be the relative bearing if the aircraft were turned to a magnetic heading of 150°?
A) 150°.
B) 190°.
C) 250°.

72. PLT091
If the relative bearing to a nondirectional radiobeacon is 045° and the magnetic heading is 355°, the magnetic bearing TO that radio beacon would be
A) 040°.
B) 065°.
C) 220°.

73. PLT466
14 CFR part 1 defines VNE as
A) maximum landing gear extended speed.
B) never-exceed speed.
C) maximum nose wheel extend speed.

74. PLT395
14 CFR part 1 defines VY as
A) speed for best rate of descent.
B) speed for best angle of climb.
C) speed for best rate of climb.

75. PLT444
In what type of operation, not regulated by 14 CFR part 119, may a commercial pilot act as pilot in command and receive compensation for services?
A) On-demand, nine or less passenger, charter flights.
B) Aerial application, and bird chasing.
C) On-demand cargo flights.

76. PLT447
A second-class medical certificate issued to a commercial pilot on April 10, this year, permits the pilot to exercise which of the following privileges?
A) Commercial pilot privileges through April 30, next year.
B) Commercial pilot privileges through April 10, 2 years later.
C) Private pilot privileges through, but not after, March 31, next year.

77. PLT220
If a pilot does not meet the recency of experience requirements for night flight and official sunset is 1900 CST, the latest time passengers should be carried is
A) 1800 CST.
B) 1959 CST.
C) 1900 CST.

78. PLT386
Does a commercial pilot certificate have a specific expiration date?
A) No, it is issued without a specific expiration date.
B) Yes, it expires at the end of the 24th month after the month in which it was issued.
C) No, but commercial privileges expire if a flight review is not satisfactorily completed each 12 months.

79. PLT161
What is the maximum indicated airspeed authorized in the airspace underlying Class B airspace?
A) 156 knots.
B) 200 knots.
C) 230 knots.

80. PLT405
Which is required equipment for powered aircraft during VFR night flights?
A) Anticollision light system.
B) Gyroscopic direction indicator.
C) Gyroscopic bank-and-pitch indicator.

81. PLT161
What transponder equipment is required for helicopter operations within Class B airspace? A transponder
A) with 4096 code and Mode C capability.
B) is required for helicopter operations when visibility is less than 3 miles.
C) with 4096 code capability is required except when operating at or below 1,000 feet AGL under the terms of a letter of agreement.

82. PLT444
Before beginning any flight under IFR, the pilot in command must become familiar with all available information concerning that flight. In addition, the pilot must
A) be familiar with all instrument approaches at the destination airport.
B) list an alternate airport on the flight plan, and confirm adequate takeoff and landing performance at the destination airport.
C) be familiar with the runway lengths at airports of intended use, and the alternatives available, if the flight cannot be completed.

83. PLT436
When operating a U.S.-registered civil helicopter, which document is required by regulation to be available in the aircraft?
A) A manufacturer`s Operations Manual.
B) A current, approved Rotorcraft Flight Manual.
C) An Owner`s Manual.

84. PLT444
Which of the following preflight actions is the pilot in command required to take in order to comply with the United States Code of Federal Regulations regarding day Visual Flight Rules (VFR)?
A) File a VFR flight plan with a Flight Service Station.
B) Verify the airworthiness certificate is legible to passengers.
C) Verify approved position lights are not burned out.

85. PLT414
During a night operation, the pilot of aircraft #1 sees only the green light of aircraft #2. If the aircraft are converging, which pilot has the right-of-way? The pilot of aircraft
A) #2, aircraft #2 is to the right of aircraft #1.
B) #1, aircraft #1 is to the right of aircraft #2.
C) #2, aircraft #2 is to the left of aircraft #1.

86. PLT416
Which airborne incident would require that the nearest NTSB field office be notified immediately?
A) Cabin door opened in-flight.
B) Flight control system malfunction or failure.
C) Cargo compartment door malfunction or failure.

87. PLT514
To obtain a continuous transcribed weather briefing including winds aloft and route forecasts for a cross-country flight, a pilot could monitor
A) a TWEB on a low-frequency and/or VOR receiver.
B) the regularly scheduled weather broadcast on a VOR frequency.
C) a high-frequency radio receiver tuned to En Route Flight Advisory Service.

88. PLT288
The visibility entry in a Terminal Aerodrome Forecast (TAF) of P6SM implies that the prevailing visibility is expected to be greater than
A) 6 nautical miles.
B) 6 statute miles.
C) 6 kilometers.

89. PLT514
Aviation Area Forecasts (FAs) for the contiguous U.S. are used in conjunction with inflight aviation weather advisories to interpolate
A) temperatures and winds at altitude.
B) conditions at airports for which no TAFs are issued.
C) radar echo precipitation types and intensity levels.

90. PLT475
What wind conditions would you anticipate when squalls are reported at your destination?
A) Rapid variations in windspeed of 15 knots or more between peaks and lulls.
B) Peak gusts of at least 35 knots combined with a change in wind direction of 30° or more.
C) Sudden increases in windspeed of at least 16 knots to a sustained speed of 22 knots or more for at least 1 minute.

91. PLT059
The station originating the following METAR observation has a field elevation of 5,000 feet MSL. If the sky cover is one continuous layer, what is the thickness of the cloud layer? (Top of overcast reported at 8,000 feet MSL.)
METAR KHOB 151250Z 17006KT 4SM OVC005 13/11 A2998
A) 2,500 feet.
B) 3,500 feet.
C) 4,000 feet.

92. PLT059
What is meant by the Special METAR weather observation for KBOI?
SPECI KBOI 091854Z 32005KT 1 1/2SM RA BR OVC007 17/16 A2990 RMK RAB12
A) Rain and fog are creating an overcast at 700 feet AGL; rain began at 1912Z.
B) The temperature-dew point spread is 1°C; rain began at 1812Z.
C) Rain and overcast at 1200 feet AGL.

93. PLT288
Which statement pertaining to the following terminal aerodrome forecast (TAF) is true?
TAF
KMEM 091135Z 0915 15005KT 5SM HZ BKN060
FM1600 VRB04KT P6SM SKC
A) Wind in the valid period implies surface winds are forecast to be greater than 5 KTS.
B) Wind direction is from 160° at 4 KTS and reported visibility is 6 statute miles.
C) SKC in the valid period indicates no significant weather and sky clear.

94. PLT288
What does the contraction VRB in the Terminal Aerodrome Forecast (TAF) mean?
A) Wind speed is variable throughout the period.
B) Cloud base is variable.
C) Wind direction is variable.

95. PLT290
SIGMET's are issued as a warning of weather conditions which are hazardous
A) to all aircraft.
B) particularly to heavy aircraft.
C) particularly to light airplanes.

96. PLT061
What significant cloud coverage is reported by this pilot report?
KMOB
UA/OV 15NW MOB 1340Z/SK 025 OVC 045/075 OVC 080/090 OVC
A) Three (3) separate overcast layers exist with bases at 2,500, 7,500 and 9,000 feet.
B) The top of the lower overcast is 2,500 feet; base and top of second overcast layer are 4,500 and 9,000 feet, respectively.
C) The base of the second overcast layer is 2,500 feet; top of second overcast layer is 7,500 feet; base of third layer is 9,000 feet.

97. PLT287
With regard to windflow patterns shown on surface analysis charts; when the isobars are
A) close together, the pressure gradient force is slight and wind velocities are weaker.
B) not close together, the pressure gradient force is greater and wind velocities are stronger.
C) close together, the pressure gradient force is greater and wind velocities are stronger.

98. PLT495
What visible signs indicate extreme turbulence in thunderstorms?
A) Base of the clouds near the surface, heavy rain, and hail.
B) Low ceiling and visibility, hail, and precipitation static.
C) Cumulonimbus clouds, very frequent lightning, and roll clouds.

99. PLT021
GIVEN:

	WEIGHT	LNG. ARM	LNG. MOM.	LAT. ARM.	LAT. MOM.
Empty weight	1700	116.1	?	+0.2	
Fuel (75 gal at 6.8 ppg)	?	110.0	--	--	
Oil	12	179.0	--	--	
Pilot (right seat)	175	65.0	?	12.5	
Passenger (left seat)	195	104.0	?	3.3	?
TOTALS	?	?	?	?	?

Determine the longitudinal and lateral CG respectively.
A) 109.35 inches and -.04 inches.
B) 110.43 inches and +.02 inches.
C) 110.83 inches and -.02 inches.

100. PLT021
GIVEN:
Weight A. 135 pounds at 15 inches aft of datum
Weight B. 205 pounds at 117 inches aft of datum
Weight C. 85 pounds at 195 inches aft of datum
Based on this information, the CG would be located how far aft of datum?
A) outside the CG envelope; the maximum gross weight is exceeded.
B) outside the CG envelope; the maximum gross weight and the gross-weight moment are exceeded.
C) within the CG envelope; neither maximum gross weight nor gross-weight moment is exceeded.