



DOCUMENT
GSM-G-CPL.021

DOCUMENT TITLE
HUMAN PERFORMANCE AND LIMITATIONS

CHAPTER 22 – PRACTICAL EXAMINATION QUESTION

Version 1.0
September 2012

This is a controlled document. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission, in writing, from the Chief Executive Officer of Flight Training Adelaide.

CONTENTS	PAGE
PRACTICE EXAMINATION QUESTIONS	3
PRACTICE EXAMINATION QUESTIONS - ANSWERS.....	53
HONG KONG CAD BASED QUESTIONS.....	54
HPL 1.....	54
HPL 2.....	60
ANSWERS – HONG KONG CAD QUESTIONS.....	67
HPL 1.....	67
HPL 2.....	67

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

PRACTICE EXAMINATION QUESTIONS

1. Oxygen is transported around the body
 - a. dissolved in blood plasma
 - b. by red blood cells which contain haemoglobin
 - c. by white blood cells which contain haemoglobin
 - d. by red and white blood cells which contain haemoglobin
2. What is the approximate cabin altitude above which you must breath 100% oxygen if you are to maintain an alveolar partial pressure equal to that at sea level?
 - a. 26,000 ft.
 - b. 30,000 ft.
 - c. 33,700 ft.
 - d. 38,000 ft.
3. What is the approximate time of useful consciousness when hypoxia develops at the specified altitudes?

<u>18,000 ft</u>	<u>30,000 ft</u>
a. 2-3 min	10-15 sec
b. 10 min	2 min
c. 30 min	45-75 sec
d. 40 min	5 min
4. What is the effect on cabin temperature of a rapid decompression at 30,000 ft?
 - a. sudden and extreme drop.
 - b. insignificant change over the first 2 minutes.
 - c. gradual decrease to ambient temperature over about 10 minutes of cabin heating ceasing.
 - d. gradual decrease to ambient temperature over 30 minutes if cabin heating continues.
5. Someone with hypoxia will have blue lips and fingernails due to
 - a. coldness
 - b. lack of haemoglobin in those areas
 - c. the haemoglobin in the blood being de-oxygenated
 - d. Impaired central temperature sensing of the body
6. Susceptibility to hypoxia is increased by
 - a. heat
 - b. noise
 - c. smoking
 - d. under-breathing

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

7. If while flying at 5,000 ft cabin altitude a passenger becomes dizzy and anxious, with tingling sensation in the extremities, you should
 - a. encourage him/her to breathe faster
 - b. get him/her to breathe into and out of a paper bag
 - c. reduce cabin altitude and wait for symptoms to subside
 - d. increase cabin altitude and wait for symptoms to subside
8. How long is needed for full adaptation of the eye to darkness
 - a. 5-10 min.
 - b. 10-20 min
 - c. 20 -30 min
 - d. over 30 min
9. The factor that contributes most in assessing an individual's susceptibility to coronary artery disease is:
 - a. stress.
 - b. obesity.
 - c. smoking.
 - d. family history.
10. The vestibular apparatus of the ear comprises:
 - a. cochlea and eardrum.
 - b. outer ear and otoliths.
 - c. eardrum and eustachian tube
 - d. otoliths and semicircular canals
11. Research shows that the greatest number of unrelated items that can be retained in the working memory at any one time is:
 - a. about 7.
 - b. 10 to 12.
 - c. about 18.
 - d. unlimited.
12. In visual searching, a saccade/rest cycle usually occupies roughly
 - a. 0.3 sec.
 - b. 1.0
 - c. 2.0 sec.
 - d. 3.0 sec.
13. Perception involves creation of mental models of the outside world which are based
 - a. entirely on sensory information.
 - b. entirely on experience and expectations.
 - c. on sensory information and motor memory.
 - d. mainly on sensory information, but also on experience and to some degree, expectations
14. In the air, orientation is most reliably determined through information from:

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

- a. the visual system.
 - b. the vestibular apparatus.
 - c. the somatosensory system.
 - d. the semantic memory store.
15. A pilot experiencing illusory pitch-up as a result of linear acceleration will probably push the stick forward. The likely immediate effect of this action will be:
- a. nothing,
 - b. that the illusion will stop
 - c. that the illusion will lessen.
 - d. that the illusion will become worse
16. Stress management programmes involve:
- a. removal of stress.
 - b. prevention of stress.
 - c. Counselling, relaxation, Religion, fitness programmes.
 - d. Removal and prevention of stress.
17. If a pilot completes a difficult task successfully and is faced with a task of similar difficulty a few days later he/she should experience:
- a. stress.
 - b. less stress.
 - c. much greater stress.
 - d. about the same degree of stress.
18. Repetitive exposure to the environmental stress of noise:
- a. has no overall effect on the body.
 - b. causes the body to become less susceptible to it,
 - c. causes the body to become more susceptible to it,
 - d. causes NIHL
19. The complete resynchronising of circadian rhythms after time-zone crossings takes about:
- a. twelve hours per hour of time shift.
 - b. one day per hour of time shift.
 - c. three days per hour of time shift.
 - d. five days per hour of time shift.
20. It is generally more difficult for the body to adapt to eastward travel than to westward travel because, when going eastward:
- a. sleep apnoeas are fostered.
 - b. circadian rhythms must be shortened.
 - c. circadian rhythms must be lengthened,
 - d. the periodicity of body temperature rhythm is increased

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

21. The major dimensions of personality most widely recognised are:
- a. tension and libido.
 - b. extroversion and anxiety.
 - c. decisiveness and credibility.
 - d. group awareness and approachability
22. In most non-emergency situations the good aircraft captain's style of leadership should be:
- a. democratic.
 - b. autocratic.
 - c. paternalistic.
 - d. laissez-faire
23. Which set of terms correctly completes the following statement
- "Where a crew acts as a group in deciding how to deal with a problem the solution arrived at will probably be ... (i) ... than that which would have been reached by the ... (ii) ... group member working alone".
- | | |
|-----------|-------------|
| (i) | (ii) |
| a. worse | average. |
| b. worse | least able. |
| c. better | average. |
| d. better | most able. |
24. The ideal pilot is:
- a. both 'person' and 'goal' directed.
 - b. neither 'person' nor 'goal' directed.
 - c. 'person' directed rather than 'goal' directed.
 - d. 'goal' directed rather than 'person' directed.
25. The approximate time of useful consciousness for an average person engaged in moderate activity, following an oxygen supply failure at 30,000 ft will be
- a. 20 seconds.
 - b. 45 seconds.
 - c. 1.5 minutes
 - d. 2.5 minutes
26. A precaution to be taken when using oxygen is that:
- a. the mask should be loose enough to allow exhaled air to escape.
 - b. cabin altitude should be set at sea level.
 - c. no smoking should be allowed.
 - d. 100% oxygen should not be used for longer than 45 minutes

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

27. What condition is treated by voluntarily decreasing the rate of breathing?
- hyperventilation
 - hypoxia
 - vertigo
 - bends
28. What is the recommended precaution regarding flying following a period of scuba-diving which was limited to a depth not requiring decompression stops?
- supplemental oxygen should be available for all flights for the four hour period following the diving
 - in the 24 hour period following the diving, total flight time should not exceed four hours
 - flight altitude should be limited to 8000 ft for the four hour period following the diving
 - the twelve hour period following the diving should be spent resting at sea level
29. Flying while suffering from a head cold increases the risk of.
- pressure vertigo
 - hypoxia
 - carbon monoxide poisoning
 - decompression sickness
30. Which of the following statements correctly describes the effects resulting from many years exposure to aircraft engine noise?
- some loss of hearing may occur but it will last for only a few minutes after each exposure.
 - some loss of hearing may occur but total recovery will eventually take place.
 - some loss of hearing may occur but partial recovery will eventually take place.
 - a permanent loss of hearing may occur.
31. Which of the following statements correctly describes the consequences of the consumption of alcohol before flying:
- judgement and performance will be impaired only if the blood alcohol concentration is above 0.05%
 - alcohol may impair judgement and performance even if consumed more than eight hours before flying
 - alcohol cannot impair judgement and performance if consumed more than eight hours before flying
 - a low level of alcohol consumption will initially improve judgement and performance
32. A symptom of carbon monoxide poisoning is:
- a feeling of well being
 - decreased body temperature
 - tingling hands and arms
 - impairment of vision

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

33. A flight deck should be designed so that
 - a. the pilot is able to view all important displays with minimal head movement
 - b. there are small balls visible on the windscreen pillar
 - c. analogue information is easier to read than digital information
 - d. any body from the average population can use it without moving the seat
34. A factor that can reduce night vision is:
 - a. high cabin temperature
 - b. dull instrument lighting
 - c. red cockpit lighting
 - d. cigarette smoking
35. Select the correct statement regarding the alleviation of the effects of hypoxia at cabin altitudes above 10,000 ft where supplemental oxygen is not available.
 - a. the effects can be alleviated by mild exercise accompanied by regular breathing
 - b. the effects can be alleviated by slow, deep breathing
 - c. the effects can be alleviated by rapid, shallow breathing
 - d. the effects cannot be alleviated
36. Which statement correctly describes the effect of cigarette smoking on hypoxia?
 - a. heavy smoking increases the susceptibility to hypoxia only above 4,000'
 - b. heavy smoking increases the susceptibility to hypoxia only above 10,000'
 - c. heavy smoking increases the susceptibility to hypoxia at all altitudes
 - d. heavy smoking does not increase the susceptibility to hypoxia at an altitude
37. Light-headedness, rapid breathing and tingling arms and hands are symptoms of
 - a. hypoxia
 - b. hyperventilation
 - c. carbon monoxide poisoning
 - d. decompression sickness
38. After a period of scuba diving to a depth requiring decompression stops, but lasting less than four hours, the recommended sea level rest which should be taken before flying is:
 - a. 4 hours
 - b. 8 hours
 - c. 12 hours
 - d. 24 hours
39. An excessively cold environment will cause:
 - a. impairment of hearing
 - b. impairment of thinking
 - c. vision 'grey out'
 - d. disorientation

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

40. The most important requirement of a display or control is
- that it is easy to reach
 - that it is standardised in location and sense of use
 - that it is well-lit at night
 - it is colour coded
41. The 'negative g' level which is accepted as the general tolerance is:
- 3.0g
 - 4.0g
 - 5.0g
42. It is essential that any flight deck warning system must
- inform, or report
 - be attention -getting, but not startling
 - be audible for problems concerning equipment failure
 - all of the above
43. One trap for pilots operating in the 'glass cockpit' is that they
- become complacent and lose their ability to make command decisions
 - often neglect the mode capacity of displays
 - lose their ability to form internal models of the real world
 - are prevented from solving unusual, or unexpected problems
44. Whilst in an aeroplane flying at an altitude of 3000 ft a passenger shows the following symptoms:

light headedness
dizziness
tingling of the hands and feet
numbness
visual disturbances
tremors
confused thinking
faintness
rapid rate of breathing
skin is normal colour

This passenger is most likely to be suffering from:

- hypoxia
- hyperventilation
- being affected by carbon monoxide
- decompression sickness

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

45. Flying whilst suffering from a head cold increases the risk of
 - a. hypoxia
 - b. rupturing an eardrum
 - c. being affected by carbon monoxide
 - d. decompression sickness

46. At which frequency levels does hearing loss, caused by exposure to aeroplane engine noise over many years initially occur?
 - a. the higher frequency levels
 - b. the lower frequency levels
 - c. all frequency levels
 - d. normal speech levels

47. After exposure to bright light, full dark adaptation of the eyes will normally take about:
 - a. 2.5 min.
 - b. 10-15 min.
 - c. 30-40
 - d. 40-50

48. One action that will help prevent, or delay shock is to:
 - a. keep the injured person well heated, even if it causes discomfort
 - b. lie the injured person down with the head low to maintain blood supply to the brain
 - c. raise the level of the injured person's heart above the legs
 - d. encourage the injured person to drink copious quantities of fluid

49. In general terms, which of the following statements is correct?
 - a. novice pilots have fewer handling accidents than do experienced pilots
 - b. novice pilots have more handling accidents than do experienced pilots
 - c. novice pilots have fewer accidents caused by faulty judgement than do experienced pilots
 - d. novice pilots have more accidents caused by faulty judgement than do experienced pilots

50. On a hot day, approximately how much water does the body lose?
 - a. 2 litres
 - b. 5 litres
 - c. 8 litres
 - d. 12 litres

51. Coping requires
 - a. reducing cognitive symptoms and conscious repression.
 - b. an emotional, or physiological mediation to alleviate the denial
 - c. both a and b.
 - d. adjustment to the situation, or changing the situation

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

52. Some kinds of food are known to produce gas in the body. These include
- vegetables, mainly legumes
 - meats, especially red meat
 - any kind of thawed food
 - foods high in sugar
53. Evolved gas disorders are due to which one of the following?
- carbon dioxide.
 - oxygen.
 - nitrogen
 - carbon monoxide
54. Hyperventilation is caused by
- over breathing
 - under breathing
 - breathing too much carbon dioxide
 - breathing too much carbon monoxide
55. Highly automated and multi-functional electronic equipment in the glass cockpit may
- lead to mode confusion
 - cause loss of situational awareness
 - encourage automation complacency
 - all of the above
56. Which of the following conditions will not cause a pilot think that he/she is high on approach?
- the runway slopes up from the threshold
 - the runway is narrower than usual
 - the approach is black
 - visibility is poor
57. Which of the following conditions will cause a pilot to think that he/she is low on approach?
- the lighting is less bright than usual
 - the terrain slopes down to the threshold
 - the air is abnormally clear
 - the runway is shorter than usual
58. Hypoxic hypoxia is that state where
- there is a dangerous excess of carbon dioxide in the blood
 - there is a dangerous excess of carbon monoxide in the blood
 - there is insufficient oxygen available in the alveoli to function at full efficiency
 - there is too much oxygen in the blood due to hyperventilation

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

59. Night vision starts to be affected at which cabin altitude?
- 2000'.
 - 4000'
 - 8000'
 - 13000'
60. Carbon monoxide is dangerous because
- it displaces oxygen from the red blood cells
 - it is heavier than air and so displaces the air
 - it has an unpleasant smell and is distracting
 - its effects increase on descent
61. Which of the following statements concerning short term memory, is incorrect?
- it serves us for a matter of seconds only
 - it is almost error free
 - it can only handle approximately 5 - 9 items at once
 - it is very susceptible to error
62. Which of the following would not be defined as good leadership?
- leading by example
 - advising intent before acting
 - making decisions on the basis that your knowledge is greater than your subordinates
 - praising good performance
63. Checklists should
- not use colour because it leads to confusion
 - contain abbreviations where possible
 - be resistant to wear from repetitive use
 - all of the above
64. Alcohol is classed as a
- CNS stimulant
 - CNS depressant
 - CNS analgesic
 - CNS sedative
65. Unequal air pressure between a part of the ear and the environment can cause pain and other complications. The part of the ear affected is the
- inner ear.
 - middle ear.
 - outer ear.
 - all three parts.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

66. The problem in Q65 is caused by a closed or blocked eustachian tube. One part of the flight will be the source of more problems than the others. This part is the
- climb
 - cruise
 - descent
 - landing
67. If your eustachian tube is closed or blocked, the problem is most likely to be at
- the nasal passage end of the tube
 - the ear end of the tube
 - anywhere along its entire length
 - the bend only
68. Which one of the following statements regarding displays is incorrect
- it takes 3.9 secs to read a 3 pointer altimeter, but only 1.3 secs to read a digital altimeter
 - readability is a high priority in their design
 - they may be aural, tactile, or visual
 - 4 millimetres is the accepted maximum height for letters and numerals in digital displays
69. Obesity can lead to
- low blood pressure
 - high blood pressure
 - fainting attacks
 - shortage of breath
70. To lower your risk of heart disease, which of the following would you avoid doing?
- being moderate with alcohol
 - having a positive attitude and avoiding emotional stress
 - choosing a low-salt, low-cholesterol diet
 - increasing your smoking, or taking it up if you don't already
71. After crossing a number of time zones, what is the average rate of time adjustment the body makes?
- 10 hrs per day
 - 7 hrs per day
 - 4 hrs per day
 - 1.5 hrs per day
72. The human brain is often considered analogous to a computer. It processes any input received through which of the following stages?
- decision-stimulus-perception-response
 - stimulus-perception-decision-response
 - response-stimulus-perception-decision
 - perception-response-decision-stimulus

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

73. The sensory memory length for visual images is about:
- 1 second
 - 10 seconds
 - 1 minute
 - 10 minutes
74. The sensory memory length for sounds is about:
- 1-2 seconds
 - 2-4 seconds
 - 4-8 seconds
 - 8-15 seconds
75. The short term memory has a retention span of about:
- 10-20 seconds
 - 15-30 seconds
 - 40-60 seconds
 - 2-3 minutes
76. The average number of items which can be held in the short term memory is:
- 7 plus or minus 2
 - 10 plus or minus 2
 - 4 plus or minus 2
 - 15 plus or minus 2
77. A characteristic of the short term memory is that it is apparently
- visual and acoustic
 - acoustic and spatial
 - spatial and visual
 - sensory and spatial
78. Short term memory is
- of average susceptibility to errors
 - very susceptible to errors
 - error free
 - almost error free
79. Stress:
- can widen the attention range
 - can restrict the attention range
 - does not affect the attention range
 - effects individuals attention ranges differently

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

80. TUC depends on
- a. the physical fitness of the individual
 - b. the rate at which depressurisation occurs
 - c. the gender of the individual
 - d. the cabin humidity at the time of depressurisation
81. Best night visual acuity is achieved by
- a. looking slightly "off-centre"
 - b. looking directly at an object
 - c. eating large quantities of red vegetables
 - d. sitting in a dark room for 30 mins before departure
82. The "leans" can be caused by:
- a. slowly entering a turn on instruments, followed by a fast wing levelling
 - b. quickly entering a turn on instruments, followed by a fast wing levelling
 - c. slowly entering a turn on instruments, followed by a slow wing levelling
 - d. quickly entering a turn on instruments, followed by a slow wing levelling
83. At which level does noise start to cause damage to the ears?
- a. 60dB
 - b. 85dB
 - c. 110dB
 - d. 140dB
84. Which noise level will cause physical pain to the ears?
- a. 85dB
 - b. 110dB
 - c. 140dB
 - d. 165dB
85. Examples of Software indicated in the SHELL model are
- a. safety equipment such as fire extinguishers, blankets and oxygen masks
 - b. instructions, checklists, passenger briefing cards and procedures
 - c. cabin staff, consumables and food trolleys
 - d. switches, levers and instrument faces
86. It has been said that the Airline's main interface with its paying customer is
- a. the check-in counter clerk
 - b. the seat in the aircraft
 - c. the seat in the departure lounge
 - d. the licensed travel agent

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

87. At about what "G" will our eyes start "greying out"?
- a. 1.5
 - b. 2.5
 - c. 3.5
 - d. 4.5
88. At which "G" range will we start to "blackout"?
- a. 4-5
 - b. 3-4
 - c. 2-3
 - d. 5-6
89. Which are three stages in the process of ones adaptation to stress?
- a. low, comfort, high
 - b. resistance, alarm, collapse
 - c. low, high, collapse
 - d. alarm, resistance, collapse
90. The bell-shaped curve of efficiency versus stress shows:
- a. that too high a stress level results in the most efficiency and fun
 - b. that too low a stress level results in the most efficiency and fun
 - c. that too high a stress level results in inefficiency and collapse
 - d. that too low a stress level results in zero efficiency and a great desire to sleep
91. What causes "attitude"?
- a. our thoughts colouring our perceptions
 - b. a rational series of mind processes
 - c. anything which reinforces our beliefs
 - d. irrational prejudice
92. Which of the following will increase ones resistance to stress?
- a. straining the whole system
 - b. prescription drugs
 - c. rest and relaxation
 - d. adopting a positive fitness programme
93. While in flight, you notice the other pilot is breathing heavily, his/her speech is slurred and he/she complains of feeling dizzy. You notice his/her lips and fingertips are blue-tinged. He/she is probably suffering from:
- a. hyperventilation
 - b. CO poisoning
 - c. hypoxia
 - d. food poisoning

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

94. The fact that the concentration of cones is greatest in the fovea, while rods are distributed over the whole of the retina means that
- night vision is best at the fovea
 - nigh vision is worst at the fovea
 - colour sensitivity is best in the peripheral region of the retina
 - light contrast is best at the fovea
95. Ideally, the 'normal' position for pointers on round-dial instruments should be
- in the 3 o'clock, or 12 o'clock position
 - in the 9 O'clock, or 12 o'clock position
 - in the 6 o'clock, or 12 o'clock position
 - in the 1 o'clock, or 12 o'clock position
96. A good captain will encourage the co-pilot to use communications styles, which are:
- assertive and submissive
 - aggressive and supportive
 - supportive and submissive
 - assertive and supportive
97. Which of the following should not be a feature of team decision-making
- use logic to analyse the problem, rather than being swayed by personal feelings.
 - even if you do not agree with a plan, it is important to accept it for the sake of harmony within the crew.
 - pursue the aims of the group rather than individual aims.
 - listen to the viewpoint of other crew members and try to see it their way
98. The 'troposphere' is the:
- inner layer of the atmosphere
 - middle layer of the atmosphere
 - the outer layer of the atmosphere
 - the zone of biological dependence
99. The atmosphere contains:
- about 78% oxygen
 - about 21 % oxygen
 - about 1% oxygen
 - about 84% oxygen
100. Alveoli are:
- small blood vessels in the liver
 - small air sacs in the lungs
 - small blood vessels in the lungs
 - attached to the trachea

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

101. The main function of haemoglobin is
 - a. to carry oxygen around the body
 - b. to carry carbon dioxide around the body
 - c. to carry carbon monoxide around the body
 - d. to increase the plasma pH

102. A rise in carbon dioxide concentration in the blood causes:
 - a. no change in respiration rate
 - b. a reduction in respiration rate
 - c. an increase in respiration rate
 - d. a reduction in blood pH

103. The altitude at which 100% oxygen has the same partial pressure as the partial pressure of oxygen at ground level is about
 - a. 10 000 ft
 - b. 22 000 ft
 - c. 34 000 ft
 - d. 18 000 ft

104. An exercise programme
 - a. has no effect on susceptibility to hypoxia
 - b. increases blood flow and protects against hypoxia
 - c. increases oxygen demand and increases the degree of hypoxia
 - d. will increase a person's tolerance to hypoxia

105. Hyperventilation means breathing:
 - a. more deeply or frequently than is necessary
 - b. less deeply and frequently than necessary
 - c. more deeply but less frequently than necessary
 - d. the same as in sleep apnoea

106. Otic barotrauma means:
 - a. that gas is entrapped in the gut
 - b. that gas is entrapped in the sinuses
 - c. that gas is entrapped in the middle ear
 - d. damage to the inner ear due to altitude changes

107. The eye adapts to differing light levels
 - a. by chemical changes in the retina
 - b. by changing the shape of the lens
 - c. by the lens becoming progressively opaque
 - d. by saccades and scanning

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

108. In conductive deafness
- a. there has been a failure of the eardrum or ossicles
 - b. there has been a failure of the cochlea
 - c. there has been a failure of the otoliths
 - d. there has been a failure in the cupula
109. Age-related vision loss is called:
- a. presbyopia.
 - b. presbcusis
 - c. presbyterianism
 - d. presbylystia
110. Age-related hearing loss is called:
- a. presbyopia
 - b. presbcusis
 - c. presbyterianism
 - d. presbylystia
111. Farsightedness, which is not caused by age, is called:
- a. yopia
 - b. presbypoa
 - c. hypermetropia
 - d. astigmatism
112. In anthropometry the terms static, contour and dynamic refer to
- a. stationary objects, curved objects and moving objects respectively
 - b. sitting positions, seat back-rest shape and limb clearance envelopes respectively
 - c. surface measures, seat back-rest shape and reach envelopes respectively
 - d. joint to joint measurements, surface measures and reach envelopes respectively
113. With age (usually about 45) the lens of the eye generally becomes:
- a. too elastic
 - b. too rigid
 - c. cracked
 - d. opaque
114. Ideally, the body mass index should be less than:
- a. 20
 - b. 25
 - c. 23
 - d. 19

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

115. A thrombus is:

- a. a narrowed artery
- b. a blood clot
- c. an air tube in the lung
- d. an infarct

116. The commonest cause of in-flight incapacitation is:

- a. gastro enteritis
- b. fits and faints
- c. coronary artery disease
- d. angina pectoris

117. Pilots suffering from alcoholism:

- a. normally lose their licence permanently
- b. normally return to flying after successful treatment
- c. normally continue flying while under treatment
- d. normally enjoy their flying more than other pilots

118. Yellow Fever vaccination is effective for about:

- a. 1 year
- b. 5 years
- c. 10 years
- d. 15 years

119. The visual sensory store is called:

- a. iconic memory
- b. echoic memory
- c. working memory
- d. semantic memory

120. Echoic memory lasts for:

- a. less than a second
- b. several seconds
- c. about half a minute
- d. is never lost

121. The distance cue of most importance to the pilot is:

- a. convergence
- b. accommodation
- c. retinal size of known objects
- d. overlap

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

122. In working memory, verbal information is stored in:
- a visual code
 - a semantic code
 - an acoustic code
 - a binary code
123. Information in long term memory:
- has an average life of about 1 year
 - has an average life of about 5 years
 - cannot be demonstrated ever to be lost
 - is only semantic in nature
124. In a visual search, the eye moves:
- continuously
 - in jerks and rests
 - sometimes continuously, sometimes in jerks and rests
 - cannot be sustained with any degree of accuracy
125. Shutting down an engine is an example of:
- skill based behaviour
 - rule based behaviour
 - knowledge based behaviour
 - environmental based behaviour
126. Lowering flap instead of undercarriage is normally an error of
- skill based behaviour
 - rule based behaviour
 - knowledge based behaviour
 - environmental based behaviour
127. Confirmation bias means:
- a tendency for people to seek only evidence that confirms their mental models
 - a tendency for people to join the Church of England
 - a tendency for people to believe what they are told
 - a tendency for people to seek confirmation of their actions
128. People appear:
- to like to impose structure and form on incoming information
 - to be rather lazy when it comes to structuring incoming information
 - actively to resist structuring incoming information
 - to disseminate incoming information to all crew concerned

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

129. A mismatch between the real world and the mental model is termed:

- a. an illusion
- b. an hallucination
- c. a dream
- d. an aberration

130. The somatosensory system:

- a. monitors heart rate and blood pressure
- b. monitors body position and orientation
- c. controls body temperature
- d. depends on rods and cones

131. In the oculogravic or somatogravic illusion the pilot:

- a. feels as though he is leaning
- b. misinterprets acceleration for pitch
- c. mistakes ground lights for stars
- d. has turned his/her head into the turn

132. The visual angle between horizon and visual touchdown point equals:

- a. the angle of approach
- b. 90 degrees minus the angle of approach
- c. 180 degrees minus the angle of approach
- d. 4/5 of 5/8 of the angle between the approach and the threshold

133. Low approach angles can lead to:

- a. short landings
- b. long landings
- c. heavy landings
- d. ballooned landings

134. Motor programmes

- a. do not require continuous conscious control
- b. require continuous conscious control
- c. are stored in working memory
- d. are only stored as iconic memory

135. Under arousing stress, attention is normally:

- a. distributed randomly and widely
- b. unaffected
- c. distributed tightly and restricted to the primary task
- d. intermittent and unreliable

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

136. An attentional system is required because
- channel capacity is limited
 - motor programmes require a separate sensory input
 - iconic memory has a very short duration
 - echoic memory is generally insufficient
137. Detecting relevant, but unattended information is called:
- the cocktail party effect
 - the liberal party effect
 - the third party effect
 - the birthday party effect
138. Increased arousal leads to:
- slower, but more accurate responding
 - faster, but more accurate responding
 - faster, but less accurate responding
 - slower, but less accurate responding
139. The amount of stress experienced depends on:
- the absolute amount of stimulation received
 - the subjective evaluation of perceived demand and perceived ability
 - the action of the parasympathetic nervous system
 - the feedback information relating to demand and ability
140. The effects of stress on performance are often expressed in terms of changes in the intermediate factor of.
- arousal
 - coping
 - demand
 - ability
141. Complex tasks are generally better performed at.
- low/moderate levels of arousal
 - high levels of arousal
 - very high levels of arousal
 - zero arousal
142. The part of the nervous system that prepares the body for action is called:
- the peripheral nervous system
 - the central nervous system
 - the sympathetic nervous system
 - the autonomic nervous system

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

143. Under acute stress, the rate of digestion is:
- a. slowed
 - b. unaffected
 - c. increased
 - d. suspended
144. The design eye position, or eye datum
- a. is always made clear to the pilot in Company Standard Operating Procedures
 - b. is the point around which the ideal cockpit should be designed
 - c. is the same for all pilots
 - d. is a theory yet to gain complete acceptance by all aircraft designers
145. Conformity, compliance, status and risky shift are all factors involved in
- a. group decision making
 - b. individual differences
 - c. personality assessment
 - d. anxiety management
146. The comfortable temperature for most people in normal clothing:
- a. 16 °C
 - b. 20 °C
 - c. 24 °C
 - d. 38 °C
147. The most stressful life event is considered to be:
- a. divorce
 - b. pregnancy
 - c. death of spouse
 - d. loss of job
148. For comfort at normal temperatures, relative humidity should be:
- a. 20 - 40%
 - b. 40 - 60%
 - c. 60 - 80%
 - d. 5 – 15 %
149. Changing job might be an example of:
- a. action coping
 - b. cognitive coping
 - c. symptom-directed coping
 - d. desperation

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

150. Regular physical exercise appears to:
- a. increase tension and anxiety
 - b. have no effect on tension and anxiety
 - c. reduce tension and anxiety
 - d. remodel tension and anxiety
151. Under 'fight or flight' conditions attention is:
- a. unaffected
 - b. focussed
 - c. broadly distributed
 - d. less accurate
152. Studies on circadian rhythms most often use:
- a. sleeping drugs
 - b. trans-meridian travel
 - c. isolation suites
 - d. water beds
153. When free running, the temperature cycle is normally:
- a. 23 hours
 - b. 24 hours
 - c. 25 hours
 - d. varied according to the parallel of latitude
154. Cues that lock circadian rhythms to clock times are most commonly called:
- a. synchronisers
 - b. blaurosen
 - c. zeitgebers
 - d. anchors
155. The highest body temperature occurs at:
- a. 06:00 hours
 - b. 12:00 hours
 - c. 18:00 hours
 - d. 01:00 hours
156. The duration of sleep is most heavily influenced by:
- a. time of day
 - b. time since last sleep
 - c. environmental temperature
 - d. environmental capture

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

157. Human performance is worst at about:

- a. 05:00 hours
- b. 14:00 hours
- c. 18:00 hours
- d. 17:30 hours

158. The EEG measures:

- a. brain activity
- b. heart activity
- c. muscle activity
- d. blood pH

159. Apnoea is:

- a. a leg cramp
- b. a snoring episode
- c. a cessation of breathing
- d. deep REM sleep

160. Stage 4 sleep is:

- a. slow wave sleep
- b. transitional sleep
- c. paradoxical sleep
- d. REM sleep

161. The inability to sleep because of shift work is an example of:

- a. chronic anxiety
- b. clinical insomnia
- c. situational insomnia
- d. circadian arrhythmia

162. Personality is:

- a. the collection of all of an individual's stable behavioural characteristics
- b. the way you protect yourself
- c. your capacity to get along with others
- d. the judgement criterion for employment purposes

163. The most reliable form of personality assessment is by:

- a. interview
- b. projective test
- c. questionnaire
- d. none of the above

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

164. The two main dimensions of personality normally identified are:
- a. anxiety and stability
 - b. extroversion and anxiety
 - c. stability and intelligence
 - d. goal and person orientation
165. Anxiety and extroversion are:
- a. well correlated with one another
 - b. independent of one another
 - c. different ways of showing the same thing
 - d. not present in the personality of a good pilot
166. Anxious extraverts are most likely to have which of the following?
- a. a risk-taking accident
 - b. an accident resulting from undue hesitancy
 - c. an accident resulting from a mishandled emergency
 - d. an accident due to incompetence
167. Interactive style is commonly analysed in terms of the following dimensions:
- a. person and goal directed
 - b. goal and task directed
 - c. person and social directed
 - d. goal and social directed
168. Interactive and leadership style should:
- a. be exactly the same whatever the circumstances
 - b. be generally stable, but adapted to suit special circumstances such as emergencies
 - c. be as fluid as possible to keep other crew members on their toes.
 - d. Mildly paternalistic, but very maternalistic
169. Four factors of importance in determining crew interaction are:
- a. perceived ability, personality, role, and handling/non-handling
 - b. perceived ability, competence, personality, and role
 - c. perceived ability, personality, role and status
 - d. competence, actual ability, objective opinion and status
170. The likelihood that someone will respond positively to a request is:
- a. compliance
 - b. conformity
 - c. risky shift
 - d. highly unlikely

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

171. A risky shift is:

- a. a change in flight level without a clearance
- b. the tendency for groups to take risky decisions
- c. the tendency for individuals to take risky decisions
- d. the shift between the hours of 01:00 and 09:30

172. Personality is defined as:

- a. the capacity to make friends
- b. the ability to adopt behaviour appropriate to the situation
- c. the sum of an individual's stable behavioural traits
- d. the aspect of homo sapiens which differentiates them from other animals

173. Anxious extroverts are likely to be described by others as:

- a. aggressive
- b. easy-going
- c. thoughtful
- d. arrogant neurotics

174. The main personality problem in single pilot operations is:

- a. risk-taking
- b. errors of skill
- c. failures of perception
- d. overconfidence

175. Side-by-side seating promotes:

- a. co-operation
- b. confrontation
- c. hostility
- d. anxiety

176. A paternalistic style in the captain should be:

- a. encouraged
- b. avoided
- c. used occasionally
- d. combined with a maternalistic style

177. In an emergency the most appropriate leader style is:

- a. P-G-
- b. P+G-
- c. P-G+
- d. P+ G+

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

178. Conformity means:
- a. doing what you are asked
 - b. wearing the correct uniform
 - c. going along with the expressed view of a group
 - d. extrapolating extensively on unrelated issues
179. If leading a group, you should, whenever possible:
- a. show independence and competence by solving problems without consulting other group members
 - b. seek the views of other group members before making a decision
 - c. argue strongly for your own point of view in order to maintain authority, even if you are not sure you are right
 - d. contemplate all issues for the entire duration of time available to do so
180. The 'out group' is a group of which:
- a. you are a member
 - b. you disapprove
 - c. you are not a member
 - d. you would like to be a member, but don't know the correct language code
181. The study of human measurement is called:
- a. anthropology
 - b. anthropomorphics
 - c. anthropometry
 - d. andropomorphics
182. Limb clearances envelopes are an example of.
- a. static data
 - b. contour data
 - c. dynamic data
 - d. potential data
183. Usual cause of backache is pain from:
- a. compressed discs
 - b. muscles in tension
 - c. the spinal cord
 - d. bifurcation of the cauda equina
184. The most important consideration in display layout is:
- a. size
 - b. colour
 - c. standardisation
 - d. artistic merit

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

185. Multi-pointer instruments should be:
- a. avoided because they do not enable precise readings
 - b. avoided because they generate errors
 - c. encouraged because they are quick to read
 - d. encouraged because they are cost effective
186. Collimated means:
- a. arranged in columns
 - b. at eye level
 - c. focussed at infinity
 - d. positioned at the resting focal distance
187. Displays should, generally:
- a. be digital
 - b. be analogue
 - c. match the way the pilot conceives the displayed variable
 - d. take into account the individual's perceptive ability
188. The switches in a rows of switches should be:
- a. as similar as possible to one another
 - b. as different as possible from one another
 - c. arranged however looks best
 - d. be activated in alternating directions
189. To increase the value of a displayed variable, an associated knob should turn:
- a. clockwise
 - b. anticlockwise
 - c. in either direction
 - d. none of the above
190. On a highly automated flight deck, the Flight Management System should:
- a. advise the pilot, but allow him to make all decisions
 - b. manage the flight and inform the pilot only when it encounters a problem it cannot handle
 - c. co-operate with the pilot in a manner that is not yet fully resolved.
 - d. manage the flight, but allow manual override in low activity phases
191. Risky shift means:
- a. the tendency for extroverts to take more risks than introverts
 - b. the tendency for a group to make a more risky decision than that group's average individual
 - c. the tendency for commercial pressure to make pilots take risks
 - d. the tendency for people to make risky decisions when they are unclear about a situation

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

192. The ideal pilot, in his behaviour:
- a. 'Goal directed' rather than 'person directed'
 - b. 'Person directed' rather than 'goal directed'
 - c. neither 'person' nor 'goal directed'
 - d. both 'person' and 'goal' directed
193. In order to come to a good group decision, a group leader should, preferably:
- a. give a clear indication of his preference soliciting the views of other group members
 - b. identify the best solution himself and give clear instructions on carrying out his wishes without consulting other group members
 - c. consult other group members before giving his own views
 - d. ensure that the potential problems and difficulties of his preferred solution are not discussed in order to preserve moral
194. The approximate percentage of oxygen in the atmosphere at ground level is:
- a. 5%
 - b. 21%
 - c. 40%
 - d. 80%
195. The approximate period of useful consciousness at 30,000 ft is:
- a. 5 seconds
 - b. 4 minute
 - c. 1 minutes
 - d. 20 minutes
196. A pilot engaged in scuba diving makes a dive to a depth of 30 ft. The pilot should not fly within:
- a. 12 hours
 - b. 24 hours
 - c. 36 hours
 - d. 48 hours
197. A pilot showing the symptoms of dizziness , tingling at the fingertips and blurred vision may be suffering from:
- a. hyperventilation
 - b. hypertension
 - c. hypoxia
 - d. high blood pressure
198. The part of the eye which bends the most light is:
- a. the lens
 - b. the cornea
 - c. fluid in the eye
 - d. the iris

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

199. The most likely cause of coronary heart disease is
- a. obesity
 - b. smoking
 - c. stress
 - d. high fat diet
200. A pilot is 32 years old, his height is 175cm and his weight 80kgs. His BMI is:
- a. 20 underweight
 - b. 23 about right
 - c. 24 correct
 - d. 26 overweight
201. The most important sense for orientation is:
- a. visual
 - b. somatosensory
 - c. vestibular
 - d. inner ear
202. If disorientated the pilot should believe:
- a. vestibular information
 - b. vision and inner ear mix
 - c. instruments
 - d. cochlea information
203. An attentional mechanism is required because:
- a. working memory is limited
 - b. processing capacity is limited
 - c. the selection process is too broad
 - d. it chooses from episodic or semantic memory
204. The average number of 'chunks' of information held in the working memory is:
- a. 4
 - b. 7
 - c. 12
 - d. infinite
205. A "motor programme" is:
- a. rule based behaviour not requiring conscious thought
 - b. rule based behaviour requiring conscious thought
 - c. learnt behaviour not requiring conscious thought
 - d. skill based behaviour requiring conscious thought

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

206. Which statement about sleep is not correct?
- a. slow wave sleep may be related to body restoration
 - b. as people get older they require less sleep
 - c. 8 hours of sleep will contain only one, or two bouts of REM sleep
 - d. there is no absolute amount of sleep that must be achieved
207. How does arousal affect performance:
- a. affected in underload, but not overload
 - b. affected in overload but not underload
 - c. no affect
 - d. performance is affected in both overload and underload situations
208. How does taking small amount of alcohol (3 -5 units)just before sleep affect the sleeping pattern:
- a. reduced REM
 - b. increased slow wave
 - c. increased sleep period
 - d. increased REM
209. Checklists should be written:
- a. in upper case only
 - b. in normal upper and lower case
 - c. in normal upper and lower case with only upper case or italics for emphasis
 - d. in lower case bold
210. A group decision is:
- a. better than the average group member's decision
 - b. worse than the average group member's decision
 - c. as good as the average group members decision
 - d. worse than the average, but better than the best
211. A captain having made a decision should:
- a. encourage questions and ideas so that potentially good ideas are not lost
 - b. gently discourage questions and ideas for the good of group moral
 - c. actively discourage questions and ideas
 - d. rigidly refuse to listen to questions and ideas
212. If the pilot is seated below the Design Eye Point (DEP) during an approach at about 200 ft he/she will:
- a. lose sight of a portion of the undershoot
 - b. lose sight of a portion of the overshoot
 - c. see more than if he/she sat at the DEP
 - d. see the same as at the DEP

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

213. The best visual cues on the approach for height are:

- a. speed and colour of passing objects
- b. the horizon with respect to objects on the windscreens
- c. vestibular reaction
- d. flow of colour and the texture

214. Skilled based behaviour is:

- a. based on experience and knowledge
- b. well learnt routines requiring little conscious thought
- c. require conscious thought
- d. no conscious thought required

215. Slow wave sleep is used to:

- a. restore the body
- b. help learn and organise the mind
- c. rest
- d. dream

216. Stress management is best achieved by:

- a. identifying the day's stressors and dealing with them one at a time
- b. identifying one's stressors and then doing something about them
- c. can only be achieved by a qualified stress analyst
- d. leaving it up to someone else

217. What is known as the 'risky shift'

- a. multiple crew over-confidence
- b. single crew overconfidence
- c. night flying between 2230 and 2330
- d. night flying between 2230 and sunrise

218. Which of the following tropical diseases is the largest killer world wide:

- a. malaria
- b. cholera
- c. typhoid
- d. yellow fever

219. Adrenalin is known as the:

- a. flight or fright hormone
- b. fright or fight hormone
- c. fight or fright hormone
- d. fight or flight hormone

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

220. Approaching an uphill sloping runway does the pilot tend to fly:
- a low approach
 - a high approach
 - either a or b
 - both a & b
221. What is the eye datum:
- the datum point around which the eye can focus
 - the angle of field of view
 - the optimum field of view from the flightdeck by pilots
 - a point that ensures that all placards are visible on the flightdeck
222. Controls should be shaped:
- the same for each position in every aircraft
 - with associative shapes
 - by colour coding
 - exactly the same as each other
223. While flying straight and level can you solve a complex problem?
- no
 - yes
 - only if the problem solving takes less than 30 secs
 - only if the problem takes less than two minutes
224. Which one of the following is equivalent to one unit of alcohol?
- one pint of beer or one small glass of wine
 - two single measures of spirit or three small glasses of sherry
 - four pints of low alcohol beer or two measures of aperitifs
 - half a pint of bitter or one measure of spirit
225. How many units of alcohol can you drink each week without damaging your health permanently?
- 21 for men, 14 for women
 - 25 for men, 21 for women
 - 30 for men, 21 for women
 - 50 for men, 35 for women
226. How long does the iconic memory last without rehearsal?
- 1 to 3 mins
 - 1 to 15 seconds
 - 1 to 3 seconds
 - 0.5 to 1 second

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

227. Human error has been documented as the primary contributor to more than:
- 25% of commercial aircraft hull-loss accidents
 - 70% of commercial aircraft hull-loss accidents
 - 95% of commercial aircraft hull-loss accidents
 - all commercial aircraft hull-loss accidents
228. Taking alcohol, drugs, tobacco, to control stress is known as:
- stress related coping
 - relax related coping
 - symptom directed coping
 - reflex directed coping
229. According to the scale known as the Holmes and Ralph (1967) re-adjustment rating scale, which of the following would be considered to be more stressful:
- death of a close family member, excluding a spouse
 - redundancy from an airline
 - divorce
 - a short term in prison
230. The eustachian tube equalises pressure between:
- middle and outer ear
 - middle and inner ear
 - outer and inner ear
231. Carrying out an approach at a familiar airfield in poor conditions you would expect:
- more stress, less confidence
 - less stress, less confidence
 - less stress, more confidence
 - more stress, more confidence
232. If you are flying straight and level and the aircraft accelerates you could expect an illusion of:
- pitch up
 - pitch down
 - pitch up, roll to the left
 - pitch down, roll to the left
233. To control hyperventilation you should:
- control depth and rate of breathing
 - increase rate, but decrease depth of breathing
 - reduce rate, but increase depth of breathing
 - alternate between breathing and not breathing every 10 secs

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

234. What is the episodic memory:
- a. a memory of rule based skills
 - b. memory of numbers and words
 - c. memory of events
 - d. memory of short term information
235. The use of a checklist is the following type of behaviour:
- a. rule based
 - b. associative based
 - c. skill based
 - d. sycophantic
236. Flying skills
- a. can be changed easily
 - b. cannot be changed easily
 - c. can be understood
 - d. cannot be understood
237. When rotating a hectopascal subscale of an altimeter clockwise would you expect the reading of height to:
- a. decrease
 - b. increase
 - c. increase on No. 1 Alt, and decrease on No.2 Alt.
 - d. all of the above
238. Personality can best be described as
- a. getting on with other people
 - b. working to the same aims of the group
 - c. a stable set of characteristics
 - d. an unstable set of characteristics
239. Myopia is:
- a. gradual hardening of the eye's lens due to ageing
 - b. gradual softening of the eye's lens due to ageing
 - c. short sight
 - d. long sight due to age
240. The relationship between workload and performance is:
- a. a U shape graph
 - b. an inverted U shape graph
 - c. an exponential curve graph
 - d. a logarithmic curve graph

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

241. In medicine a prophylaxis could be expected to increase your protection from which one of the following diseases:
- yellow fever and polio
 - malaria
 - HIV infection
 - malaria, HIV and hepatitis B
242. A myocardial infarction is:
- entrapped barotrauma
 - air trapped in the intestine
 - nitrogen bubble caught in the vascular system
 - more commonly known as a heart attack
243. Taking which of the following drugs would make the pilot unfit to fly:
- Beta blockers (antihypertensive medication)
 - Stugeron, Avomine (antihistamines)
 - caffeine
 - aspirin
244. A vestibular illusion is:
- a cerebral illusion caused by stress or fatigue
 - an illusion of the middle ear caused by accelerations
 - an amatory dream resulting in nocturnal emissions
 - an illusion caused by accelerations in the inner ear
245. Cognition is:
- the individuals thoughts
 - the individuals interpretations and ideas
 - the individuals knowledge and understanding
 - all of the above
246. A pilot suffering from circadian disrythmia could expect his body clock to go into phase with local time at the rate of
- 3 hours per day
 - 2 hours per day
 - 1.5 hours per day
 - 2.5 hours per day
247. It is generally accepted that healthy individuals do not display any noticeably adverse symptoms due to the decrease in ambient pressure with increase in altitude, provided that the flight:
- does not exceed 5,000 feet
 - does not exceed 8,000 feet
 - does not exceed 10,000 feet
 - does not exceed 15,000 feet

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

248. If the delivery system in the aircraft is capable of providing 100% oxygen, then:
- flight to 10,000 feet may be achieved
 - flight to 33,700 feet may be achieved
 - flight to 40,000 feet may be achieved
 - flight to any level may be achieved
249. Sinus barotrauma is most likely to occur:
- during take-off from a high altitude aerodrome
 - during descent.
 - during initial climb to altitude.
 - during level flight in turbulence
250. Which of the following statements concerning the retina is correct:
- The retina has two types of light sensitive cells, both of which are sensitive to colour
 - The retina has two types of light sensitive cells which are called rods and cones. The rods are sensitive to colour but the cones are not.
 - The retina has three types of light sensitive cells, all of which are individually sensitive to colour
 - The retina has two types of light sensitive cells which are called rods and cones. The cones are sensitive to colour but the rods are not
251. Prolonged exposure to very high luminance can result in damage to the lens in the eye. Use of the correct type of sunglasses can prevent such damage, and these should have a luminance transmittance of
- at least 50%
 - 20%-50%
 - 10%-15%
 - 15%-40%
252. There may be a variety of reasons for syncopic attack, but the main cause is:
- a reduction in the blood supply to the brain
 - a reduction in the blood supply to the coronary artery
 - a reduction in the oxygen supply to the brain
 - a loss of co-ordination due to an excess of alcohol in the blood
253. In respect to alcohol intake for 50% of the male population any more than units per day or units per week can be damaging to vital organs. The missing figures are:
- 10 and 100
 - 6 and 30
 - 5 and 25
 - 8 and 40
254. The maximum number of unrelated items that can be retained in the working memory is:
- unlimited
 - 12
 - 7
 - 9

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

255. Which one of the following will be lost when an individual suffers from amnesia?
- the semantic memory.
 - the working memory.
 - the motor programmes.
 - the episodic memory.
256. Knowledge based behaviours:
- require a pilot to evaluate the information and then use his knowledge and experience to deal with the situation.
 - require that a routine or procedure has previously been learned.
 - require that the motor programmes have been learned and are stored for execution without needing conscious thought.
 - require that a routine is automatically stored in the semantic memory.
257. A pilot is able to determine the projected impact point on the runway while approaching to land visually
- because the texture flow on the retina flows away from the impact point.
 - because the texture flow on the retina remains stationary within approximately one hundred metres of the impact point.
 - because the texture flow on the retina flows at increasing speed towards the impact point.
 - because the texture flow on the retina increases in intensity towards the impact point.
258. Which of the following has been found to produce the highest stress levels:
- marital separation.
 - marriage.
 - personal injury or illness.
 - the death of a spouse or partner
259. In terms of arousal, when is an individual's performance at its best?
- at times of high arousal.
 - at times of low arousal.
 - at any time, providing that there is some degree of arousal.
 - at times of optimal arousal.
260. The circadian rhythms of body temperature and the sleep/wake cycle run together with the lowest point occurring at around:
- 05:00.
 - 12:00.
 - 23:00.
 - 02:00.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

261. Approximately how long after sleep onset will rapid eye movement (REM) sleep occur:
- 10 minutes. and is then repeated approximately every 30 minutes.
 - three to four hours
 - 90 minutes, and is then repeated approximately every 90 minutes.
 - seven hours.
262. A person suffering from narcolepsy:
- is unable to sustain regular patterns of sleep even when in a sleep deficit condition.
 - is unable to stay awake when in a sleep credit condition.
 - experiences short cessation in breathing during sleep.
 - is unable to sleep properly due to disruptions in his work/rest cycle
263. The processing of information is basically limited by:
- the capacity of the working memory and the rate at which information can pass through the system.
 - the type of stimuli and the ability of the semantic memory to absorb the information.
 - only being able to activate one motor programme at a time.
 - the capacity of the long term memory and the amount of stimuli presented to the receptors
264. During a visual search there are usually:
- two saccades per second.
 - ten saccades per second.
 - sixty saccades per minute.
 - three saccades per second.
265. Repeated exposure to a moderate level of stress will cause an individual to:
- suffer an increase in stress levels.
 - adapt to that stress and so reduce its impact.
 - suffer a reduction in stress levels and so in arousal.
 - suffer exactly the same amount of stress each time that exposure is repeated.
266. Electricity activity in the brain is measured by use of an:
- electrocardiogram.
 - electroencephalogram
 - electromyogram.
 - electroculogram.
267. The personality of an individual is best assessed by:
- an indepth interview with that individual.
 - projective testing.
 - a prolonged visual study of that individual.
 - personality testing by means of a questionnaire.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

268. The ideal pilot is said to be goal and person directed. This means that the individual:
- will be equally concerned about the safe and efficient conduct of the flight, as about the well being of his colleagues.
 - will be more concerned about establishing good relationships with his colleagues than with performing the required duties.
 - will have little regard for either his work or his colleagues but have an extremely high opinion of himself.
 - will be excessively concerned with safe and efficient operation of the flight and will expect others to behave exactly as he does.
269. In general, the average professional pilot tends to be:
- unstable and extroverted.
 - stable and introverted.
 - unstable and introverted.
 - stable and extroverted
270. Risky shift refers to the situation in which:
- a normally reserved individual makes a risky, and out of character, decision.
 - a group of individuals collectively make a decision which involves more risk than had any of those individuals made a decision alone
 - a group of extroverts confer to arrive at a decision which involves far less risk than had any of the individuals make the decision alone
 - a career move is made away from a comfortable but undemanding position.
271. In order to arrive at a good group decision, the leader of the group should
- always consider and explain his opinion first.
 - consider his opinion only, expecting that the rest of the group will benefit from his experience.
 - explain his opinion first then invite the opinions of the rest of the group.
 - reserve his opinion until he has heard the opinions of the remainder of the group, and then express his.
272. The cockpit working place is designed around a datum specific to:
- the pilot's eyes.
 - the pilot's seat.
 - the pilot's hands.
 - the control column.
273. It is suggested that the best way of presenting purely quantitative information to the flight crew is by means of:
- an analogue display.
 - digital display.
 - a moving tape display.
 - a combination of analogue and moving tape display.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

274. Two major problems experienced when using aircraft checklists are:
- that it is easy to reverse or change the sequence of the checks.
 - that it is easy to miss an individual item, and also respond to checks automatically.
 - that they are cumbersome and are readily discarded by flight crew who prefer to use memorised drills.
 - that they are boring and because of this flight crew are tempted to construct their own check sequence.
275. When several rows of control switches need to be included in cockpit panels, it is desirable that
- they should all be of identical design and colour because this makes the environment more cosmetically acceptable.
 - they should all be of the same design, but each system should have its own colour coding.
 - the ON position for certain systems should be different from the ON position for other systems.
 - they should be of differing sizes, shapes and colours to prevent the inadvertent operation of a particular system.
276. A Permanent Threshold Shift is:
- a decrease in TORA
 - a decrease in TODA
 - NIHL due to ossicle damage
 - NIHL due to damage to nerve fibres in the cochlea
277. 25 ml of alcohol, or approximately 2 standard drinks
- takes 1 hour to wear off
 - takes about 6 hours to wear off
 - takes about 12 hours to wear off
 - takes about 3 hours to wear off
278. Syncope is a term which refers to
- some manifestation of epilepsy
 - the inadvertent use of primary flight instruments
 - a change of consciousness due to oxygen deficiency in the brain
 - a mild form of myocardial ischaemia
279. The short-term memory has an average capacity of storing:
- 5 plus or minus 2 items for up to 30 minutes.
 - 7 plus or minus 2 items for up to 30 seconds.
 - meaningful items for up to five minutes.
 - sound-related items for up to five minutes.
280. A good captain will encourage the co-pilot to use communication styles which are
- assertive and submissive.
 - aggressive and supportive.
 - supportive and submissive.
 - assertive and supportive.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

281. Which of the following should not be a feature of team decision-making?
- a. use of logic to analyse the problem, rather than being swayed by personal feelings.
 - b. even if you do not agree with a plan, it is important to accept it for the sake of harmony within the crew.
 - c. pursue the aims of the group rather than individual aims.
 - d. listen to the viewpoints of other crew members and try to see it their way.
282. The effect of a prolonged slow turn with no external reference will be the sensation that:
- a. the rate of turn is increased.
 - b. the rate of turn is staying the same.
 - c. the rate of turn is decreasing.
 - d. none of the above.
283. The best visual clues on approach to land are:
- a. runway width.
 - b. runway length.
 - c. runway width and length.
 - d. texture flow and size of known objects on the ground.
284. To fly a 30° visual approach the pilot must be seated so that the visual impact point appears
- a. 3° above the horizon.
 - b. 3° below the horizon.
 - c. 3° above the threshold.
 - d. 3° below the threshold.
285. Angular acceleration is sensed by the
- a. eustachian tube
 - b. otolith.
 - c. vestibular apparatus
 - d. semicircular canals.
286. Linear acceleration is sensed by which part of the ear
- a. otolith
 - b. semicircular canals
 - c. eustachian tube.
 - d. vestibular apparatus
287. Which of the following correctly relates performance and arousal?
- a. a low level of arousal is usually accompanied by the ability to make quick decisions
 - b. a high level of arousal is usually accompanied by a low level of performance
 - c. a low level of arousal is usually accompanied by a high level of interest
 - d. a high level of arousal is usually accompanied by a high level of attention

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

288. Select the incorrect statement.
- a. environmental capture is more likely to occur to an experienced pilot.
 - b. environmental capture is more likely to occur to a trainee pilot.
 - c. environmental capture is a problem with skill based behaviour.
 - d. a habit can lead to environmental capture.
289. Skill based behaviour related to routine tasks or motor programs is prone to errors such as:
- a. environmental capture.
 - b. action slips.
 - c. risky shift.
 - d. misidentification.
290. The acceleration that gives an illusion of pitch up is_____ The correct procedure is_____
- a. somatogyral, trust your instruments.
 - b. somatogravic, trust your instruments.
 - c. somatogyral, trust your vestibular organs.
 - d. somatogravic, trust your vestibular organs.
291. Difficult tasks are best performed with:
- a. zero arousal levels.
 - b. moderate arousal levels.
 - c. high arousal levels.
 - d. extreme arousal levels.
292. If the final approach is lower than normal, the distance between the visual aim point and the touch down point (impact point) _____and the aircraft will touch down_____ the threshold.
- a. decrease; before.
 - b. decrease; after.
 - c. increase; before.
 - d. increase; after.
293. Which is the most effective attention-getting warning?
- a. visual.
 - b. aural (bells, horns etc).
 - c. voice and visual.
 - d. aural and visual.
294. The most satisfactory activation system for flightdeck toggle switches is:
- a. the sweep-on concept.
 - b. the forward-on concept.
 - c. the port-on, starboard-off concept.
 - d. the aft-on concept.

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

295. One of the main purposes of a LOFT simulator session is to
- a. allow the crew to make errors, then work as a team to resolve them
 - b. keep stress levels low to allow the crew to learn new procedures
 - c. give the instructor the opportunity to intervene and prevent development of bad habits
 - d. learn to develop a sense of infallibility in the interests of flight safety
296. Vigilance is an important flight deck skill. One example of a vigilant task is
- a. an individual's preparedness for difficulties
 - b. carefully reading items from a checklist
 - c. scanning for other traffic during a long flight
 - d. attention to all minor and major threat cues
297. When faced with multiple stressors the best approach is to:
- a. identify individual stressors and solve individually.
 - b. identify individual stressors and solve simultaneously.
 - c. have a nice cup of tea and a good lie down
 - d. ignore the stressors.
298. A major problem has to be solved. How can the Captain come to the best solution?
- a. voice his own idea instantly.
 - b. use "Tight Ship" and discourage adverse comments.
 - c. make a decision and not discuss it.
 - d. discuss with crew, encouraging ideas and criticism.
299. The term 'synergistic effect' refers to
- a. the effect of G forces on an individuals susceptibility to hypoxia
 - b. an undesired result when one drug is taken in combination with another drug
 - c. the confusion in meaning by pilots of similar words on checklists
 - d. a symptom of prolonged exposure to high stress levels
300. When recovering from a turn while flying IFR a pilot may suffer from the illusion of descending. This is an example of
- a. an illusion of the otoliths
 - b. a proprioceptive illusion
 - c. an illusion of the cochlea
 - d. poor instrument scanning
301. The oculogravie (false climb) illusion
- a. occurs when the aircraft accelerates forward
 - b. causes the otoliths to sense a nose-high attitude
 - c. may cause the pilot, who does not cross-check with the instruments, to dive the aircraft
 - d. all of the above

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

302. Somatogravitational illusions are caused by changes in linear acceleration, or gravity. Examples of these illusions are:
- the leans, coriolis illusion and graveyard spin
 - oculogravitational illusion, oculoagratational illusion and elevator illusion
 - elevator illusion, coriolis illusion and the leans
 - oculoagratational illusion, oculogravitational illusion and coriolis illusion
303. Somatogyral illusions are caused when angular acceleration
- causes the sensation of pitch up
 - stimulates the otoliths
 - causes the sensation of pitch down
 - stimulates the semicircular canals
304. Examples of somatogyral illusions are
- the leans, coriolis illusion and graveyard spin
 - oculogravitational illusion, oculoagratational illusion and elevator illusion
 - elevator illusion, coriolis illusion and the leans
 - oculoagratational illusion, oculogravitational illusion and coriolis illusion
305. Coriolis illusion causes the sensations of rolling, pitching and yawing all at the same time. This happens when:
- the pilot makes a head movement in a geometrical plane other than that of the turning plane of the aircraft
 - the aircraft enters a climbing, or descending turn and it is considered to be the most dangerous of all vestibular illusions
 - cupula deflection occurs in all three semicircular canals simultaneously
 - all of the above occurs
306. The system which responds to sensations from pressure on joints, muscles and skin is called the
- proprioceptive system
 - vestibular system
 - sensory input system
 - oculosomatic system
307. The middle ear consists of
- the auditory nerve, cochlea and semicircular canals
 - the tympanic membrane, ossicles and the eustachian tube
 - the ossicles, otoliths and semicircular canals
 - the eustachian tube, tympanic membrane and the external canal

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

308. Which statement relating to the vestibular system is incorrect?
- the body cannot physically distinguish between linear accelerations and the force of gravity
 - changes in the position of the head relative to gravity cause the otolithic membrane to shift position on the macula
 - on movement of the head the sensory hairs strike the otoliths in the endolymph and signal a change in head position to the brain
 - when the head is upright, a resting frequency of nerve impulses is generated by the hair cells
309. Which statement, regarding the wearing of contact lenses by pilots, is incorrect?
- bifocal contact lenses for the correction of presbyopia are suitable for flying
 - crew members who wish to use contact lenses while flying must have approval
 - approved lenses must have been worn for 8 hours a day for at least one month
 - a pair of ordinary extra spectacles must be carried at all times while contact lenses are being used
310. Which statement relating to vision correction is incorrect?
- varifocal lenses are generally not advised for use in flying
 - all spectacles restrict peripheral vision and thick frames should particularly be avoided
 - photosensitive lenses may be used only if approved by an ophthalmologist
 - where the correction is for presbyopia, 'look-over' spectacles are advised
311. Radial keratotomy is a surgical procedure where multiple, spoke-like incisions are made on the cornea. The purpose of this procedure is
- to eliminate the effects of colour blindness and allow a person to fly
 - to reduce the complications of myopia
 - to improve visual acuity
 - to reduce glare sensitivity
312. Monocular cues can aid in distance estimation. These cues are:
- motion parallax, retinal image size and three dimensional imaging
 - stereoscopy, aerial perspective and geometric perspective
 - retinal image size, three dimensional imaging and motion parallax
 - geometric perspective, motion parallax and retinal image size
313. Motion parallax is
- terrain, or objects appear elliptical when viewed from a distance
 - parallel lines tend to converge as the distance from the observer increases
 - an image focused on the retina is perceived by the brain to be of a given size
 - the apparent, relative motion of stationary objects as viewed by a moving observer
314. Linear perspective is
- terrain, or objects appear elliptical when viewed from a distance
 - parallel lines tend to converge as the distance from the observer increases
 - an image focused on the retina is perceived by the brain to be of a given size
 - the apparent, relative motion of stationary objects as viewed by a moving observer

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

315. Apparent foreshortening is
- a. terrain, or objects appear shorter when angled towards the observer
 - b. parallel lines tend to converge as the distance from the observer increases
 - c. an image focused on the retina is perceived by the brain to be of a given size
 - d. the apparent, relative motion of stationary objects as viewed by a moving observer
316. Retinal image size is
- a. terrain, or objects appear elliptical when viewed from a distance
 - b. parallel lines tend to converge as the distance from the observer increases
 - c. an image focused on the retina is perceived by the brain to be of a given size
 - d. the apparent, relative motion of stationary objects as viewed by a moving observer
317. Which statement about the visible light spectrum is incorrect?
- a. visible light is between ultra-violet and infra-red
 - b. the visible light spectrum is from 380 nanometres and 760 nanometres
 - c. visible light suffers a 900 phase shift at high altitudes
 - d. visible light is part of the electromagnetic energy spectrum
318. Which of the following statements best explains the term 'visual acuity'?
- a. in the absence of stimulus the eyes relax
 - b. the ability to resolve shapes, colours and fine details of objects
 - c. the ability to change focus by the ciliary muscles changing the shape of the lens
 - d. when tracking a moving target the eyes shift in a series of jerky movements
319. Which statement best describes empty field myopia?
- a. in the absence of stimulus the eyes relax
 - b. the ability to resolve shapes, colours and fine details of objects
 - c. the ability to change focus by the ciliary muscles changing the shape of the lens
 - d. when tracking a moving target the eyes shift in a series of jerky movements
320. Saccadic eye movement is best described as
- a. in the absence of stimulus the eyes relax
 - b. the ability to resolve shapes, colours and fine details of objects
 - c. the ability to change focus by the ciliary muscles changing the shape of the lens
 - d. when tracking a moving target the eyes shift in a series of jerky movements
321. When the term 'accommodation' is used with respect to the eye, it usually means
- a. in the absence of stimulus the eyes relax
 - b. the ability to resolve shapes, colours and fine details of objects
 - c. the ability to change focus by the ciliary muscles changing the shape of the lens
 - d. when tracking a moving target the eyes shift in a series of jerky movements

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

322. The retina contains two kinds of light-sensitive cells. Rods are for low light intensity and contrast, cones are for colour. Which statement relating to rods is incorrect?
- rhodopsin is always present in the rods because it cannot be bleached by light
 - for night vision to be effective, rhodopsin must build up completely in the rods
 - the greatest period light sensitivity of rods occurs after 30 - 45 minutes of darkness
 - rods can increase their sensitivity to light by up to 10,000 times
323. The reason that the eye has two blind spots at night is because
- each cone cell in the fovea is connected to a single nerve fibre
 - the periphery of the retina is where the rods are concentrated
 - the fovea contains a very high concentration of cone cells, but no rod cells
 - large numbers of rods may be connected to a single nerve fibre
324. The reason we are able to see objects is because
- they reflect light
 - the iris controls the size of the pupil
 - the retina contains light sensitive cells
 - the light sensitive cells contain light sensitive pigments
325. The Valsalva manoeuvre
- is used when the Mission position is no longer exciting
 - is used to pressurise the ears on ascent
 - is used to pressurise the ears on descent
 - is used to ventilate the ears at any time
326. Trapped gas disorders can be painful and debilitating. The offending areas are
- the joints of the arm and leg, stomach, small intestines, bowel and teeth
 - the inner ear, sinuses, alimentary canal and teeth
 - the middle ear, sinuses, teeth, stomach and bowel
 - the sinuses, teeth, small intestine, colon and middle ear
327. The sinuses are frontal, maxillary, ethmoidal / sphenoidal. Their respective locations in the skull are
- cheek region below the eyes, forehead above the eyebrows, behind the nose
 - cheek region below the eyes, behind the nose, forehead above the eyebrows
 - forehead above the eyebrows, cheek region below the eyes, between and behind the eyes
 - behind the nose, cheek region below the eyes, forehead above the eyebrows
328. The holder of a medical certificate shall inform the authority in writing in the event of
- becoming pregnant
 - any significant personal injury involving incapacity
 - any illness involving incapacity to function as a crew member
 - all of the above

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

329. As soon as the period of 21 days has passed in the case of illness
- the medical certificate shall be deemed to be suspended
 - once the medical certificate has been suspended, the suspension can only be lifted when the crew member declares him/herself fit for duty
 - the certificate can only be reinstated by appointment from the Authority
 - the suspension will remain in place at discretion of the Authority
330. Current research into Human Error accidents arrives constantly at one conclusion, ie
- inadequate confidential post-incident reporting methods implemented by aircrew
 - inadequate training in the areas of leadership, communication and teamwork
 - inadequate preflight planning leading to significant loss of situational awareness
 - inadequate evaluation of testing quality for procedural requirements on the flight deck
331. CRM - cockpit resource management, or crew resource management is a way towards improved safety in aviation born from the real life experiences of airline crews. It endeavours to eliminate all weak links in
- interpersonal human skills and safe realistic strategies for decision making
 - team work, situational awareness, stress and work-load management
 - flight deck design, corporate culture and government strategies
 - all of the above
332. Calling 'three greens' on final when there are, in fact, not three greens, is an example of
- a rule based error
 - a skill based error
 - environmental capture
 - the distorted workings of a sick and twisted mind
333. In a normal individual, hyperventilation is not directly fatal because
- oxygen is still being taken into the body, albeit in small quantities
 - it doesn't occur above 10,000' therefore it cannot cause death through oxygen starvation
 - as soon as the individual lapses into unconsciousness normal breathing patterns resume
 - the individual will not become unconscious due to hyperventilation
334. One of the main differences between veins and arteries is that
- all veins carry deoxygenated blood and all arteries carry oxygenated blood
 - veins have valves and low pressure, but arteries have no valves and high pressure
 - veins carry blood away from the heart and arteries carry blood to the heart
 - all of the above
- *** *Pulmonary arteries carry de-oxygenated blood from heart to lung*
335. One of the reasons why stagnant hypoxia occurs is because
- skeletal muscle movement is responsible for blood movement from the legs to the heart
 - gravity is responsible for blood movement from the head to the heart
 - skeletal muscle movement is responsible for blood movement to the brain
 - any one of the above

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

336. Air enters the lungs because
- a. it is sucked in through the nose and mouth
 - b. the thoracic cavity pressure is greater than atmospheric pressure
 - c. thoracic cavity volume is decreased by the movement of the diaphragm
 - d. thoracic cavity pressure is reduced to that below atmospheric pressure
337. A sphygmomanometer is an instrument used to measure arterial blood pressure. A reading from this instrument may be 120/80. These figures refer to
- a. systolic pressure and diastolic pressure respectively
 - b. diastolic pressure and systolic pressure respectively
 - c. pumping arterial pressure and resting arterial pressure respectively
 - d. both answers (a) and (b)
338. Situational awareness is easy to lose in the modern glass cockpit. It is generally accepted that there are three levels of situational awareness. These are:
- a. evaluate, anticipate, react
 - b. anticipate, react, evaluate
 - c. monitor, estimate, exaggerate
 - d. monitor, evaluate, anticipate

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
 LIMITATIONS**

PRACTICE EXAMINATION QUESTIONS - ANSWERS

1(b), 2(c), 3(c), 4(a), 5(c), 6(c), 7(b), 8(d), 9(d), 10(d),
 11(a), 12(a), 13(d), 14(a), 15(d), 16(c), 17(b), 18(d), 19(b), 20(b),
 21(b), 22(a), 23(c), 24(a), 25(b), 26(c), 27(a), 28(d), 29(a), 30(d),
 31(b), 32(d), 33(a), 34(d), 35(d), 36(c), 37(b), 38(d), 39(b), 40(b),
 41(a), 42(d), 43(c), 44(b), 45(b), 46(a), 47(c), 48(b), 49(b), 50(b),
 51(d), 52(a), 53(c), 54(a), 55(d), 56(d), 57(a), 58(c), 59(b), 60(a),
 61(d), 62(c), 63(c), 64(b), 65(b), 66(c), 67(a), 68(d), 69(b), 70(d),
 71(d), 72(b), 73(a), 74(c), 75(b), 76(a), 77(a), 78(d), 79(b), 80(b),
 81(a), 82(a), 83(b), 84(c), 85(b), 86(b), 87(c), 88(a), 89(d), 90(c),
 91(a), 92(d), 93(c), 94(b), 95(b), 96(d), 97(b), 98(a), 99(b), 100(b),
 101(a), 102(c), 103(c), 104(a), 105(a), 106(c), 107(a), 108(a), 109(a), 110(b),
 111(c), 112(d), 113(b), 114(b), 115(b), 116(a), 117(b), 118(c), 119(a), 120(b),
 121(c), 122(c), 123(c), 124(b), 125(b), 126(a), 127(a), 128(a), 129(a), 130(b),
 131(b), 132(a), 133(a), 134(a), 135(c), 136(a), 137(a), 138(c), 139(b), 140(a),
 141(a), 142(c), 143(a), 144(b), 145(a), 146(b), 147(c), 148(b), 149(a), 150(c),
 151(b), 152(c), 153(c), 154(c), 155(c), 156(a), 157(a), 158(a), 159(c), 160(a),
 161(c), 162(a), 163(c), 164(b), 165(b), 166(a), 167(a), 168(b), 169(c), 170(b),
 171(b), 172(c), 173(a), 174(a), 175(a), 176(b), 177(c), 178(c), 179(b), 180(c),
 181(c), 182(c), 183(b), 184(c), 185(b), 186(c), 187(b), 188(b), 189(a), 190(a),
 191(b), 192(d), 193(c), 194(b), 195(c), 196(a), 197(a), 198(b), 199(b), 200(d),
 201(a), 202(c), 203(b), 204(b), 205(c), 206(c), 207(d), 208(a), 209(c), 210(a),
 211(a), 212(a), 213(d), 214(b), 215(a), 216(a), 217(a), 218(a), 219(d), 220(a),
 221(c), 222(a), 223(b), 224(d), 225(a), 226(d), 227(b), 228(c), 229(c), 230(c),
 231(c), 232(a), 233(a), 234(c), 235(a), 236(b), 237(b), 238(c), 239(c), 240(b),
 241(b), 242(d), 243(b), 244(d), 245(d), 246(c), 247(c), 248(c), 249(b), 250(d),
 251(c), 252(a), 253(c), 254(d), 255(d), 256(a), 257(a), 258(d), 259(d), 260(a),
 261(c), 262(b), 263(a), 264(d), 265(b), 266(b), 267(d), 268(a), 269(d), 270(b),
 271(d), 272(a), 273(b), 274(b), 275(d), 276(d), 277(d), 278(c), 279(b), 280(d),
 281(b), 282(c), 283(d), 284(b), 285(d), 286(a), 287(d), 288(b), 289(b), 290(b),
 291(b), 292(c), 293(d), 294(a), 295(a), 296(c), 297(a), 298(d), 299(b), 300(a),
 301(d), 302(b), 303(d), 304(a), 305(d), 306(a), 307(b), 308(b), 309(a), 310(c),
 311(b), 312(d), 313(d), 314(b), 315(a), 316(c), 317(c), 318(b), 319(a), 320(d),
 321(c), 322(a), 323(c), 324(a), 325(d), 326(c), 327(c), 328(d), 329(a), 330(c),
 331(d), 332(a), 333(c), 334(b), 335(a), 336(d), 337(a), 338(d), 339 - , 340 - .

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

HONG KONG CAD BASED QUESTIONS

HPL 1

- Some H.K. tech questions have three choices of answers.
Be careful when marking answers!

1. -____ the effects of noise exposure, the effects of ageing is to cut out the ____tones of hearing first.
 - a. like, high
 - b. unlike, high
 - c. unlike, low
 - d. like, low
2. Damage to hearing will depend on
 - a. age and gender, with males more susceptible
 - b. duration and intensity of noise
 - c. volume and frequency level of sound
 - d. sound pressure level and frequency level
3. All pilots are going to suffer some hearing loss as part of the aging process.
 - a. this is called presbyopia
 - b. this is called presbycusis
 - c. this is called hypermetropia
 - d. this is called otitis media
4. The formula used for calculating Body Mass Index is
 - a. weight in kg divided by (height in metres)²
 - b. (height in metres)² divided by weight in kg
 - c. weight in kg multiplied by (height in metres)²
 - d. (height in metres)² multiplied by weight in kg
5. What is the main side effect of antihistamines?
 - a. slight fever
 - b. nausea and vomiting
 - c. blurred vision
 - d. drowsiness
6. The amount of O₂ in air at MSL is 21%. At 10,000 it is ____
 - a. 10%
 - b. 21%
 - c. 15%
 - d. 12%

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

7. The gaseous composition of the atmosphere is
 - a. N₂ 78%, O₂ 21% Other 1%
 - b. N₂ 21%, O₂ 78% Other 1%
 - c. N₂ 87%, O₂ 12% Other 1%
 - d. N₂ 79%, O₂ 20% CO₂ 1%
8. Symptoms of one type of Decompression Sickness are
 - a. blurred vision
 - b. blue colouration of the nose and eyelids
 - c. tingling of the lips and fingers
 - d. sore and aching joints
9. At an ambient pressure of 30,000' cabin pressure will be around ____ and the pressure differential will be ____
 - a. 6000', 9psi
 - b. 8000', 9psi
 - c. 6000', 12psi
 - d. 8000', 12psi
10. During a moving-eye scan the eye will only see when it stops moving. A move/stop cycle is called
 - a. a saccade and the move-stop cycle has a 3.0 second duration
 - b. empty field myopia and the move/stop cycle has a 0.3 second duration
 - c. empty field myopia and the move/stop cycle has a 3.0 second duration
 - d. a saccade, the move-stop cycle, has a 0.3 second duration
11. The vestibular apparatus comprises the
 - a. semicircular canals, cochlea and otolith organs
 - b. semicircular canals, proprioceptors and the otolith organs
 - c. otolith organs and the cochlea
 - d. otolith organs and the semicircular canals
12. High blood pressure leads to an increased risk of
 - a. coronary artery disease and/or stroke
 - b. family history of early onset heart disease
 - c. decompression sickness below FL180
 - d. fits, or seizures
13. Heart rate ____ and blood pressure ____ with temperatures above 36°C
 - a. increases, decreases
 - b. decreases, increases
 - c. decreases, decreases
 - d. increases, increases

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

14. Atmospheric perspective is
- the tendency for the colour of distant objects to shift to the red end of the spectrum in fog, or haze
 - tendency for objects to appear less distinct and smaller when the air is foggy, or hazy
 - the tendency for RWY thresholds to become less distinct in poor visibility causing the pilot to fly a high approach
 - the tendency for fog or haze to appear thicker than it is when viewing objects at an angle rather than straight through it
15. Eyes adjust to different levels of illumination by
- changing pupil size and by changes in the chemical composition of the retina's photosensitive cells
 - changing pupil size and changes in the chemical composition in the photosensitive cells of the cornea
 - changes to the iris and changes in the chemical composition of the lens
 - oculogravie changes to the pupil and retina
16. A person experiences muscular pain in the shoulders and a choking feeling while at a cabin altitude of 8000' he may be suffering from
- angina pectoris
 - myocardial infarction
 - decompression sickness
 - gastroenteritis
17. After diving to a depth of 30', or greater one should not fly for
- 12 hours
 - 24 hours
 - 48 hours
 - 36 hours
18. Around the age of ___ the lens is unable to accommodate fully and ___ is said to occur
- 45, presbyopia
 - 50, presbycusis
 - 55, myopia
 - 60, hypermetropia
19. At night , in order to achieve the best view of a target, it is necessary to
- look directly at the object at one to two second intervals
 - keep the eyes moving around the object
 - focus the object in a retinal position away from the fovea
 - both b) and c) are correct
20. Symptoms of hypoxia and hyperventilation are similar, so a patient should be
- questioned carefully before any action is taken
 - made to control their breathing, or to breath into a paper bag
 - treated as if hypoxic, but only if cabin altitude is above 14,000'
 - treated as if hypoxic if cabin altitude is above 10,000'

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

21. Breathing 100% O₂ at ____ will give the same ppO₂ in the lungs as at MSL
- 34,000'
 - 33,700'
 - 37,400'
 - 18,000'
22. The partial pressure of O₂ in the alveoli at 10,000' is approximately
- 55mm Hg
 - 103 mm Hg
 - 35 mm Hg
 - 160 mm Hg
23. The cause of cyanosis as a result of hypoxia is
- blue colouring of the fingernails and lips
 - deoxygenated haemoglobin
 - high levels of blood CO₂
 - euphoria and the inability to judge your own performance
24. Rate and depth of breathing is determined by
- blood CO₂ levels, or blood pH receptors in the brain
 - blood O₂ levels, or blood pH receptors in the brain
 - concentration of H⁺ ions in the haemoglobin
 - concentration of bicarbonate ions in the plasma
25. In the event of an explosive decompression you should
- hold your breath to extend the time of useful consciousness
 - make no attempt to hold your breath, breath normally until your mask is on
 - see that other crew members have their masks on properly, then see to your own mask
 - aviate, navigate and communicate
26. What effect does breathing in and out of a paper bag have?
- increases the concentration of carbon dioxide in the lungs
 - removes excess carbon dioxide from the blood
 - reduces nausea and light headedness
 - maintains a stable blood carbon monoxide level
27. In a rapid decompression at high altitude, the venturi effect will cause
- cabin altitude to reach as much as 5000' above actual altitude
 - misting in the cabin accompanied with noise and flying debris
 - a loud noise followed by rushing air and cabin misting
 - cabin temperature to be as much as 15° C higher than OAT

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

28. Nausea, vomiting and diarrhoea are usually symptoms of Gastroenteritis, but if they persist for more than 72 hours
 - a. it could indicate an Aortic Aneurism and you should see a doctor
 - b. it could be a Gastro-intestinal ulcer and you should see a doctor
 - c. it could be Malaria and you should see a doctor
 - d. it could be Salmonella poisoning and you should see a doctor
29. To maintain a satisfactory ECG, one should
 - a. make regular visits to the CAA doctor
 - b. maintain a healthy diet and keep alcohol intake down to a minimum
 - c. exercise regularly and not smoke
 - d. control blood cholesterol, exercise and not smoke
30. Pain in the chest, neck, shoulders and left arm, all of which subside with rest, is probably
 - a. angina pectoris
 - b. myocardial infarction
 - c. decompression sickness
 - d. gastroenteritis
31. Symptoms of carbon monoxide poisoning are
 - a. similar to hypoxia, but without the loss of judgement
 - b. tingling of the finger, arms and lips followed by muscle spasm
 - c. shortness of breath and loss of energy
 - d. headaches, breathlessness and cherry-red complexion
32. On long-haul flights aircraft cabin humidity may drop to as low as 5%. One should
 - a. wear warm clothes to maintain body temperature
 - b. drink fluid as required and use a moisturising agent to keep lips and skin moist
 - c. drink at least 250ml of water every 30 minutes
 - d. reduce cabin pressure to as low as possible
33. The time required for one unit of alcohol to be removed from the blood is
 - a. dependent on the individual's BMI, age and gender
 - b. approximately thirty minutes
 - c. up to eight hours in some cases
 - d. approximately one hour
34. A pilot's sunglasses should
 - a. effectively filter red light and have 85 - 90% luminance transmittance
 - b. effectively filter green light and have 70 - 85% luminance transmittance
 - c. effectively filter violet light and have 60 - 75% luminance transmittance
 - d. effectively filter blue light and have 10 - 15% luminance transmittance

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

35. What is the major epidemic disease spread by mosquitoes that kills the most people globally?
- a. Malaria
 - b. Yellow Fever
 - c. Typhoid
 - d. Cholera
36. Boyle's Law states that
- a. volume is inversely proportional to pressure for constant temperature
 - b. temperature is inversely proportional to pressure for constant volume
 - c. volume is directly proportional to pressure for constant temperature
 - d. volume is inversely proportional to temperature for constant pressure
37. Carbon monoxide(CO) has great affinity to
- a. Oxygen
 - b. Haemoglobin
 - c. Nitrogen
38. During a period of low sleepiness in the circadian rhythm you should ___ naps and should ___ exercise before bed.
- a. take / take
 - b. avoid / take
 - c. take / avoid
 - d. avoid / avoid
39. What is the side effect of Antihistamine?
- a. drowsiness
 - b. antibiotic resistance
 - c. gastrointestinal tract
 - d. nausea
40. The eye adapts to differing light levels
- a. By contracting and dilate Iris
 - b. By changing the chemical composition of Retina
 - c. Both A and B
 - d. Neither A nor B

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

HPL 2

1. A 3° glide slope is maintained when
 - a. the angle between the threshold and the horizon remains constant
 - b. the angle between the visual impact point and the opposite threshold remains constant
 - c. the angle between the visual impact point and the horizon remains constant
 - d. the angle between the visual impact point and the threshold remains constant
2. Confirmation bias means
 - a. complying only with those who support your hypothesis
 - b. accepting hypothesis-confirming information and disregarding that which disaffirms the hypothesis
 - c. being more inclined to regard the information which disaffirms the hypothesis as being more valuable than that which affirms it
 - d. confirming the acceptance of any hypothesis which affirms the information disregarded by other crew members
3. In an emergency situation and diverting due to bad WX , a complex decision will require
 - a. moderate to high level of arousal, or stress
 - b. a low level of stress, or workload
 - c. no stress at all
 - d. whatever level of stress that happens to be the case
4. In the graph below, person X is



- a. stable and extraverted
 - b. controlled and thoughtful
 - c. unstable and introverted
 - d. aggressive and introverted
5. Pilot personality is best assessed by
 - a. questionnaire
 - b. interview followed by projective tests
 - c. cocktails parties and golf days followed by interviews
 - d. interview
6. The ideal pilot should be
 - a. controlled and thoughtful
 - b. a stable extrovert
 - c. sober and pessimistic
 - d. a stable introvert

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

7. Ideally, checklists should use ____ for emphasis and ____ for normal text
 - a. uppercase, italics with black print on white background
 - b. italics, lowercase black print on white background
 - c. uppercase, lowercase black print on white background
 - d. italics, lowercase black print on yellow background
8. Circadian rhythms ____ when running free, so it is easier to fly ____ than to fly ____
 - a. decrease their time span, west, east
 - b. increase their time span, east, west
 - c. increase their time span, west, east
 - d. increase their time span, east, west
9. Displaced circadian rhythms will adjust at the approximate rate of
 - a. 1 - 2 days per hour
 - b. 1.0 - 1.5 hrs per day
 - c. whatever the individual's genetic predisposition dictates
 - d. 1.0 - 1.5 hrs per day, but only for westbound travel
10. At ____ the body temperature is at its ____ and it may be ____
 - a. 1800, lowest, difficult to concentrate
 - b. 0500, highest, difficult to sleep
 - c. 1800, highest, difficult to stay awake
 - d. 0500, lowest, difficult to stay awake
11. A decision made by a group is:
 - a. better than the decision made by the average individual member
 - b. rarely as good as the average individual member's decision
 - c. a risky decision whenever possible
 - d. always conformist, but rarely non-compliant
12. One member of a crew offers a very dangerous solution to a problem which is rejected by other crew members. He then offers a much less dangerous, but still slightly risky option. It is possible that the other crew members
 - a. are likely to seek a third option
 - b. are likely to demonstrate compliant behaviour and modify the second option
 - c. are likely to conform with the second option but not really accept it
 - d. are likely to accept the second option
13. The most important considerations in cockpit design are
 - a. eye datum and switch movement direction
 - b. eye datum and anthropometry
 - c. audible warnings and anthropometry
 - d. location of primary flight instruments and anthropometry

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

14. The correct position for the pilot to place the seat is
 - a. in line with the eye datum
 - b. in line with the primary flight instruments
 - c. 78 cm from the instrument panel
 - d. 78 cm from the eye datum reference balls
15. The design of the cockpit is based around
 - a. a single eye datum point
 - b. static, contour and dynamic measurements
 - c. the mid 90 percentile statistics from the sample population
 - d. practical and aesthetic considerations
16. Cockpits are designed to accommodate
 - a. all of the physical requirements of the individuals likely to use it
 - b. 90 percent of selected individuals who are likely to use it
 - c. the 95th percentile of selected individuals
 - d. the 5th to 95th percentile of selected individuals
17. A system design consideration which must be given to automated flight decks is
 - a. how autonomy will lead to loss of situational awareness
 - b. how much autonomy should be given to the aircraft
 - c. the degree of interaction at the human/computer interface
 - d. the effects of digital displays on fatigue and vigilance
18. Body language on the flight deck is
 - a. important, but difficult to evaluate due to the seating arrangements
 - b. very important
 - c. not very important
 - d. impossible to evaluate
19. Iconic memory lasts for ____ and echoic memory lasts for ____
 - a. 5 -10sec, 20 - 30sec
 - b. 10 sec, 20 sec
 - c. 0.5 -1.0sec, 2.0 - 8.0sec
 - d. 1.0 -5.0sec, 5.0 - 10.0sec
20. A pilot can employ ____ motor skills and make ____ conscious decision at the same time
 - a. several, several
 - b. several, one if no motor skills are being used
 - c. several, one
 - d. one, several

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS

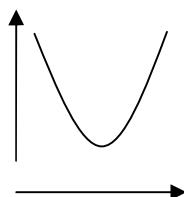


**HUMAN PERFORMANCE AND
LIMITATIONS**

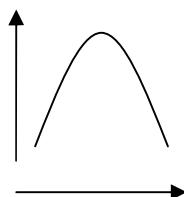
21. Which are you capable of doing
 - a. performing multiple complex tasks simultaneously
 - b. talking to others and flying straight and level at the same time
 - c. flying straight and level only
 - d. performing one complex task only before moving on to the next
22. Information in working memory, unless actively rehearsed will
 - a. be lost in 10 - 20 minutes
 - b. not be lost because it is incorporated into semantic memory
 - c. be lost in 2.0 - 8.0 seconds
 - d. be lost in 10 - 20 seconds
23. In the working memory, the impact of interference may be reduced by ____ the time between arrival of inputs and by ____ the similarity between them
 - a. reducing, increasing
 - b. increasing, reducing
 - c. increasing, increasing
 - d. reducing, reducing
24. What categories of behaviour are used by pilots?
 - a. skill based and knowledge based
 - b. rule based only
 - c. knowledge based only
 - d. rule based, skill based, knowledge based
25. Perception involves creation of mental models of the outside world which are based
 - a. on actual information detected by the sensory apparatus which is incorporated into the new model
 - b. mainly on sensory information, but also on experience and expectation
 - c. expectation, experience and previously established mental models of similar nature
 - d. previously established mental models modified to accommodate the current situation
26. The illusion experienced after rolling wings level from an undetected wing drop is
 - a. coriolis illusion
 - b. somatogravitational illusion
 - c. the bends
 - d. the leans
27. Pitch-up illusion from acceleration in straight and level flight will be ____ when the nose is lowered
 - a. reduced
 - b. improved
 - c. made worse
 - d. unaffected

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS

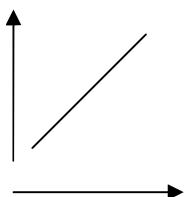
28. The relationship between performance and arousal (stress level) is



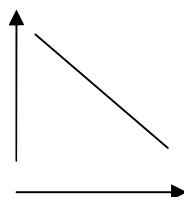
a).



b).



c).



d).

29. What physiological changes are caused by stress?

- a. increased heart rate and sweating
- b. rapid and irregular heart rate
- c. decreased concentration and vigilance
- d. narrow focus on the task at hand and the inability to assimilate incoming information

30. The release of adrenalin into the bloodstream causes

- a. decreased heart rate, dryness of the mouth and high blood sugar
- b. increased heart rate, increased blood flow and increased breathing
- c. high blood sugar levels, increased heart rate and increased rate of digestion
- d. increased heart rate, increased blood flow and decreased breathing

31. As a person gets older they

- a. require more sleep because their metabolism is slowing down
- b. require more sleep and will sleep at various times of the day and night
- c. require less sleep, but are less flexible about when they sleep
- d. require less sleep, but will be prone to sleep at any time

32. Sleep apnoea (cessation in breathing)

- a. causes minor brain damage which may go unnoticed
- b. causes REM rebound
- c. causes daytime tiredness
- d. causes disruption to body rhythms

33. The ideal leadership style is considered to be

- a. P+, G-
- b. P+, G+
- c. P-, G+
- d. P-, G-

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



**HUMAN PERFORMANCE AND
LIMITATIONS**

34. The alerting function for all important system failures should be done by
- flashing visual warning placed in the optimum panel position
 - audible warning using a digitized female voice
 - audible warning using a bell, or horn sound
 - audible warning with visual signal as well if the option permits
35. In an urgent, but not life threatening situation when a decision has to be made the ideal captain should
- become a P+, G- individual until the emergency has passed
 - solicit ideas from the crew before stating his/her own opinion
 - state his/her own opinion first to encourage other to do likewise
 - not involve others in the decision, but discuss opinions in the debrief
36. Amnesia causes a loss of what memory?
- Episodic memory
 - Semantic memory
 - Working memory
37. As a pilot becomes more experienced, it is more ____ for him to be able to explain the skill and more ____ to accidentally apply the wrong skill.
- unlikely, likely
 - likely, likely
 - likely, unlikely
 - unlikely, unlikely
38. Group decision will be better than
- that of a single crew member
 - that of the average crew member
 - that of the most able crew member
39. What is the tendency of approaching a down sloped runway?
- pilot feels lower, produces a high approach
 - pilot feels higher, produces a low approach
 - pilot feels lower, produces a low approach
40. Which is the correct trait for the captain to possess?
- be democratic sometimes
 - never be autocratic
 - bend rules if necessary
41. Choose the correct description of sensing rate 1 turn in the cloud.
- you can sense the turn immediately
 - you sense the turn about 20 seconds after application
 - you sense the turn immediately but cessation comes in 20 seconds

**CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS**



**HUMAN PERFORMANCE AND
LIMITATIONS**

42. What is the correct reason for Sleep apnoea patients feel sleepy in day time?
- a. due to waking up frequently and not receiving adequate sleep for cessation of breathing during night time sleep
 - b. due to the victim is unaware of falling asleep in day time
 - c. because of the patient's inability to sleep under normal conditions
43. How does small amount of alcohol (3~5 units) intake just before sleep affect the sleeping pattern?
- a. Reduced REM
 - b. Increased slow wave
 - c. Increased sleep period
 - d. Increased REM

CHAPTER 22
PRACTICAL EXAMINATION
QUESTIONS



HUMAN PERFORMANCE AND
LIMITATIONS

ANSWERS – HONG KONG CAD QUESTIONS

HPL 1

1(a), 2(b), 3(b), 4(a), 5(d), 6(b), 7(a), 8(d), 9(a), 10(d),
11(d), 12(a), 13(d), 14(b), 15(a), 16(c), 17(b), 18(a), 19(c), 20(d),
21(b), 22(a), 23(b), 24(a), 25(b), 26(a), 27(a), 28(d), 29(d), 30(a),
31(d), 32(b), 33(d), 34(d), 35(a), 36(a), 37(b), 38(d), 39(a), 40(a),

HPL 2

1(c), 2(b), 3(b), 4(b), 5(a), 6(b), 7(c), 8(c), 9(b), 10(d), 11(a),
12(d), 13(b), 14(a), 15(a), 16(d), 17(b), 18(a), 19(c), 20(c), 21(b), 22(d),
23(b), 24(d), 25(b), 26(d), 27(c), 28(b), 29(a), 30(b), 31(c), 32(c), 33(b),
34(d), 35(b), 36(a), 37(d), 38(b), 39(a), 40(a), 41(c), 42(a), 43(a),