# **CASA CPL QUESTIONS**

- 1. Diet and exercise
- 2. Heart, Ailments, Drug & Alcohol, Cardio Respiratory System
- 3. Hyperventilation, Hypoxia, CO poisoning
- 4. Hearing/Balancing
- 5. Vision
- 6. Motion sickness and Acceleration
- 7. Visual/Vestibular illusions
- 8. Information processing
- 9. Stress, fatigue, Circadian Rhythm
- 10. Basic Ergonomics
- 11. Crew Co-ordinations
- **12.** TEM

#### 1. Diet and exercise

- Body fat pinch test: usually check (above hip or belly).
   The fold of skin in your grasp should be no more than 12mm thick.
- 2. What level of exercise is recommended at minimum to ensure the healthy standard?
  - a. 30min daily
  - b. 20min 3 days a week
  - c. 30min 4 days a week
  - d. 60 min daily
- 3. Minimum exercise recommended is; (20min a day, 3 days a week)
- 4. What can obesity lead to Cardio vascular problems
- 5. 20mm skinfold measurement, which is considered normal, is from?
  - a. Thigh (Quadriceps)
  - b. over the hip (Suprailiac)
  - c. abdomen
  - d. chest (Pectoral)
- 6. The pinch test: Where about?.
  - > **Belly**(above the hip)
  - no more than 12mm thick.
  - more than 20mm: fitness level should be improved
- 7. Do pilots need multi-vitamins? As long as they have healthy diet they don't.
- Australian Guide of Healthy Eating is recommending to reduce..
   More sugar and fat

## 2. Heart, Ailments, Drug & Alcohol, Cardio Respiratory System

- 1. CASA regulation for diving and flying needs to be applied to
  - a. all aeroplanes
  - b. pressurised ones only
  - c. non pressurised ones only
- 2. The best way to reduce alcohol absorption is to:
  - a. drink water during drinking
  - b. eat food before drinking
  - c. drink coffee
- 3. Ratio of the oxygen in the atmosphere as altitude increases;

21%: Stays constant

- 4. What are the possible side effects of Aspirin? Stomach bleeding, kidney or Liver problems
- 5. CO<sub>2</sub> as the by-product of the metabolic process is
  - a. waste product expelled via lungs
  - b. waste product expelled via skin
  - c. a catalyst for the absorption of O2 by lungs
- 6. Which part of the body will be the least affected by the pressure differential?
  - a. lungs
  - b. sinus
  - c. middle ear
  - d. Intestine
- 7. Which one will not reduce performance of a pilot in the flight deck?
  - a. humidity 90%
  - b. temperature of 20 degrees C.
  - c. constant vibration
  - d. constant noise
- 8. What is the correct order of O2 respiration?

mouth or nose - trachea - bronchi - alveoli - capillaries (in the lungs) - left heart - artery - body tissues and organs

- 9. Doctors advise to consume less salt in diet due to the danger of
  - a. decrease density in bones
  - b. hypertension
  - c. Low blood pressure
  - d. Cardio vascular disease
- 10. Drugs to reduce bowel motility are usually not advisable for pilot because of
  - a. blurred vision
  - b. drowsiness
  - c. reduce hearing ability

- 11. What is the <u>correct method</u> to reduce blood alcohol level (remove alcohol from body)?
  - a. drink cups of black coffee
  - b. wait
  - c. eat food before drinking
  - d. exercise
- 12. partial pressure of O2, with increasing alt, will
  - a. reduce and the percentage also reduces
  - b. reduce but the percentage won't change
  - c. increase and the percentage also increases
  - d. reduce but the percentage will increase
- 13. The correct blood circulation order is:

heart-body-heart-lungs-heart

(Be careful! It is same as lungs-heart-body-heart-lungs)

- 14. Perecentage of Oxygen at sea level is 21%, what is it at 10,000ft?
  - a. greather than 21%
  - b. 21%
  - c. Less than 21%
- 15. What is the role of Haemoglobin?

The major function of haemoglobin is to transport oxygen from the lungs to the body's tissues and then transport carbon dioxide out of the tissue back to the lungs.

- 16. The correct rate of alcohol removal from blood is:
  - a standard drink/ an hour
- 17. 164. The side effects of

Antihistamines: drowsiness Ephedrine: affects vision

- 18. Which part of the body feels hurt on climb after eating vegetables?
  - a. Big bowel
  - b. Small bowel
  - c. Lungs
  - d. Stomach
- 19. After eating food that causes gas (ie soft drinks, beans cabbage, etc), pain associated with a pressure drop may be felt in?
  - a. Small bowels
  - b. large bowel
  - c. stomach
  - d. anywhere along digestive tract

- 20. A rapid decompression occurs at 30,000 ft, what is TUC of the Alt.?
  - a. 2-3min
  - b. 45-75sec
  - c. 20-30 sec
- 21. Alcohol absorption is:
  - a. increase by eating food
  - b. decreased by eating food, but metabolises at the same rate
  - c. decreased by eating food and metabolises slower
  - d. at one standard drink an hour
- 22. After scuba diving, which of the following are you most likely to suffer from decompression sickness?
  - a. Unpressurised aircraft
  - b. Unpressurised at 8000ft
  - c. Pressurised aircraft
  - d. Cabin altitude 10,000ft
- 23. Air consists of a mixture of gases. What is the percentage of Carbon Dioxide?
  - a. 78%
  - b. 21%
  - c. 1%
  - d. 0.03%

# 3. Hyperventilation, Hypoxia, CO poisoning

- Cold winter day, around 600ft on climb, the pilot experiences headache, breathless, and not able to think properly. What is he suffering from?
   CO poisoning
- 2. What are the symptoms of the hyperventilation caused by +CO2? Dizziness, muscle spasms, unconsciousness, visual impairment, tingling sensations
- 3. What is the definition of decompression sickness? Nitrogen gas released (evaporation) from blood
- 4. What is the main poisonous gas that can come out of a leaking exhaust system? Carbon Monoxide
- 5. Which one is <u>not</u> a good method to deal with hypoxia?
  - a. supply O2
  - b. breath smoothly
  - c. descend
  - d. breath into a paper bag
- 6. You experience symptoms that led you to the conclusion that CO is present. After shutting off the heat your actions are:
  - a. open fresh air vents, use oxygen, advise ATC and land as soon as possible
  - b. open fresh air vents, and carry out precautionary landing
  - c. advise company that they require a relief pilot at next stop
  - d. climb to greater altitude
- 7. Which material is the least flammable one?
  - a. nilon
  - b. wool
  - c. cotton
- 8. You are flying on a cold day in southern part of Australia and you start feeling sluggish war with headaches. What are you suffering from? Co poisoning

# 4. Hearing/Balancing

- 1. headsets can reduce noise level by
  - a. 10 dB
  - b. 20 dB
  - c. 40 dB
  - d. 50 dB
  - 2. What is the function of Ossicles in the middle ear?

To pass sounds from outer ear to inner ear as vibrations (mechanical energy)

- 3. Utricle and Saccule can sense:
  - a. liner acceleration and deceleration
  - b. angular acceleration and deceleration
  - c. liner velocity
  - d. angular velocity
- 4. malleus, incus and stapes:
  - a. transfer sound waves from the vibrating eardrum to the inner ear
  - b. convert the vibration into nerve impulses for onward transmission to the brain (Ossicles: malleus, incus, stapes)
- 5. Utricle and Saccule can sense
  - a. angular and linear acceleration
  - b. angular acceleration only
  - c. linear acceleration only
  - d. angular and linear acceleration and velocity
  - Utricle + Saccule = Otoliths
- 6. The sensory inputs provide orientation and "equilibrium" are:
  - 1. visual 2. vestibular 3. proprioceptive (somatosensory) systems together
- 7. You fly a regular charter flight of 7 hours a day. When is it advised to wear hearing protection?
- a. seated in the cockpit only
- b. during preflight and in all stages of flight
- c. during high power setting such as runup and takeoff only
- d. during preflight, take off and climb

(A horrible question. A is not an option according to CASA. b should be an answer because the noise level of typical piston engined aeroplanes in cruise is over 85dB. Our complaint to CASA was ignored)

8. What is the function of Eustachian tube? Refer to the textbook

- 9. What are the effects of noise exposure?
- a. Gradual, permanent hearing loss, leading to loss of licence
- b. Permanent, measureable hearing loss which can be corrected by an audiologist
- c. Hearing loss which is only temporary
- 10. When should you wear a hearing protection?
- a. If you must yell to someone from 5 m away.
- b. If you can't hear a normal conversation from 5 m away.
- c. If you must yell to someone from 0.5 m away
- 11. TUC at 4000ft is:
- a. 25sec
- b. 40sec
- c. 1min
- d. 10min

◊TUC at 4000ft is 30 (with minimal activity) to 20 (with moderate activity) seconds

#### 5. Vision

#### ♦ Many questions from Anatomy of Eyes

- 1. Astigmatism is caused by?
  - a. Short sightedness
  - b. Long sightedness
  - c. Unevenness of the curvature of the cornea
  - d. Age changes
- 2. Limitations to vision: eyes have difficulty seeing objects the size of which subtends an angle of less than ( ) of arc.
  - a. 1 degree
  - b. 5 degree
  - c. 1 minute
  - d. 1 second
- 3. During the cycle of Saccade, eyes are
  - a. more sensitive
  - b. processing with greater rapidity
  - c. unable to sense tings at night
  - d. blind
- 4. Rods and Cones: which one is more numerous?
  - a. cones
  - b. rods
- 5. the best way to ensure visual acuity in the low sun is to use:
  - a. sunglasses
  - b. canopy cover
  - c. Sun visor
  - d. Cap
- 6. The reason for Astigmatism is (unevenness of the curvature of the cornea)
- 7. Which is correct about the light sensitive elements of the eye?
  - a. Cones are more prevalent in the eye and are more sensitive to light
  - b. Rods are more prevalent in the eye and are more sensitive to light
  - c. Cones are more prevalent in the eye and are less sensitive to light
  - d. Rods are more prevalent in the eye and are less sensitive to light
- 8. With reference to the eye, Which of the following statements is correct:
  - a. Rods are more numbered than cones and are more light sensitive
  - b. Rods are less numbered than cones and are more light sensitive
  - c. Rods are more numbered than cones and are less light sensitive
  - d. Rods are less numbered than cones and are less light sensitive
- 8. Myopia is;
  - a. Short sightedness
  - b. Long sightedness
  - c. Multi focusing
  - d. Aging ciliary muscle

9. What does FOVEA in the eye do?

Fovea has lots of cones and no rods. We use fovea to see colours/ details of objects or during day/ in bright light.

- 10. In terms of traffic scan, which is the correct way of scan?
  - a. Short move, rapid stop
  - b. Short move, long stop
- 11. Which part of eye process the light?
  - a. retina
  - b. fovea
  - c. rods
  - d. optic disc
- 12. People with age over 40 usually deteriorate the ability to focus on close object is because of
  - a. lens becomes less elastic
  - b. cornea becomes weaker
  - c. eyeball gradually become too long
- 13. the light focusing (refraction) on the retina is done by
  - a. lens
  - b. lens and cornea
  - c. pupil
  - d. iris
- 14. How could you know there will be a risk of collision?
  - a. When the other aircraft remains the constant bearing (as converging), same position on wind screen.
  - b. When traffic is getting bigger
- 15. Which of the following statements will NOT depreciate a Pilot's ability for eye sight to Focus:
  - a. The lens continually focusing on the blind spot instead of the Retina
  - b. The weakening of the Ciliary muscle
  - c. The size of the eyeball whether it be abnormally larger or smaller
  - d. Cannot Remember 4th option
- 16. anatomy of eyes: when you look at an object, the light from outside falls to; Retina
- 17. Astigmatism is caused by-

unevenness of curvature of the cornea and leads to blurry vision

- 18. Which of the following gives the best visual acuity?
  - a. 1 arc
  - b. 1 min
  - c. 1sec
  - d. 5 degrees
- 19. If a pilot is at a beach, not wearing sunglasses. How could this affect his night vision during night flight? Affects for up to 1 week

#### 20. What does FOVEA do? Can see the details and colours of an object in the light

- 21. How would you protect your vision on landing facing the sun?
  - a. Sunglasses
  - b. Sun visor
  - c. Seat fully up
  - d. stay familiar with the area
- 22. Which part of the eye is connected to optic nerve?
  - a. Retina
  - b. Fovea
  - c. Cornea
  - d. Ciliary muscle

(Typical NQR question)

- 23. Which part of the eye regulate intake of light? Iris
- 24. Full activation of Rhodopsin (the chemical in Rods) takes:
  - a. 7min
  - b. 10min
  - c. 20 ~ 30 min
  - d. 30 ~ 40 min
- 25. To prevent Empty Field myopia;
  - a. Look at windshield post
  - b. Look at instrument
  - c. Look at an object in far distance
  - d. Look at a pen in arms length
- 26. Astigmatism:
  - a. requires glasses specifically designed for it
  - b. requires standard glasses
  - c. is short sightedness
  - d. is long sightedness

#### 6. Motion sickness and Acceleration

- 1. In an aerobatic flight without G suit, grey out can be experienced from
  - a. 3.5G
  - b. 5G
  - c. 7G
  - d. 9G
- 2. Jet-lag recovery: which one affects pilots body rhythm most significantly?
  - a. west to east with shiftwork
  - b. north to south with shiftwork
  - c. north to south with minimum rest period
  - d. west to east with minimum rest period
- 3. What is the main reason for motion sickness?

  Mismatching signals between vision, vestibular apparatus, (and proprioceptors)
- 4. During a student's first cross-country flight around 6000ft, you notice him becoming nauseous, extremely pale, with cold sweating. What do you think him suffering from?
  - a. Hypertension
  - b. Hyperventilation
  - c. Hypoxia
  - d. Motion sickness

# 7. Visual/Vestibular illusions

- 1. The terrain before RWY is <u>declining toward the aeroplane</u>. This can cause
  - a. low approach
  - b. high approach
  - c. heavy landing
  - d. slow approach
- 2. On approach, you notice the approach lighting appearing to move on it's own. What should you do?
  - a. look slightly away from lights
  - b. look directly at lights
  - c. tell ATC to dim lights
  - d. tell ATC to turnoff lights
- 3. A plane is approaching to an air strip at night. The runway has lightings however the lighting are at the edge of the strip (not at the edge of the runway). The illusion you will experience when approaching this strip is;
  - a. feel too high so will round out too early
  - b. feel too low so will round out too early
  - c. feel too high so will round out too late
  - d. feel too low so will round out too late
- 4. Describe **Proprioceptors** that is a part of the sensory system

Sensors in the joints, limbs, and muscles: senses only the relative motions & positions

- 5. An approach to a short runway could cause an illusion that result in
  - a. high approach and possible overshoot
  - b. high approach and possible undershoot
  - c. low approach and possible overshoot
  - d. low approach and possible undershoot
- 6. What is the common reason of special disorientation? Centrifugal force, Gravity
  - 7. How would you know that you are very low on approach?
    - a. Runway slope up towards the threshold
    - b. Runway looks wide
    - c. Lightings are not as bright as usual
    - d. The runway looks shorter
  - 8. On a night take-off, the technique pilot need to avoid is to:
    - a. Cross check the heading indicator and the visual cues for runway direction
    - b. Establish climb by referring to both visual reference and the attitude indicator
    - c. Check VSI and altimeter for positive climb rate and continual increase
    - d. Rely on visual cues outside on climb with landing lights on
  - 9. False hypothesis is not likely to occur: during normal operations

- 10. During an instrument flight in cloud what will cause you to lose orientation
  - a. Moving head quickly
  - b. Reading charts
  - c. Rapid eye movement
- 11. You are making an approach at a runway that is the minimum length for you aircraft type. The visual illusion will cause the approach;
  - a. high and overshoot
  - b. low and overshoot
  - c. high and undershoot
  - d. low and undershoot

# 8. Information processing

1. How many unrelated items can we hold in working (short term) memory?

7±2 (CASA question doesn't have the choice of 7±2. select the number between **5** and **9**. For example, 5~7 is correct. 7~11 is wrong)

- 2. Chunking is effective to (extend short term memory capacity)
- 3. What is an example of environmental capture?
  - a. Calling three greens on final when they are not
  - b. Reaching down for trim where it was in an old aircraft
  - c. Reading back wrong call sign
  - d. Turn on pitot heat instead of lowering flaps

## 9. Stress, fatigue, Circadian Rhythm

1. Credit- Debit system of sleep:

We cannot store sleep. So if you sleep (8) hours or more it doesn't make difference.

- 2. Fatigue affects Pilot's performance in:
  - a. simple monotonous task
  - b. simple complex task
  - c. intense monotonous task
  - d. intense complex task
- 3. Which is the easier option for human to recover from JET- LAG?
  - a. Travel east, expand a day
  - b. Travel west, expand a day
  - c. Travel east, compress a day
  - d. Travel west, compress a day
- 4. You found your crew colleague quite forgetful recently, and losing interest of the job. You should suspect him experiencing
  - a. Narcolepsy
  - b. Hypersomnia
  - c. Chronic fatigue
  - d. General adaptation syndrome
- 5. The best performance can be achieved under (moderate) arousal/ stress.
- 6. Which one is the body response to Fight or Flight? Refer to symptoms of stress (textbook chapter17, page12)
- 7. Which two factors mostly disrupt body rhythm?
  - a. East-west and irregular circadian roster
  - a. East-west and ....
  - b. North-south and shift work
  - c. North-south and ....
- 8. Cold temperature: The optimum temperature for a pilot is around 20 degrees, from which temperature should caution be taken as pilot metal ability is decreased?
  - a. +20
  - b. +10 to +15
  - c. Below +5
  - d. below -5
  - 161. Sleep credit/debit system: Maximum 8 hours for 16 credit points

- 9. Adapting to the different time zone is the hardest when
  - a. flying east/ west with a shift work
  - b. flying north/ south with a shift work
  - c. east/west with layover
  - d. north/ south with -----
- 10. Physiological stressor: Too much noise can
  - a. Lower the arousal level
  - b. Narrow or restrict the attention
  - c. Increase speech intelligibility in cockpits
  - d. Increase attention level

# 10. Basic Ergonomics

- 1. To apply Anthropometry to aircraft design, what is the correct distribution of statistics?
  - a. 85%
  - b. 90%
  - c. 95%
  - d. 100%
- 2. Which way is to fasten your lap type seat belt in correct way? Fasten one side to another side (over the hip)
- 3. When designing a cockpit, what proportion of body types do designers cater for?
  - a. 30%
  - b. 85%
  - c. 90%
  - d. 95%
- 4. Ergonomics: Frequency of use relates to instrument & switches have to be
  - a. able for both pilots to reach
  - b. be robust against constant use
  - c. in an easy to reach position
  - d. not needed to have guards & protection
- 5. What percentage of the population do aircraft manufacturers use to design aircraft cockpits (anthropometry)?
  - a. 80%
  - b. 90%
  - c. 95%
  - d. 100%

#### 11. Crew Co-ordinations

- 1. Acknowledging captain that the aeroplane is running out of fuel, but ending up crashing. What type of the behaviour the co- pilot indicates in this case?
  - a. submissive
  - b. resigned
  - c. supportive
  - d. assertive

(Note: Chapter 20 Behaviour Types)

- 2. This pilot conducts EFATO (Engine Failure After Take Off) drill because he saw a bit of oil leaking due to the loose oil cap. What attitude do you see from his reaction?
  - a. impulsive
  - b. macho
  - c. resignation
  - d. authoritarian
- Assertiveness:
  - a. states facts as required
  - b. yells aggressively
  - c. stick to your opinion and do not consider others
- 4. What type of behaviour should a co- pilot use in an emergency situation? Supportive
- 5. A pilot is flying to meet his friend. He enters cloud and is advised to make a 180 degree turn. However he keeps going as he wants to show off to his mate. What type of behaviour is this?
  - a. Anti- authority
  - b. macho
  - c. resignation
  - d. deference
- 6. A set of crew need to decide whether keep trying to land at their destination in the bad weather or to divert to another aerodrome. The correct action of the captain is to
  - a. Make a decision and tells the crew
  - b. State the situation and ask for ideas
  - c. State the situation, give a view and ask for opinion
  - d. State the situation, ask for opinion, then give a view
- 7. An aircraft is coming to an approach to land and the co-pilot thinks they are too low, how should he cope telling it to the captain?
  - a. submissive
  - b. aggressive
  - c. assertive

- 8. A pilot wants to show off to his friends asked them to watch him conducting a takeoff but got in to spin just after take- off. The plane crashed and the pilot died. What kind of attitude is that?
  - a. Anti- authority
  - b. impulsive
  - c. invulnerable
  - d. macho
  - e. resignation
- 9. A pilot found fuel leaking after take- off. He decided to conduct forced landing, ended up crashing. Later on, the reason of the fuel leakage was found to be loose fuel cap. This is an example of being:
  - a. impulsive
  - b. macho
  - c. deferent
  - d. anti- authority
- 10. In an emergency situation, What attitude type should the Co-Pilot adopt?\*
  - a. persuasive
  - b. assertive
  - c. supportive
  - d. submissive
- 11. Flying in cruise mode, Engine oil is suddenly sprayed out of engine over the cowling, The Pilot immediately shuts the engine down and carries out a forced landing unfortunately crashing into a building. Upon inspection, it was found the oil was coming from a Loose Oil filler cap. What type of Behaviour category would the pilot have been considered?
  - a. impulsive
  - b. submissive
  - c. persuasive
  - d. dismissive
  - e. recognitive
- 12. You are holding due traffic. The first officer advised the captain three times of very low fuel. The captain does not respond, ending up crash. The attitude of the FO was
  - a. assertive
  - b. submissive
  - c. resigned
  - d. aggressive
- 13. Communication style Chapter 20
- 14. What is the sign of active listening?

Asking questions, paraphrase, making eye contact, using positive body language

- 15. What is the factor affecting group decision making?

  Chapter 20, page 13
- 16. Group decision making: What is deference? page 9 of chapter 20
- 17. The correct way to listen: When you listen to someone you:
  - a. think about what you are going to say next
  - b. re-state what they have said
  - c. think of ways to change the subject
- 18. Which is the best description of 'active listening'?
  - a. Listening fully for better understanding
  - b. A SAR scanning technique
  - Listening watch to spot traffic better/improve situational awareness
     Something completely unrelated
- 19. Although weather condition is not suitable for the flight, the pilot gets pushed to air transport boxes of crab to airport B. At the end, the pilot decides to fly because of the threat from the operator to fire him if he cancels the flight. What type of hazardous attitudes do you see from the pilot?
  - a. resignation
  - b. Invulnerable
  - c. Macho
  - d. deference

#### **12.** TEM

1. An aeroplane flying to unfamiliar aerodrome was too fast in approach, ran out of runway on landing, and damaged landing gears. In this scenario what was undesired aircraft state?

Running out of the runway on landing

- 2. The best example of Committed Error is
  - a. taxi to wrong runway
  - b. violation of controlled airspace
  - c. misinterpretation of clearance call
- 3. What type of countermeasure is it to use checklist?
  - a. Systemic based countermeasure
  - b. Planning countermeasure
  - c. Execution countermeasure
  - d. Review countermeasure
- 4. In TEM, pilot is of fatigue, but he continues flying to the destination to see his friend there. In this case fatigue is:
  - a. internal threat
  - b. latent threat
  - c. external threat
  - d. environmental threat

### Note: they cannot be called errors but they increase the likelihood of errors

- 5. Organisation threats, mostly, are
  - a. Latent
- Fall behind the time schedule → rush → forget to turn anti-icing device → icing → accident

In this scenario, which part is initial "committed error"?

- a. behind the schedule
- b. rush
- c. forget to turn anti- icing device
- d. icing
- 7. SOP can reduce the organisation threat including
  - a. expected, unexpected and latent
  - b. expected, unexpected but no latent
  - c. unexpected, latent but no expected
  - d. latent, expected, but no unexpected
- 8. Find an example of latent threat
  - a. engine failure
  - b. illusion
  - c. unfamiliar aerodrome
  - d. foreign accent

- 9. Experiencing low speed on approach, also with low approach path. What is the counter measure you have to apply first?
  - a. control speed
  - b. flaps down
  - c. fix the approach path
- 10. You suffered a radio failure and whilst fixing it, you violated CTA without a clearance. Under TEM, what action should you take once you become aware of the CTA violation?
  - a. keep fixing the radio and advise ATC as soon as possible
  - b. check your aeronautical chart for the quickest route back into class G
  - c. follow the radio failure procedure in ERSA
  - d. conduct a 180 degree turn and listen out for instructions
- 11. You are operating into an unfamiliar ALA. As a result you have not used the correct flap setting and have overshot the runway and stopped beyond the runway end. The threat in this circumstance is:
  - a. poor preparation prior to departure
  - b. using incorrect flaps
  - c. Running off the runway
  - d. Insufficient communication with ATS
- 12. The pilot is flying VFR flight with an expired weather forecast. He ends up getting into big broken cloud with heavy shower. He still keeps pushing himself to continue the flight up to the stage that he starts losing control and getting in to stall. What is the <u>initial UAS?</u>
  - \*Keep pressing on the flight
- 13. An aeroplane, all of sudden, lost height of 500ft in the air. The countermeasure should be to
  - a. notify ATC first
  - b. climb back to the height first
  - c. do a & b at the same time
  - d. prioritise between a and b
- 14. You suffered a radio failure and whilst fixing it, you violated CTA without a clearance. Under TEM, what action should you take once you become aware of the CTA violation?
  - a. keep fixing the radio and advise ATC as soon as possible
  - b. check your aeronautical chart for the guickest route back into class G
  - c. follow the radio failure procedure in ERSA
  - d. conduct a 180 degree turn and listen out for instructions
- 15. Quiet radio call. Pilot answered RWY 03 instead of RWY 30, and approached and landed on RWY 03 which was incorrect. What's the pilot's initial error?
  - a. Approaching RWY 03
  - b. Landing RWY 03
  - c. Workload/ stress
  - d. Radio quality

- 16. What is the type of threat that ATC can control?
  - a. internal
  - b. external
  - c. latent
  - d. environmental
  - \*\*a poorly made question
- 17. What is the best way to avoid poor weather if the info is available?
  - a. ATC assistance
  - b. Follow planned tracks
  - c. Local knowledge of weather
- 18. Checklist is (systemic based) countermeasure.
- 19. An error may be described as:
  - a. forgetting to do something, which is against organisation SOPs
  - b. handling the aircraft into danger
- 20. Pilot flew to a new ALA, didn't set flaps for landing, rolled through the end of the RWY and crashed. In this case the latent threat is;
  - a. Not enough knowledge of ALA
  - b. Incorrect flap setting
  - c. RWY aspect
  - d. Too fast
- 21. Pilot landed at an unfamiliar aerodrome, didn't use enough flaps, overran RWY, damaged undercarriage. What is the initial error?
  - a. overrunning RWY
  - b. Not leaving at correct flap setting
  - c. Damage to undercarriage
  - d. Unfamiliar with aerodrome
- 22. An aeroplane entered CTA without clearance and then was vectored away from you. What is the UAS?
  - a. entering CTA without clearance
  - b. the near mid- air collision
- 23. During the engine failure, pilot reads out 80kts of the best gliding speed instead of 70kts which is the actual best gliding speed. What type of error is that?
  - a. internal
  - b. environmental
  - c. latent
  - d. external
- 24. What type of management system is TEM?

Tool or procedures that allow pilots to anticipate or identify/ respond to threat, before it can adversely affect the safety of the flight

- 25. A pilot was on an approach to an unfamiliar aerodrome and as a result, overspeeding, overshooting, and broke an undercarriage. What is the initial UAS in this circumstance?
  - a. unfamiliar aerodrome
  - b. overspeeding
  - c. overshooting
  - d. breaking undercarriage

- 26. A pilot had an engine failure over a paddock, maintain a speed which was over the best gliding speed. What should be the first immediate reaction?
  - a. to find a best spot for landing
  - b. to get the best gliding speed
  - c. to find the wind direction
  - d. to look out for traffic
- 27. Checklist can
  - a. minimize error rate
  - b. completely remove all the errors
- 28. Monitoring approach, being used in many airlines, is an efficient way for crew resource management to:
  - a. fly final approach with CASA examiner on the back
  - b. co- pilot conduct the final approach with captain supervise
  - c. captain fly the airplane with co- pilot deal with the radio communication
  - d. Use the ground based radar to monitor the glide sloe of a/c
- 29. TEM: what is the correct TEM recovery procedure when you got in the spiral dive?
  - a. recover yourself from spiral dive
  - b. identify threat, avoid spiral dive
  - c. notify ATC
  - d. figure out the error
- 30. A pilot has some personal concerns in his mind but seems to be focused during pre-flight, could this a threat?
  - a. yes, that could lead to a pilot error
  - b. yes, it will cause high workload
  - c. no
- 31. Which threat can be prevented by ATC? (A subjective Questions!)
  - a. Environmental
  - b. External
  - c. Internal
  - d. Latent
- 32. In a simulator, instead of 80kts in the checklist you select 70kts. What type of error is this? Handling Error
- 33. During an approach to land, there is slight turbulence which causes the a/c to go below its min. approach speed and come too low. What should have been done in the first place to avoid this?
  - a. Inform ATC
  - b. Ensure not too low
  - c. Return to approach speed
  - d. Ensure speed is at Vb (Turbulence penetration speed calculated)

- 34. The benefit of using checklists in the TEM model is:
  - a. To eliminate errors
  - b. To help manage errors
  - c. To prevent undesired aircraft states
  - d. To prevent errors
- 35. A pilot has 2 hours of fuel and get lost. What type of countermeasures must be apply?
  - a. Look for signs and references on the ground
  - b. Declare emergency
  - c. Get assistance from ATC
  - d. Ask himself why he got lost
- 36. There was a work function a night before the flight with alcohol involved. Pilot also knew that he was fatigued. What type of threat is this?
  - a. Latent
  - b. Unexpected
  - c. External
  - d. Internal
- 37. Being behind the schedule, you took off in a rush knowing that the METAR for your destination would have expired on arrival.

On arrival, you almost stall the aircraft due to the changed weather conditions but recover somehow. Where did the first UAS occur?

- a. Approach stall
- b. Stall
- c. Weather conditions at the destination
- d. Being behind the schedule
- 38. Being late, pilot was in a rush going through procedures, ended up committing errors including leaving anti icing off. What type or error is this?
  - a. Procedural error
  - b. Handling error
  - c. Communication error
  - 39. What is considered a procedural error?

    Omitting an item from a checklist
  - 40. Which is the latent threat created by a GA operator?
    - a. taxing too fast
    - b. aerodrome signs not fixed
  - 41. Pitot tube of the aircraft was blocked but the pilot didn't notice during pre-flight inspection. Climb speed is now below the best climb speed. What is the error committed?
    - a. Not detecting blocked pitot tube
    - b. Not at the best climb speed
  - 42. You are lost. You should
    - a. Carry on
    - b. Declare an emergency
    - c.Ask ATC for assistance
    - d. Fly around and try to figure out where you are

- 43. Which one is committed error? (incomplete question)
  - a. communication error with ATC
  - b. line up on wrong runway X
  - c. taxi too fast
- 44. A student pilot is lost in the middle of solo navigation exercise. He knows he is on track, and his heading is also correct. What he doesn't know is exactly where he is on track. His navigation aids are all out of range. He has one HF radio available. What action needs to be taken?
  - a. contact ATC
  - b. find a big ground feature according to map first
- 45. When an aeroplane is on approach in a bad weather, what is the best way to make a decision whether to carry on or move to an alternate plan?
  - a. captain makes a decision on his own
  - b. captain states the current situation and ask the crew opinion before saying his opinion
  - c. captain states the current situation and say his opinion before asking the crew opinion
  - d. make a vote
- 46. A pilot had been fatigued after the last scheduled flight. After a good rest, He was re- scheduled to conduct an extra flight on the Christmas day. What could be a **threa**t in this scenario?

Dehydration (fatigue can't be an option)

- \*\*\*Christmas hot season in Australia: a poorly constructed question
- 47. Defensiveness is:

To be defensive and not to learn from criticism from others

- 48. Pilot is in a rush because he is way behind schedule. He forgets a lot of things during the flight. Which is the latent threat? (This question is incomplete)
  - a. Being behind the schedule
  - b. Rushing
- 49. Pilot uses an expired chart, ended up flying into CTA. Which one is error?
  - a. Expired chart
  - b. Flew into CTA
  - c. Near mid-air collision
- 50. Due to high workload, pilot hardly communicates on the radio as if it didn't function clearly. Which is the best countermeasure for this?
  - a. Second radio to be carried
  - b. Workload management
- 51. What is the most important thing to do when UAS happened?
  - a. Fix the error
  - b. Fix the threat
  - c. Fix the UAS

- 52. Pilot is in a low approach speed before landing manages to control the speed. What is the UAS in this case? Low approach speed
- 53. Error of omission: things you should have done but forgot to do Error of commission: things you did that you shouldn't have done Proper planning and briefing should limit errors of commission.
- 54. What is the principle /purpose of TEM?
  - a. Anticipate and avoid errors as they arise
  - b. Anticipate and avoid threats as they arise
  - c. Try to solve threats
  - d. Try to solve errors

Identify threats, minimize the chances of error, and resolve those errors when occurs.

- 55. The purpose of using checklists is:
  - a. To reduce the frequency of error occurrence
  - b. To manage errors
  - c. To eliminate threats
  - d. To prevent UAS