



EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

FINAL EXAM

IATA/SAFETY SECTION

SUBJECT: PRINCIPLES OF FLIGHT

Stream: Flight Dispatch No.21

Duration: 2 Hrs

DATE: 20/09/2016

TIME: 2.00 – 4.00 PM

INSTRUCTIONS TO CANDIDATE:

1. This paper consists of **TEN (10)** Printed pages.
2. This paper consists of **TWO SECTIONS**
3. Answer the questions as per the instructions given
4. Examination rules and regulations shall apply

1. During a night flight, an observer located in the cockpit, seeing an aircraft coming from left on approximate opposite parallel track, will first see the:
 - a. Red steady light
 - b. Green steady light
 - c. White steady light
 - d. Green and white flashing light
2. The coverage angle of the regulatory white navigation/position lights, located to the rear of the aircraft is:
 - a. 140°
 - b. 110°
 - c. 220°
 - d. 70°
3. The commander is required by the authority to present the aircraft documents, He
 - a. Can refuse to present them
 - b. Can request a delay of 48 hours
 - c. Shall do so ,within a reasonable period of time
 - d. Shall do so if authorized by the operator
4. The minimum number of hand fire extinguishes to be located in the passenger compartment of an aircraft with a maximum approved passenger seating configuration of 31 is:
 - a. 1
 - b. 0
 - c. 2
 - d. 3
5. The purpose of the first aid oxygen is to:
 - a. Provide the cabin attendants with respiratory protection
 - b. Supply all the passengers in case of depressurization
 - c. Provide undiluted oxygen to passengers for physiological reasons following a cabin depressurization
 - d. Provide the flight crew with respiratory assistance after depressurization
6. A public address system is required to operate an aircraft whose maximum approved passenger seating configuration is greater than:
 - a. 9
 - b. 61
 - c. 30
 - d. 19
7. In VFR public transport on an aircraft for which the flight manual indicates an minimum crew of one pilot, when do the regulations require the presence of a second pilot?
 - a. If the aircraft is a twin engine
 - b. If part or all the flight is done at night
 - c. If the flight lasts more than 2 hours
 - d. Never

8. North Atlantic airspace is regulated, among other, according to:
 - a. The ICAO document 7030(additional regional procedures)
 - b. Rules issued by bordering states(document 6530)
 - c. Rules common to bordering states, grouped in document 7050(north Atlantic ocean airspace)
 - d. The ICAO document 7030(additional regional procedures)
9. During a de-icing procedure carried out in two stages, the hold over time starts:
 - a. At the end of the second stage(anti-icing stage)
 - b. At the beginning of the first stage(de-icing stage)
 - c. At the end of the first stage(de-icing stage)
 - d. At the beginning of the second stage(anti-icing stage)
10. Which one of the following sets of conditions is mostly likely to attract birds to an aerodrome?
 - a. Modern and closed sewage treatment entre in close proximity
 - b. Opened refuse hip in close vicinity
 - c. Maintaining the grass on the airfield
 - d. Extraction of minerals such as sand and gravel
11. During an explosive decompression at flight level340(FI340) ,your first action will be:
 - a. To set the transponder to 7700
 - b. To comfort your passengers
 - c. To warn the ATC
 - d. To put on the oxygen mask
12. For a given aeroplane,the wake turbulence increases when the aeroplane has a:
 - a. High mass and high airspeed
 - b. Low mass and high airspeed
 - c. Low mass and low airspeed
 - d. High mass and low airspeed
13. The dangerous goods transport documents, if required, shall be drawn up by:
 - a. The operator
 - b. The handling agent
 - c. The captain
 - d. The shipper
14. Who shall be satisfied, before flight, that the aircrafts weight is such that flight can be safely made, and that any transported cargo is properly distributed and secured?
 - a. The operator
 - b. The flight engineer
 - c. The airline s dispatcher
 - d. The commander
15. Flight data recorders must keep the data and parameters recorded during at least the last:
 - a. 30 hours of operation
 - b. 48 hours of operations

- c. 25 hours of operation
 - d. Flight
16. The public address system must be audible and intelligible at:
- i. All passenger seats
 - ii. Toilets
 - iii. Cabin crew seats
 - iv. Work stations
- The combination re-grouping all correct-statement is:
- a. 1-2
 - b. 1-2-3
 - c. 1-2-3-4
 - d. 1
17. The MNPS(minimum navigation performance specification)airspace extends vertically between flight levels.
- a. 280 &390
 - b. 275&400
 - c. 280 &400
 - d. 285&420
18. The M.E.L (minimum equipment list) is produced by:
- a. The aircraft state of registry
 - b. The manufacturer
 - c. The state of the operator
 - d. The operator
19. In icing conditions, if you have exceeded the hold over time the correct procedure is to:
- a. De-ice the aircraft
 - b. Operate the aircraft de-icing /anti-icing systems
 - c. De-ice again the aircraft, then apply anti-icing fluid
 - d. Apply directly anti-icing fluid without conducting previous de-icing procedures
20. A water fire extinguisher(straight jet) can be used on a fire of :
- 1) Solids(fabric, carpets,...)
 - 2) Liquid(gasoline)
 - 3) Gas
 - 4) Metals(sodium)

The combination re-grouping all the correct statements is:

- a. 1
- b. 3 and 4
- c. 3
- d. 2

21. A class B fire is a fire of:
- Solid materials usually of organic nature
 - Liquid or liquefied solids
 - Electrical source fire
 - Special fire:metal,gas,chemical product
22. For an aeroplane with a tyre pressure of 16bars, there is a risk of dynamic hydroplaning as soon as:
- Cross wind is greater than 15kts
 - Speed is greater than 117kts
 - Speed is greater than 138kts
 - Water depth is equal to the depth of the tyre grooves
23. For an aeroplane with a tyre pressure of 8 bars, there is a risk of dynamic hydroplaning as soon as the :
- Speed is greater than 127kt
 - Speed is greater than 98kts
 - Cross wind is greater than 20kts
 - Water is equal to the half of the depth of tyre grooves
24. As a pilot in command ,during flight preparation, if you are notified that a dangerous package has been damaged during its loading, you:
- Mention it on the notification to captain
 - Accept it after a visual inspection
 - Mention it on the shippers declaration
 - Ensure that arrangements are made for its removal
25. What is the transponder code to be used by the commander of an aircraft that is subject to unlawful interference(hijacked)
- A 7800
 - A 7700
 - A 7500
 - A 7600
26. The tip vortices circulate about each wing tip:
- From the underwing toward the upper side of the wing
 - Clockwise
 - From upper side of the wing toward the underwing
 - Counter clockwise
27. A slow decompression may be caused by:
- 1) A leak in a doorseal during normal pressurized flight
 - 2) A loss of a cabin window
 - 3) Malfunction of a pressurized system
 - 4) Loss of a door

The combination regrouping all the correct statement is:

- a. 1,3
 - b. 2,4
 - c. 1,2,3
 - d. 1,2,3,4
28. The commander shall not commence take off in icing conditions:
- a. Unless the external surfaces are free from any ice contamination greater than 5mm
 - b. Unless the external surfaces are still covered with anti-icing fluid and the aircraft is not operated in forecasted icing condition greater than moderate icing
 - c. Even if the ice contamination does not lead to an exceedence of mass and balance limits
 - d. Unless the external surfaces are clear of any contamination, except as permitted by aircraft flight manual
29. In regard to passengers briefing in public transport aircraft, information about oxygen must be given to passengers through a demonstration. if a flight is to be carried out atFL290,this demonstration must be completed before:
- a. The aircraft reaches FL250
 - b. The aircraft reaches FL100
 - c. Take off
 - d. The aircraft reaches FL140
30. A runway covered with 4mm thick water, is said to be:
- a. Wet
 - b. Flooded
 - c. Contaminated
 - d. Damp
31. What is the correct action to take in the event of a carburetor fire on a piston engine? the engine has started.
- a. Keep it going?
 - b. Shut off engines before confirming which one is on fire
 - c. Move the mixture control to idle cut off(ICO) open the throttle fully and continue to operate the starter motor.
 - d. Do nothing about it.
32. Class C fire is:
- a. Ordinary combustibile or fibrous material
 - b. Energized electrical materials
 - c. Flammable or combustibile liquids
 - d. Flammable metals
33. What equipment is carried on board to pry into difficult to reach areas which are on fire to enable the crew fight the fire effectively?
- a. Protective breathing equipment(PBE)

- b. Crash axe /crow bar
 - c. Halon 1211-BCF fire extinguisher
 - d. Life jackets
34. Is the commander to be notified when PRMs (person with reduced mobility) to be carried on board?
- a. Yes
 - b. Depends on the number of PRMs
 - c. No
 - d. No, only the dispatcher should be informed
35. What colour is Halon 1211-BCF fire extinguisher?
- a. Yellow
 - b. Blue
 - c. Green
 - d. Purple
36. An inadmissible passenger is:
- a. A person subject to judicial deportation from a state to a state to which that person has a rights of access
 - b. A person in the charge of a law enforcement officer being escorted from one state to another for judicial reasons
 - c. A person carried in an aircraft from a destination state to which the person did not have right of access. i.e. no visa or no right of residence.
37. An AOC may be revoked, suspended or varied if the authority deems it necessary. On what grounds can this action be taken:
- a. If the profitability, financial stability of the operation gives cause for concern
 - b. If the quality system is not approved
 - c. If the operations is unable to comply with safety requirements
 - d. If the operator is found guilty of unfair trading practices
38. Why are operators required to establish a quality control system?
- a. To give the travelling public reassurance that operation is properly regulated
 - b. To ensure safe operational practices and airworthy aircrafts
 - c. To ensure that regulations concerning engineering maintenance are complied with.
39. If an aero plane is certificated for 300 or more passengers ;4(four) first aid kits are required to be carried in the aircraft, upon pre-flight checks only 3(three) first aid kits are found to be on board and booked passengers for the flight are 200?
- a. Flight depart with 3 first aid kits as they are within the requirement
 - b. Flight will not depart until the number of the required first aid kits are on board
 - c. It depends upon the maximum take-off mass permitted
 - d. Regulations need not be followed in this case.

40. What is a dry lease?
- Where the person leasing the aircraft is responsible for fuel, repair etc...
 - Where the leased aircraft comes complete with flight crew
 - Where the aircraft is operated under the AOC of the person to whom is leased
 - Where the aircraft is operated under the AOC of the person from who it is leased
41. Is it necessary to carry the entire operations manual on each flight?
- Yes
 - No-only parts concerning crew duty
 - No-only parts required for the conduct of the flight
 - No-only parts required for the conduct of the flight and those concerning crew duty
42. What must the commander ensure that all those on the flight deck are familiar with?
- Check lists
 - Safety procedures
 - Contents of the operations manual
 - Flying the aircraft
43. Which of the following does a Quality system require?
- Aircraft flight manual and check lists
 - Operations manual
 - A Quality manager
 - Non- conformance monitoring
44. Can dangerous goods be carried in the passenger cabin or flight deck?
- Yes, but only good specified in the technical instructions
 - No
 - Yes, if authorized by authority
 - Yes, provided they are non-toxic
45. The commander is required by the authority to present the aircraft documents, He
- Can refuse to present them
 - Can request a delay of 48 hours
 - Shall do so, within a reasonable period of time
 - Shall do so if authorized by the operator
46. In VFR public transport on an aircraft for which the flight manual indicates an minimum crew of one pilot, when do the regulations require the presence of a second pilot?
- If the aircraft is a twin engine
 - If part or all the flight is done at night
 - If the flight lasts more than 2 hours
 - Never

47. The requirements for packaging and labeling are found in?
- The technical instructions
 - Operations manual
 - ICAO Annex 18
 - Check list
48. As a pilot in command, during flight preparation, if you are notified that a dangerous package has been damaged during its loading, you:
- Mention it on the notification to captain
 - Accept it after a visual inspection
 - Mention it on the shipper's declaration
 - Ensure that arrangements are made for its removal
49. In the events of precautionary landing who is responsible for alerting the emergency services?
- The operations dispatcher
 - The commander
 - Air traffic controller
 - Police
50. The strongest vortices are generated by:
- Heavy aircrafts, travelling fast, in a 'clean' configuration
 - Heavy aircrafts, travelling fast, in a 'dirty' configuration
 - Heavy aircrafts, travelling slow, in a 'dirty' configuration
 - Heavy aircrafts, travelling slow in a 'clean' configuration

PART2

1. List down the nine classes of dangerous goods.

(9MKS)

