

EAST AFRICAN SCHOOL OF AVIATION EXAMINATION SAFETY SECTION

DIPLOMA IN FLIGHT DISPATCH

FLD 37/38

FINAL EXAMINATION

SUBJECT: AIR TRAFFIC MANAGEMENT

Duration: 02 Hrs: 30 Min

DAY/DATE: TIME: 1400HRS – 1600HRS

INSTRUCTIONS:

ANSWER ALL QUESTIONS

SECTION A: 45 MARKS

Que 1

- a) Specify the elements of information provided to air traffic by the Aerodrome Control prior to entering the traffic circuit or commencing approach to land. (6 marks)
- b) State the circumstances under which Aerodrome Control is responsible for alerting the safety services

(8 Marks)

Que 2:

- a) Draw a standard en-route holding pattern, name and explain the parameters associated with it. (7 marks)
- b) When shall arriving aircraft be transferred from approach control unit to aerodrome control unit

 (10 marks)

Que 3:

- a) When is VOR separation deemed to exist for;
 - i) Two outbound aircraft
 - ii) One outbound and one inbound

(6 marks)

- b) What is the meaning of the following letters when they are included in composition of route designators
 - i. A
 - ii. M
 - iii. W
 - iv. Y

(8 Marks)

SECTION B: 25 MARKS

1. In order to meet the wake turbulence criteria what minimum separation should be
applied when a medium category aircraft is taking off behind a heavy category aircraft and
both are using the same runway.
a) 3
b) 2

- 2. When it becomes apparent that an aircraft is in difficulty, the decision to initiate alert phase is responsibility of
- a) Operational ATC unit

c) 1d) 4

- b) Flight Information or Control organization
- c)Air Traffic Coordination services
- d) Search and Rescue coordination centers
- 3. Air Traffic Services Unit consists of;
- a) ATCUs and Flight Information Centers (FIC)
- b) ATCUs, FICs and Air Traffic Services Reporting offices (ATSRO)
- c) ATSRO and ATCUs
- d) FICs and ATSROs
- 4. Which of the following ensures standardization of ATS worldwide?
- a) KCAA
- b) ICAO

c) IATA
d) KAA
5. Except when cleared by an ATC unit, a VFR flight cannot enter or leave a control zone when the cloud base is lower than; a) 1000ft and less than 8km visibility b) 2000ft and less than 5km visibility
c)1500 ft or less than 5km visbility
d)1000ft and less than 5km visibility
 6. Who are not required to contact an Air Traffic Control Service Unit for separation? a) Aircraft under VFR b) Aircraft under Special VFR c) Aircraft under IFR
7. The aircraft whose attitude reference is solely based on the natural horizon follow
a) VFR
b) IFR
c) Pilot
d) KCAA commands
8. An ATS airspace in which IFR and VFR flights are permitted and all flights receive air
traffic control service; IFR are separated from other IFR flights and receive traffic
information concerning VFR flights and VFR flights receive traffic information concerning
all other flights is classified as;
a) Airspace E
b) Airspace B

c) Airspace A

d) Airspace D
9. Who is responsible for the separation of an aircraft from other aircraft in a controlled
airspace?
a) Air Traffic Control Unit
b) Pilot
c) Co-pilot
d) Navigator
10. What is the minimum visibility when flying below 10,000ft and following VFR?
a) 1KM
b) 8KM
c) 5KM
d) 1.5KM
11. What altitude does FL540 correspond to?
a) 54,000ft
b) 5.4 ft
c) 54 ft
d) 5400 ft
12. Which one of the following is not an objective of Air Traffic Services
a) prevent collisions between aircraft on the maneuvering area and obstructions on that area;
b) expedite and maintain an orderly flow of air traffic;
c) provide advice and information useful for the safe and efficient conduct of flightsd) To provide Rescues and Fire Fighting Services to Aerodrome traffic

13. What is the rule concerning level or height the aircraft should maintain when flying

IFR outside controlled airspace unless otherwise directed

- a) 2000ft above highest obstacle within 8Kms of the heading
- b) 1000ft above the highest obstacle within 8kms of the estimated position of the aircraft
- c) 1000ft above the highest obstacle within 8nms of the planned track
- d) 2000ft above the highest obstacle within 8nms of the planned track
- 14. An aircraft is expected to overtake another aircraft from behind in a sector of
- a) 50° both sides of longitudinal axis
- b) 60° both sides of longitudinal axis
- c) 80° both sides of longitudinal axis
- d)70° both sides of longitudinal axis
- 15. What type of flying is known as Normal Aviation Practice?
- a) flights over cities, towns and settlements at a height of less than 1000 feet when it is undertaken on the Final Approach to Land or the Initial Take-off Flight Path
- b) Flying for the purpose of checking navigational aids or procedures
- c) Flying in such a manner as may be necessary for the purpose of saving lives
- d) flights over high terrain or mountainous areas
- 16. Aircraft A flies in VMC with an ATC clearance within a control area, Aircraft B without ATC clearance approaches at roughly the same height on a converging heading. Who has right of way?
- a) Aircraft A, regardless of the direction from which B approaches.
- b) Aircraft B, regardless of the direction from which A approaches.
- c) Aircraft A, if B is to the right of him
- d) Aircraft B, if A is to the right of him
- 17. When two aircraft are approaching head-on or approximately so and there is danger of collision _____
- a) each shall alter its heading to the right.
- b) each shall alter its heading to the left.
- c) each shall give way to the other
- d) each shall pass over, under or in front of the other

18. Air Traffic Service Unit consists of

- a) Air Traffic Control Unit and Flight Information Centers
- b) Flight Information Centers and Air Services Reporting Offices
- c) Air Traffic Control Units, Flight Information Centers and Air Traffic Service Reporting Office
- d) Air Services Reporting Offices and Air Traffic Control Units
- 19. Which of the following is not a rule applicable for IFR inside a controlled airspace
 - a) The pilot of the aircraft must be the holder of a license which includes an instrument rating;
 - b) The aircraft must not be equipped with suitable instruments for the purpose of navigation as required for the airspace concerned
 - c) The pilot must be familiar with the notified procedures for the airspace in which he intends to fly
 - d) The pilot must report the aircraft's position as required
- 20. Which of the following is not a section of an air report
- a) Air Traffic Control clearance
- b) Meteorological information
- c) Operating information
- d) Position report
- 21. When the Captain cannot comply with an ATC clearance
- a) The captain must accept the ATC clearance because it is based on a filled flight plan
- b) She/he may request an amended clearance and if executable she/he will accept that clearance
- c) She/he may ask for a new clearance and the appropriate ATC must grant him/her that clearance.
- d) She/he may suggest a new clearance to ATC
- 22. A method of navigation which permits aircraft operation on any desired flight path within the coverage of station-referenced navigation aids or within the limits of the

capability of self contained aids, or a combination of these is called a) Flight Navigation b) VFR Navigation c) Area Navigation (RNAV) d) IFR Navigation
23. The longitudinal separation minimum based on time between aircraft at the same FL, when there is enough coverage for navigation aids and the preceding aircraft has a higher true airspeed of 20kts minimum is
a) 3 minutesb) 15 minutes
c) 5 minutes d) 10minutes
 24.An aircraft maneuverings in an airport's circuit receives a series of red flashes from the control tower. This signifies that the aircraft must; a) Not land because the airport is not available for landing b) Give way to another aircraft c) Return to land and that clearance to land will be communicated in due course. d) Not land for the moment regardless of the previous instructions
25. The vertical separation minimum (VSM) for flights in accordance with IFR within controlled airspace below FL290 is a) 500 ft b) 2,500 ft c) 1,000 ft d) 2,000 ft