空中交通管制概论	
EXAM	
Duration	**2h**
Nbr of Questions	**38**

Part I. Choose the best correct answer. 2 point for each item.

1. The three components of ATM are ( ).

   A) Aerodrome control, Approach control, Area control

   B) Airspace management, Air traffic flow management, Air traffic services

   C) Strategic management, Pre-tactical management, Tactical management

   D) Information management, Traffic management, safety management

2. The three different Air Traffic Service Units are ( ).

   A) Meteorological Information service unit, Aeronautical information service unit, Flight information service unit

   B) Flow control unit, Traffic control unit, separation control unit

   C) Aerodrome control unit, Approach control unit, Area control unit

   D) Departure control unit, En-route control unit, Arrival control unit.

3. Which type of Special Use Airspace can be set up over the high seas by a country? ( )

   A) Reserved airspace

   B) Prohibited airspace

   C) Restricted airspace

   D) Danger airspace

4. Airspace is classified to allow for ( ).

   A) Different degree of control of activities

   B) Easy designation of different parts of airspace

   C) Segregation of different activities

   D) Flight of aircraft of different speed

5. Chinese airspace is currently classified into classes ( )

   A) Managed, unmanaged

   B) Intended Traffic Environment, Known Traffic Environment, unknown Traffic Environment

C) A, B, C, D

D) A, B, C, D, E, F, G

6. Which of the following is NOT included in the airspace structure of Flexible Use Airspace? ( )

A) Conditional Routes,

B) Temporary Reserved Areas,

C) Prior Co-ordination Airspace

D) Restricted airspace

7. Control sector capacity is mainly determined by ( ).

A) Controller workload

B) Airspace volume

C) Aircraft speeds

D) Separation standards

8. A Pilot will change the altimeter setting to QNH when ( )

A) His aircraft starts to descend

B) Passing through the Transition Level

C) Passing through the Transition Altitude

D) His aircraft starts to approach

9. Below 12500 m, vertical separation between two adjacent flight levels is ( )

A) 1000 m

B) 600 m

C) 500 m

D) 300 m

10. The last three legs of an aerodrome traffic circuit are ( )

A) Upwind, crosswind, downwind

B) Downwind, crosswind, upwind

C) Downwind, Crosswind, final

D) Downwind, Base, Final

11. Information relative to an intended flight or portion of a flight, to be provided to air traffic services units, shall be in the form of a ( ).

A) Flight Request

B) Flight Plan

C) Flight application

D) Flight briefing

12. An ATC ( ) shall be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight.

A) instruction

B) clearance

C) approval

D) permission

13. Which of the following is NOT contained in an air traffic control clearance? ( )

A) Departure time

B) aircraft identification

C) clearance limit

D) route of flight

14. The Missed Approach Point (Mapt) for precision approaches is ( )

A) Over the runway threshold

B) on reaching minimum descent altitude

C) on reaching decision altitude

D) Over the runway end

15. At lower altitudes, a standard holding pattern will take ( ) minutes to complete.

A) 3 C) 5

B) 4 D) 6

16. For design of approach procedures, aircraft are categorized according to their ( )

A) Weight C) Engine types

B) Size D) speeds

17. Where a final approach fix (FAF) is available, the ( ) segment begins when the aircraft is on the inbound track of the procedure turn, base turn or final inbound leg of the racetrack procedure.

A) arrival C) intermediate approach

B) initial approach D) Final approach

18. The initial approach segment provides at least ( ) of obstacle clearance in the primary area, reducing laterally to zero at the outer edge of the secondary area.

A) 300 m C) 100 m

B) 150 m D) 50 m

19. Radar separation for approach section is usually ( ) km

A) 10 C) 5

B) 6 D) 3

20. Odd levels are allocated for ( ) flights

A) Northbound C) Westbound

B) Southbound D) Eastbound

21. Wake turbulence separation minima is determined by aircraft ( )

A) Weight C) Size

B) Speed D) Engine type

22. According to ICAO general rules of air, when a pilot sees another aircraft coming to him from his left at about the same level, he is supposed to ( ).

A) Turn left C) Descend

B) Turn right D) Maintain his heading and level

23. All flights, conducted in accordance with the rules and procedures of ICAO and/or the national civil aviation regulations and legislation , are categorized as ( ).

A) GAT
B) OAT
C) MET
D) RBT

24. A joint civil/military department, responsible for the day-to-day management and temporary allocation of national or sub-regional airspace, is called ( )

A) An AIS office
B) An AMC
C) A SWIM
D) An AUP

25. For IFR flight, the minimum flight altitude should provide an obstacle clearance of ( ) metres over high terrain or mountainous areas.

A) 1000
B) 600
C) 300
D) 150

26. The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours is called ( ).

A) SIGMET
B) AIRMET
C) ATIS
D) VOLMET

27. When an aircraft has been cleared to land and fails to land within 5 minutes of the estimated time of landing and and communication has not been re-established with the aircraft, the situation is in ( )

A) An emergency phase
B) A distress phase
C) An uncertainty phase
D) An alert phase

28. The design of an instrument departure procedure is, in general, dictated by ( ).

A) the terrain surrounding the aerodrome
B) type of aircraft involved
C) siting of navigational aids
D) ATC requirements

29. Which of the following is NOT a task of the approach controller ? ( )

A) Merging
B) Sequencing
C) Track keeping
D) Spacing

30. Traffic synchronization is a component of ( ) operational concept

A) US Nextgen
B) ICAO global ATM
C) SESAR
D) Future China ATM

Part II. Answer the following questions. 5 points for each question.

1. What are the functions of ASM?

2. Why should a control area be sectorized?

3. Why should airspace be classified?

4. What are the tasks for the pre-tactical phase of Air Traffic Flow and Capacity management?

5. What are the ways to optimize utilization of available en-route capacity?

6. What factors have to be considered when reducing the vertical separation minima?

7. How can wake turbulence separation be reduced?

8. How can an in-flight holding pattern be defined?