



# CBCS SCHEME

BAE/BAS456B

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Question Paper Version : A

**Fourth Semester B.E./B.Tech. Degree Supplementary Examination,  
June/July 2024  
Drone Pilot Training**

Time: 1 hr.]

[Max. Marks: 50

## INSTRUCTIONS TO THE CANDIDATES

1. Answer all the **fifty** questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

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1. The aerospace map for drone is freely available on the \_\_\_\_\_ platform.  
a) Data sky                      b) NEOSKY                      c) Digital sky                      d) Air sky
  2. Civil Aviation requirements are published by \_\_\_\_\_  
a) AAI  
b) Indian Air-force  
c) DGCA  
d) Central Public Works Department
  3. \_\_\_\_\_ category of drones does not require any registration for use in India.  
a) Micro                      b) Nano                      c) Small                      d) Large
  4. What is the primary purpose of ATC procedure?  
a) Ensuring Aircraft safety  
b) Monitoring Weather conditions  
c) Conducting pilot training program  
d) Managing airport finances
  5. The full form of CAR \_\_\_\_\_  
a) Civil Aviation Requirement  
b) Central Aviation Regulation  
c) Civil Aviation Regulation  
d) Central Aviation Requirement

6. How does the Indian Drone Airspace is Zonalised?
  - a) Red, Blue, Green
  - b) White, Black, Violat
  - c) Red, Yellow, Green
  - d) Yellow, Green, White
  
7. As per the guidelines, drone cannot be flown more than \_\_\_\_\_ ft vertically.
  - a) 100
  - b) 200
  - c) 500
  - d) 400
  
8. What is CTR in
  - a) Close Target Reconnaissance
  - b) Correction
  - c) Clear
  - d) Control zone
  
9. What is the primary purpose of obtaining a Unique? Identification Number (UIN) for a drone, as per DGCA?
  - a) To operate the drone in controlled air space
  - b) To ensure insurance coverage for the drone
  - c) To track and identify the drone
  - d) To participate is drone racing events
  
10. Standardization of ATM service is ensured by?
  - a) FAA
  - b) DGCA
  - c) ICAO
  - d) IAO
  
11. Fixed wing UAV's are suited for \_\_\_\_\_ Inspection applications
  - a) Circular
  - b) Linear
  - c) Varying topography
  - d) Low attitude
  
12. If the angle of attack and other factors remains constant and airspeed is doubled, the lift will increase by \_\_\_\_\_ times.
  - a) 2
  - b) 3
  - c) 1/2
  - d) 4
  
13. Skidding outward in a turn is caused by \_\_\_\_\_
  - a) Insufficient Bank
  - b) Excess power
  - c) Excess Bank
  - d) Over turn
  
14. The combination of Ailerons and Elevators is called \_\_\_\_\_
  - a) Alevon
  - b) Spoiler
  - c) Elevon
  - d) Rudder
  
15. If the weight of a fixed wing UVA increases, the gliding range will \_\_\_\_\_ as well as the rate of descent \_\_\_\_\_
  - a) Remain same, increases
  - b) Remain same, decreases
  - c) Increases, increases
  - d) Decreases, increases

16. What is the purpose of Gimbal in drones?
  - a) Capture aerial photos
  - b) Control of drone's altitude
  - c) Stabilize the camera during flight
  - d) Improve GPS accuracy
  
17. LOS stands for \_\_\_\_\_
  - a) Line of sight
  - b) Low obstruction system
  - c) Landing orientation sensor
  - d) Line of stability
  
18. In aviation, what is the purpose of squawking a transponder code?
  - a) Initiating engine shut down
  - b) Communicating with ATC
  - c) Requesting in flight catering
  - d) Indicating fuel status
  
19. In multirotor operation, what is the primary mechanism for controlling the aircraft's altitude?
  - a) Ailerone
  - b) Elevators
  - c) Rotor speed variation
  - d) Flaps
  
20. What does the term "METAR" stand for in meteorology?
  - a) Meteorological Alert and Reporting
  - b) Meteorological Aerodrome Report
  - c) Meteorological Emergency tracking and response
  - d) Meteorological Elevation and Range
  
21. Fly away emergency occurs due to GPS and hardware/software failure is know as \_\_\_\_\_
  - a) Safe flight
  - b) Straying
  - c) Escaping
  - d) Charge failure
  
22. IMU stands for \_\_\_\_\_
  - a) Inertial Measurement Unit
  - b) Indian Medical Unit
  - c) Indian Meteorological Unit
  - d) Imperial Metering Unit
  
23. What is the function of an anemometer?
  - a) Measure air pressure
  - b) Measure wind speed
  - c) Measure temperature
  - d) Measure humidity
  
24. In meteorology, what does the term "dew point" represent?
  - a) The temperature at which air becomes Saturated with moisture
  - b) The point of maximum air pressure
  - c) The point of minimum humidity
  - d) The temperature at which clouds form

25. What is the purpose of Windssock at an airport?  
a) Control speed  
b) Measure air speed  
c) Display Airport status  
d) Indicate wind speed and direction
26. \_\_\_\_\_ is logical process to make observation and interpretation  
a) Interface                      b) Inference                      c) Interference                      d) Impair
27. What does sense and avoid in drone technology?  
a) Detect and avoid collision  
b) Sense regular restrictions  
c) Flight data in real time  
d) Avoiding air space
28. Flight plan should be submitted atleast \_\_\_\_\_ minutes before departure  
a) 60                      b) 30                      c) 45                      d) 90
29. In the lowest part of the stratosphere, the temperature is almost \_\_\_\_\_  
a) Twice                      b) Half                      c) Zero                      d) Constant
30. Comprehensive maintenance has to be performed after every \_\_\_\_\_ flight  
a) 100                      b) 50                      c) 200                      d) 1000
31. \_\_\_\_\_ sensor can penetrate obscurant, such as smoke, fog and haze  
a) Temperature                      b) IR sensor                      c) Camera                      d) Thermal Imaging
32. \_\_\_\_\_ is the common payload in drones  
a) LIDAR  
b) Thermal Imaging Sensor  
c) Camera  
d) IR SENSOR
33. What is the purpose of LiDAR technology in payload installation on drones?  
a) Capture high resolution images  
b) Measure distances and create detailed Maps  
c) Record Video footage  
d) Enhance communication signals
34. In payload utilization, what is the primary application of a multispectral camera on a drone?  
a) Terrain Mapping  
b) Wildlife monitoring  
c) Crop health assessment  
d) Real time video streaming
35. What is the primary function of a magnetometer in payload, installation on a drone?  
a) Measure Temperature  
b) Measure air speed  
c) Measure magnetic field strength  
d) Enhance camera stabilization



48. \_\_\_\_\_ colour has the largest frequency in visible spectrum  
a) Green                      b) Voilet                      c) Blue                      d) Yellow
49. Flight mode that allows the drone to automatically follow and track a subject \_\_\_\_\_  
a) Follow Me Mode      b) Orbit Mode              c) Acro Mode              d) Waypoint Mode
50. Photogrammetry creates dynamic, measurable documents using system of \_\_\_\_\_  
a) UAV Mounted Sensors  
b) GIS Mapping system  
c) Both of the above  
d) None of these

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