

SUBJECT-SOP**Marks-200****Time: - 02:00 Hrs**

1.	Wing Span-	2.	Length-
3.	Height-	4.	Vertical Fin-
5.	Aspect Ratio-	6.	Max T/O Weight-
7.	Standard Empty Weight-	8.	Max Baggage Weight-
9.	Max Load per Seat-	10.	Min Combined Crew Weight-
11.	Fuel Capacity Total-	12.	Fuel Capacity Useable
13.	Oil Capacity-	14.	Engine Type-
15.	Propeller Type	16.	Propeller Diameter-
17.	Absolute Ceiling at MTOW-	18.	Torque-
19.	Max Permitted Rpm-)	20.	Compression Ratio-
21.	Cooling System-	22.	Ignition System-
23.	Max Coolant Temp-	24.	EGT Normal-
25.	Max EGT-	26.	Oil Temp Max-
27.	Oil Pressure Max-	28.	Oil Pressure-
29.	Magneto Drop Check RPM-	30.	Single Magneto Drop Max-
31.	T/O Ground at MTOW-	32.	Best Climb Speed –
33.	Best Climb Rate at MTOW-	34.	Min Sink Rate Speed-
35.	Best Landing Ration Speed-	36.	Max Speed VNE-
37.	Normal Operating Speed-	38.	ASI Marking White Band-
39.	ASI Marking Red Band-	40.	Techo-meter Max Line-
41.	Oil Temp Yellow Line-	42.	Oil Temp Green Line-
43.	Electrical System (Battery)-	44.	Alternator-
45.	Fuel Quantity Low Warning-	46.	Garmin Aera 500 GPS screen size-
47.	Min Battery Voltage-	48.	Range of Techo-meter-
49.	Variometer Start Working at when Speed exceed-	50.	Nose Wheel Tyre Pressure-

51. Write down the Circuit Pattern of Virus ac?

(5×10=50)

52. Write down manoeuvring limitation?

53. Write down Cockpit Pre Flight Inspection?

54. Write down Taxi procedure?

55. Write down the switch off procedure?

56. Write down engine failure during Takeoff?

57. Explain Engine failure in Flight?

58. Explain Magneto Drop Check procedure?

59. Write down checks before engine start?

60. Explain vital action before take-off?

SPECIALISED SUBJECTS**State True or False**

61. The angular motion about longitudinal axis is called rolling

62. MiG-21 is a multi-engine aircraft.

63. AN-32 aircraft have propellers.

64. MI-35 trainer a/c used in Indian air force.

65. Weight is the vertical component of Total Reaction, resolved at right angles to the relative airflow.

66. Helicopter does not have rotor blades.

67. Airship is lighter than air aircraft.

68. Free balloons are not an example of lighter aircraft.
69. Center of gravity is the point through which weight of an aircraft acts
70. Unit of work is Joule.
71. Thrust acting horizontally forward along the propeller shaft.
72. Angle of attack is a length of chord line intercepted between the leading and trailing edges.
73. The rotary motion of an air craft about its lateral axis is known as rolling
74. ASI works on the principle of Differential Pressure
75. Central Air Command located in Delhi

MCQ

76. What is the highest Gallantry award bestowed other than in the face of enemy(Peacetime)
(a) Shaurya Chakra (b) Kirti Chakra(c) Vayu Sena Medal(d) Ashoka Chakra
77. The identifying word for the letter 'T' is _____
(a) Tea (b) Thumb (c) Tango (d) Tree
78. The Navy is divided into _____commands.
(a) 08 (b) 03 (c) 05 (d) 07
79. _____ is a half great circle joining the two poles.
(a) Equator (b) Rhumb Line (c) Earth Axis (d) Meridian
80. _____ is the main body of the aircraft to which all the other components are attached.
(a) Cockpit (b) Fuselage (c) Tail section(d) Aero Engine
81. _____ is a fundamental control surface in order to provide means of controlling yaw of an airplane about its vertical axis.
(a) Rudder (b) Aileron (c) Elevator (d) Stabilizer
82. ETA stands for_____
(a) Estimated time of approach (b) Estimated time of arrival
(c) Evaluated time of arrival (d) Evaluated time of approach
83. The identifying word for the letter 'Q' is _____
(a) Queen (b) Quebec (c) Queue (d) Quit
84. Aero models are classified according to _____
(a) role(b) utility (c) type (d) All of the above
85. Medium-sized water drops falling from layers of clouds called as_____
(a)Sleet (b) Snow (c) Rain (d) Drizzle
86. Average height for medium clouds is _____

(a) 20,000 feet and above (b) 6500 feet to 20,000feet

(c) Ground level to 6500 feet (d) 6500 feet to 10,000feet

87. ISA stands for _____

(a) International Standard Atmosphere (b) Indian Standard Atmosphere

(c) Indian Standard Atmosphere (d) None of above

88. The layer above the stratosphere is _____

(a) Thermosphere (b) Ionosphere (c) Mesosphere (d) Troposphere

89. Relief is indicated on maps and charts as _____

a) Spot heights or depths (b) Contours and form lines

(c) None of above (d) All of above

90. _____line cutting all the meridians at the same angle.

Rhumb Line (b) Equator (c) Equator (d) Latitude

91. The first evidence of hypoxia occurs at _____in the form of diminished night vision.

(a)1000 feet (b) 5000 feet (c) 10000 feet (d) 25000 feet

92. _____was Chief of the Air Staff (CAS), from 1 August 1964 to 15 July 1969

(a)Arjan Singh (b) Rakesh Sharma (c) NirmalJit Singh Sekhon (d) None of above

93. _____aircraft did not participate in the kargil war.

(a)MiG-21 (b) MiG-27 (c) Rafale (d) Mirage 2000

94. Rakesh Sharma was the first Indian to go into space on _____

(a)April 2, 1984 (b) April 2, 1987 (c) April 2, 1971 (d) April 2, 1988

95. _____law says that 'the sum total of all energy in the universe remains constant'.

(a)Newton's First Law (b) Law of Conversation of Energy

(c) Newton's Second Law (d) Newton's Third Law

96. Stalls depend only on _____

(a)Angle of attack (b) Airspeed (c) Angle of incidence (d) None of above

97. The Indian Air force anniversary is celebrated on_____every year.

(a) 8 Oct (b) 4 Apr (c) 4 Oct (d) 3 Dec

98. The Kargil Vijay Diwas is observed in India on _____ every year.

(a)26th July (b) 3rd December (c)15th Aug (d) 26th Jan

99. The Indo-Pak war 1971 lasted for_____ days.

(a) 14 Days (b) 13 Days (c) 3 Days (d) 11 Days

100. _____ is the resistance of the air to anything moving through it.

(a) Drag (b) Thrust (c) Lift (d) Weight

HEALTH AND HYGIENE

1. Responsibility for the maintenance of personal health therefore lies with the _____.
2. The average requirement of sleep is about _____ a day.
3. _____ minimizes the accumulation of bacteria in mouth which can cause tooth decay and gum diseases.
4. _____ habits such as washing hands and brushing teeth will keep bacteria, viruses and illness at bay.
5. Lack of adequate food hygiene can lead to _____ and _____.
6. Brush your teeth _____.
7. _____ is the condition and measures necessary to ensure the safety of food from production to consumption.
8. Food is a potential source of _____.
9. _____ is the heating of milk to such temperature and for such periods of time, as are required to destroy any pathogens without destruction of nutritive value.
10. Fruits and vegetables are an important source for the spread of _____ and _____.
11. Sanitation means keeping the living area and its surroundings _____.
12. A sample of food provided to cadets will be preserved for _____ after the meal is served.
13. All preliminaries, such as, cutting, peeling and washing of food items will be done in a _____.
14. Each cook house will have soakage pit, _____ wide.
15. These pits will be fly-proofed, filled with _____ and covered with a top layer of earth.
16. Water used in the Camp must be from authorised source and must be checked by the _____ and certified as potable.
17. A pit _____ deep and of a length suitable to the requirement is constructed and wooden seats placed over it with proper partitions and curtains.
18. For camps of less than a week's duration, dig a row of trenches in parallel, each trench being _____.
19. _____ are filled up after 24 hours and new trenches are dug up.
20. The most common urinal used for camps is the _____ which are constructed over a simple soakage pit.
21. _____ will also be washed twice a day and treated with lime.
22. Latrines will be _____ every morning.
23. _____ is the initial assistance given to a victim of injury or illness.
24. An open pneumothorax or sucking chest wound - the chest wall has been penetrated by _____.
25. Moist heat such as hot water, hot fluids and steam, which is called _____.
26. In Snake bite, the poison is injected by the snake through _____ and deeply grooved biting fangs.
27. Bite by scorpions should be treated like _____.
28. _____ is preventable by giving anti-rabies vaccine.
29. Dog and the patient should be kept under observation for at least _____.
30. Signs and Symptoms of _____ Shortness of breath rate or breathing increase.
31. _____ -When the restlessness of body and mind are present.
32. Cover the patient's mouth with clean gauze and blow directly and slowly into it. 10 – 12 times per minutes in _____.
33. First Aid for Different Type of Fractures _____ and _____.
34. _____ It is caused by blunt instrument.
35. _____ Injuries in which a body structure is forcibly detached from its normal point of insertion.
36. _____ that originate from an external source of trauma are contusions, also commonly called bruises.
37. Apply A/S ointment or powder and cover it with gauze. Select suitable bandage, start bandaging clock wise from outer aspect to inner aspect by covering _____.
38. UNO has declared _____ as the International Day of yoga.

39. Yoga is a _____ method utilized for attaining a goal.
40. The _____ and _____ pressure may be mentioned as special characteristics of the yoga system of health.
41. The nature of Yogic practices is _____.
42. Padmasana asana is useful for _____.
43. Gyan Mudra is most suitable for _____.
44. _____ is a combined sequence of 12 positions.
45. Shavasana asana provides relief in disease like _____.
46. Vajrasana asana can be done immediately after _____.
47. _____ helps in making the spine supple.
48. Halasana asana stimulates blood circulation and makes the _____.
49. Vajrasana Timing _____.
50. While _____ Suryanamaskara recite the different names of Sun god at each position.