Name: **Enrolment No:**	UPES UNIVERSITY OF TOMORROW

UPES

End Semester Examination, Dec 2023

Course: MBA AVM **Semester: 3**

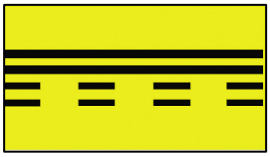
Program: Aerodrome Design & Operations **Time : 03 hrs.**

Course Code: TRAV 8002 **Max. Marks: 100**

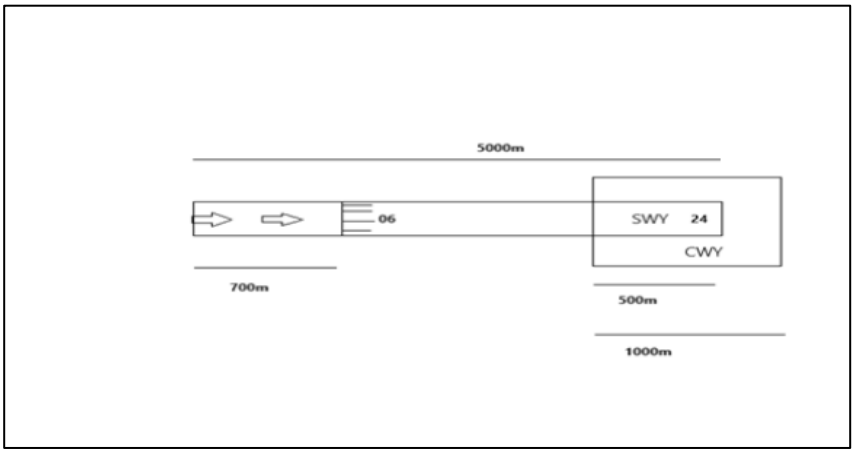
Instructions: ***(Note: For all sections, answer as per CAR Section 4 Series B Part 1)***

SECTION A

10Qx2M= 20Marks

S. No.		Marks	CO
Q 1	For conduction friction test of runway what is a. MPL b. MFL	**2**	**CO1**
Q2	Removal of Disabled Aircraft is stated under. a. Airport Service Manual 9137 Part 1. b. Airport Service Manual 9137 Part 3. c. Airport Service Manual 9137 Part 5. d. Airport Service Manual 9137 Part 7.	**2**	**CO1**
Q3	CAR Section 4 Series B part 1 deals with a. Aerodrome Design and Operations b. Aerodrome Design and Planning c. Aerodrome Design and Construction d. Both a & b	**2**	**CO1**
Q4	Runway Closer marking shall be marked with: a. White Color b. Yellow Color c. White with Black Border d. Yellow with Black Border	**2**	**CO2**
Q5	Low Intensity Flashing Yellow Obstacle Light is for a. Follow Me Vehicle b. CISF Vehicle c. Ambulances d. Both b & c	**2**	**CO3**
Q6		**2**	**CO1**

	Identify the Airfield Signage a. Intermediate Holding Position b. Runway Holding Position Pattern A c. Runway Holding Position Pattern B d. Both b & c		
Q7	Strike Rate = Nb X 10,000/ Na What does Na stand for?	**2**	**CO1**
Q8	Runway Width excluding shoulders required for Code C operations is a. 45m b. 35m c. 75m d. 60m	**2**	**CO2**
Q9	TODA is the combination of: a. TORA + RESA + RWY Strip b. ASDA + LDA c. TORA + CLEAR WAY d. TORA + STOPWAY	**2**	**CO2**
Q10	Full Form a. ARFF b. OMGWS	**2**	**CO2**
SECTION B **4Qx5M= 20 Marks**			
Q 11	Discuss the difference between Precision Approach Runway Cat I & II	**5**	**CO3**
Q 12	Define (2.5 X 2 = 5) a. ARP b. Maneuvering Area	**5**	**CO3**
Q 13	Explain Chicago Convention	**5**	**CO3**
Q 14	Explain the significance with dimensions of: (2.5 X 2 = 5) a. RHP b. IHP	**5**	**CO3**
SECTION-C **3Qx10M= 30 Marks**			
Q 15	Explain with proper slopes percentages of Transverse Slop of Runway, Transverse Slop of Runway Strip, Longitudinal Slope of RESA, Longitudinal Slope of Taxiway & Apron	**10**	**CO2**
Q 16	Discuss the difference between Precision Approach Runway Cat I & II	**10**	**CO3**
Q 17	Explain in detail the dimensions of TDZ, Barrette, Runway Centerline Light Off set & Clearance distances on aircraft for stand Code "F." OR Explain in detail the mechanism of measuring of Runway friction, its methods & Action taken for maintaining the required levels.	**10**	**CO3**

SECTION-D 2Qx15M= 30 Marks			
Q 18	Draw a schematic of the CAT I Precision Approach lightning system & explain with proper dimensions.	**15**	**CO4**
Q 19	Determine (7.5 X 2 =15) a. An Antennae has to be installed with a height of approx. 50m in the approach surface of CAT 1 Runway. Identify the distance from threshold. b. Wildlife department has planned to install bird repellant device of 10m parallel to runway, confirm the distance from runway strip which might obstruct the Transitional Slope. OR  <u>Calculate</u> TORA, TODA, ASDA & LDA for RWY 06 & 24. (Marks 15)	**15**	**CO4**