



Name:

Enrolment No:

UPES

End Semester Examination, Dec 2024

Course: MBA AVM

Program: Aerodrome Design & Operations

Course Code: TRAV 8002

Semester: 3


Time : 03 hrs.

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	Full Form of a. DARK b. OMGWS	2	
Q2	AIRAC System consists of a. 40 days b. 41days c. 42days d. 45days	2	
Q3	Secondary Power Supply Sources at Airport are: a. DG Set b. UPS c. a or b d. a & b	2	
Q4	Second section of Approach surface consists of a. Slope 2% & Distance 3000m b. Slope 2.5% & Distance 3600m c. Goes Horizontal & Distance 8400m d. Slope 2.5% and Distance 3000m	2	
Q5	Aerodrome Identification Beacon Emits a. Flashes of Yellow & Green b. Flashes of Yellow & Blue c. Morse Code d. Flashes Red	2	

Q6	 <p>Identify the Airfield Signage</p> <ol style="list-style-type: none"> <li>Taxiway End Signage</li> <li>No Entry</li> <li>Road Holding Position</li> <li>None of the Above</li> </ol>	2	
Q7	<p>Inner Guage difference between TDZ marking shall be</p> <ol style="list-style-type: none"> <li>47.5m</li> <li>18 m</li> <li>9m</li> <li>4.5m</li> </ol>	2	
Q8	<p>What is the Runway Width excluding shoulders for Code C operations</p> <ol style="list-style-type: none"> <li>45m</li> <li>35m</li> <li>55m</li> <li>60m</li> </ol>	2	
Q9	<p>Inner Horizontal Surface has a radius of</p> <ol style="list-style-type: none"> <li>2000m</li> <li>4200m</li> <li>4000m</li> <li>15000m</li> </ol>	2	
Q10	<p>Length of Radio Altimeter Operating Area before threshold is</p> <ol style="list-style-type: none"> <li>300m</li> <li>60m</li> <li>3000m</li> <li>3600m</li> </ol>	2	
<p><b>SECTION B</b>  <b>4Qx5M= 20 Marks</b></p>			
Q 11	<p>Explain the Application, Color &amp; Characteristics of (2.5 X 2 = 5)</p> <ol style="list-style-type: none"> <li>RETIL</li> <li>Aircraft Stand Maneuvering Guidance Lights.</li> </ol>	5	CO3
Q 12	<p>An antenna of 70m height must be installed before the threshold of Runway 14. Calculate suitable distance for installation?</p>	5	CO3
Q 13	<p>Identify the 3 measures adopted by Aerodromes for denoting unserviceable areas.</p>	5	CO3
Q 14	<p>What are the slopes percentages for the following.</p>	5	CO3

	<ul style="list-style-type: none"> <li>a. Transverse Slope of Runway,</li> <li>b. Transverse Slope of Runway Strip,</li> <li>c. Longitudinal Slope of RESA,</li> <li>d. Longitudinal Slope of Apron</li> <li>e. Transverse Slope of Taxiway</li> </ul>		
<b>SECTION-C</b> <b>3Qx10M= 30 Marks</b>			
Q 15	Design a Full Parallel Runway 09R with proper Specifications & Distances.	<b>10</b>	<b>CO2</b>
Q 16	Explain Characteristics & Slope. <span style="float: right;">(5 X 2 = 10)</span> <ul style="list-style-type: none"> <li>a. Balked Landing Surface</li> <li>b. Inner Transitional Surface</li> </ul>	<b>10</b>	<b>CO3</b>
Q 17	Explain all three Wild life Strike reporting methods along with strike mitigation measures.	<b>10</b>	<b>CO3</b>
<b>SECTION-D</b> <b>2Qx15M= 30 Marks</b>			
Q 18	<div style="text-align: center;"> </div> <p><u>Calculate</u> TORA, TODA, ASDA &amp; LDA for RWY 06 &amp; 24.</p>	<b>15</b>	<b>CO4</b>
Q 19	Draw a detailed schematic diagram of the CAT II Precision Approach lighting system with barrettes and explain with proper dimensions.	<b>15</b>	<b>CO4</b>