Roll No
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## PRESIDENCY UNIVERSITY BENGALURU

# SCHOOL OF ENGINEERING MID TERM EXAMINATION - NOV 2023

Semester: Semester V - B.Tech CIV - 2021 Date: 6-NOV-2023

Course Code: CIV2023 Time: 9:30AM - 11:00AM

Course Name: Sem V - CIV2023 - Airport Engineering and Harbour

Max Marks: 50

Program: B. TECH Weightage: 25%

#### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

#### PART A

#### **ANSWER ALL THE QUESTIONS**

(2 X 5 = 10M)

1. What are the objectives of airport survey?

(CO1) [Knowledge]

2. What are the zoning laws applied near the airport site?

(CO1) [Knowledge]

#### **PART B**

#### **ANSWER ALL THE QUESTIONS**

(2 X 10 = 20M)

**3.** There are four modes of transportation and air transport is gaining popularity fast. What are the advantages and disadvantages of air transport?

(CO1) [Comprehension]

**4.** Selection of a site to construct an airport is a tough task, failing which the whole process will become uneconomical. What are the factors affecting airport site selection?

(CO1) [Comprehension]

### **PART C**

## **ANSWER ALL THE QUESTIONS**

(1 X 20 = 20M)

- **5.** a) What are the factors influencing runway orientation?
  - b) Table shows typical wind data for an airport site. Determine the best orientation of the runway and percentage of time during which the runway can be used. Does it require a second runway? If so determine total coverage.

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Wind Direction	Percentage of Tin
N	10.3
NNE	8.1
NE	3.9
ENE	1.8
E	1
ESE	0.4
SE	7.1
SSE	8.7
S	14.3
SSW	10
SW	5.7
WSW	1.6
W	0.5
WNW	0.3
NW	7.2
NNW	5.6

(CO2) [Application]