

C.U. SHAH UNIVERSITY

Summer Examination-2017

Subject Name: Dock Harbor and Airport Engineering

Subject Code: 4TE08DHA1

Branch: B.Tech (Civil)

Semester: 8

Date: 15/04/2017

Time: 02:30 To 05:30

Marks: 70

Instructions

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1	Attempt the following questions:	(14)
	a) Define pier-head.	1
	b) What is the full form of ICAO?	1
	c) Define airport capacity.	1
	d) What do you mean by dredging?	1
	e) Define ferry.	1
	f) What are dolphins?	1
	g) Draw a sketch of normal landing of an aircraft.	1
	h) What is airport grading?	1
	i) Define Wharves.	1
	j) The length of runway is increased per 300 m rise above MSL.....	1
	k) FAA stands for.....	1
	l) Beaufort scale is used to determine.....	1
	m) Define a harbor.	1
	n) Define clapotis.	1

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
	(a) Why fenders are provided on docking platform? Draw the sketch of wooden and rubber fenders.	(7)
	(b) What do you understand by terminal building? What are the facilities provided in terminal building?	(7)
Q-3	Attempt all questions	(14)
	(a) Find the design length of runway required if the length under standard atmospheric condition is 2000 m. The actual elevation of the site is 1000 m above MSL and the airport reference temperature is 16°C. Max. effective gradient is 0.5%	(7)
	(b) Make a neat sketch of a dipper dredge and describe its use. What are the special advantages of this type dredge?	(7)
Q-4	Attempt all questions	(14)
	(a) What are the different types of lock gates? Explain with sketch the mitre type gate.	(7)
	(b) Describe the moment of an aircraft in three principal axes with the help of neat sketch	(7)



