

C.U. SHAH UNIVERSITY

Winter Examination-2019

Subject Name: Dock Harbor and Airport Engineering

Subject Code: 4TE08DHA1

Branch: B.Tech (Civil)

Semester: 8

Date: 13/09/2019

Time: 10:30 To 01:30

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.
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- Q-1 Attempt the following questions (14)**
- a) What is approach zone? (1)
 - b) Define breakwater. (1)
 - c) What is the runway orientation? (1)
 - d) Define the terms tidal range. (1)
 - e) What is the full form of AAI? (1)
 - f) What are slipways? (1)
 - g) What is the function of hangar? (1)
 - h) Enlist major seaports in Gujarat. (1)
 - i) What are the main components of a terminal building? (1)
 - j) What is dredging? (1)
 - k) Draw the sketch of rubber fenders. (1)
 - l) What is airport grading? (1)
 - m) What is wind rose diagram? (1)
 - n) What do you mean by the term visual aid at airport? (1)

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

- Q-2 Attempt all questions (14)**
- A) Explain in detail the effect of weight components in the planning and design of airports. What are the different gear configurations generally used to support the aircraft weight? (7)
 - B) What are Mooring buoys? What are the component part of a buoy unit? Explain with sketch (7)
- Q-3 Attempt all questions (14)**
- A) What is ferry? Describe different types of ferries. (3)
 - B) What are the objectives of regional planning? What are the advantages of regional planning? What are to be collected from regional planning? (7)
 - C) Write a note on 'disposal of dredged material' (4)
- Q-4 Attempt all questions (14)**
- A) Draw a neat sketch to show how lighting is done on a runway? Adopt narrow gauge pattern of lighting. (7)
 - B) What are the different types of lock gates? Explain with sketch the mitre type gate. (7)



