

KADI SARVA VISHWAVIDHYALAYA

BE SEMESTER: 6TH

EXAMINATION (MAY/2015)

SUBJECT CODE: CV 602

SUBJECT NAME: DOCKS, HARBOUR AND AIRPORT ENGINEERING

DATE: 01 /05/2015

TIME: 10.30 TO 1.30

TOTAL MARKS: 70

INSTRUCTIONS:

1. Answer each section in separate Answer book
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

SECTION: I

Q : 1 (ALL COMPULSORY)

- (A) Define : Airport capacity, Clear way ,Apron, Instrumental runway, Pavement classification number 05
- (B) At an airport site at sea-level with standard atmospheric conditions, the runway lengths required for takeoff and landing are 1700 m and 2300 m respectively. The proposed airport is situated at an altitude of 140 m. If the airport reference temperature is 15°C and if the effective runway gradient is 0.35 percent, calculate the length of runway to be provided. 05
- (C) What are the characteristics of a conventional type aircraft? 05

OR

- (C) List out factors affecting airport site selection? Explain any three in detail. 05

Q : 2 Answer the following questions.

- (A) Draw layout of domestic airport and International airport. 05
- (B) What is runway orientation? What are the factors affecting runway orientation. 05

OR

- (A) Describe various aircraft parking systems. 05
- (B) Explain briefly various taxiway geometrics as recommended by ICAO. 05

Q : 3 Answer the following questions.

- (A) Discuss function of airport drainage. Explain briefly requirement of an airport drainage system. 05
- (B) What are the main components of terminal building? Explain briefly. 05

OR

- (A) List out elements of airport lighting. Explain Threshold lighting, runway lighting and taxiway lighting with neat sketch. 05
- (B) Describe various components of air traffic control network. 05

SECTION: II

Q : 4 (ALL COMPULSORY)

- (A) Importance of water transportation. Write Advantages and disadvantages. 05
- (B) Factors affecting selection of breakwater. 05
- (C) How the water waves are generated. Explain shallow waves and deep waves. 05
- OR
- (C) Enumerate eight major ports of India 05

Q : 5 Answer the following questions.

- (A) Differentiate between (i) Quays and pier (II) Wharf and jetty 05
- (B) Define harbour. Draw the sketch of a typical artificial harbour. 05
- OR
- (A) What are the different ways of cathodic protection? 05
- (B) Write short note on : Revetment 05

Q : 6 Answer the following questions.

- (A) Write short note on : Beacon lights 05
- (B) List different types of dredgers. Explain dipper dredger with neat sketch. 05
- OR
- (A) Types of different navigational aids. Explain light house with neat sketch. 05
- (B) Write short Note on : Littoral Drift 05

All the Best