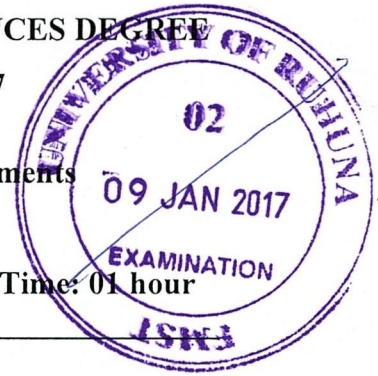


UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE
Level III Semester II – December 2016/ January 2017

OCG3241 – Hydrography of Coastal and Marine Environments

Answer all the questions

Time: 01 hour



01. Fill in the blanks

- a) Geoid is the surface of the earth's gravitation and rotation which nearly coincides with the in the open ocean
- b) Direction of gravity is to a level surface
- c) GPS satellites are placed at an orbital inclination of and overall height of
- d) The fundamental frequency of GPS signal is
- e) The GPS system consists of, andsegments.
- f) The frequency of CA code isMhz

(20 Marks)

02. State True or False

- a) Geoid is the only equipotential surface which can be connected in practice with the earth's surface
- b) UHF waves can travel around the globe
- c) All astronomical observations are made relative to Geoid.
- d) GPS is a one way ranging system
- e) At new and full moon the sun's tide producing forces act against those of the moon
- f) Anti-spoofing affects P code only
- g) The length of sea mile increases as we go up in latitude from equator
- h) Phase comparison is more accurate than code comparison.
- i) Infinite equipotential surfaces can be drawn
- j) The proportion of tide producing forces varies inversely as the third power of distance between heavenly bodies.

(10 marks)

03. Short Answer

- a) List the Components of datum transformation parameters.
- b) Define Gravity.

(20 marks)

04. Long Answer

- a) Write down the basic components of an Echo sounder and explain three of them

(25 marks)

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