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Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2014

(CUCSS)

Environmental Sciences (Main)

ES 21 08—ENVIRONMENTAL PHYSICS

(2010 Admissions)

Time : Three Hours Maximum : 36 Weightage

I. Answer *all* questions :

1 What is Coriolis effect ?

2 What is a Hurricane ?

3 State Stefan-Boltzmann's law on radiation.

4 What is seasonal variation of insolation ?

5 Define nuclear fusion.

6 State two important effects of interference of sound waves.

7 What is a gamma ray emission ?

8 Define Relative Humidity of the earth's atmosphere.

9 Distinguish between weather and climate.

10 What is a stereopair ?

11 What are cold fronts ?

12 What is Rayleigh scatter ?

13 Define geostationary satellite.

14 Define scale of aerial photograph.

(14 × 1 = 14 weightage)

II. Answer any *seven* of the following limiting your answers to *one paragraph* in each case :—

15 Discuss briefly vertical air motions.

16 What are the properties of warm air masses ?

17 Explain the significance of auroras.

Turn over

18 Distinguish between satellite imageries and aerial photographs.

19 Explain radioactive series with a suitable example.

20 What is temperature inversion in the atmosphere ?

21 Briefly describe meteorological elements.

22 Comment on the use of aerial photographs in land surveys.

23 Distinguish between cyclones and anticyclones.

24 Comment on the acoustics of auditoriums.

(7 × 2 = 14 weight

III. Answer any *two* of the following :—

25 What is noise pollution ? Describe the different steps that can be taken to control noise pollu

26 Describe the characteristics of electromagnetic spectrum. Add a note on their use in rer sensing studies.

27 Describe the optical features of the atmosphere.

28 Discuss the mechanisms, forms and types of precipitation.

(2 × 4 = 8 weight