

Total No. of Questions : 8]

SEAT No :

P1696

[5130]-404

[Total No. of Pages :2

M.Sc.

ENVIRONMENTAL SCIENCE

**EVSC-404 : Renewable and Non-renewable Energy
(2013 Pattern) (Semester-IV) (Credit System)**

Time : 3 Hours]

[Max. Marks :50

Instructions to the candidates:

- 1) Solve any Five Questions from the following.*
- 2) Neat and labeled diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

Q1) Answer the following:

[10]

- a) Describe solar spectrum with diagram.
- b) What are fossil fuels? Add a note on formation of fossil fuels.

Q2) a) Discuss various environmental problems associated with fossil fuels.**[10]**

- b) What is energy plantation? Explain its role in energy generation.

Q3) a) Explain how solidwaste is useful for energy generation.

[10]

- b) Explain physicochemical characteristics and energy content of different fossil fuels.

Q4) a) Describe methods used for radioactive waste disposal.

[10]

- b) Explain principle and working of solar collectors and concentrators.

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- Q5)** a) What is photovoltaics? How do photovoltaics work? [10]
- b) Explain energy generation from nuclear fission process.
- Q6)** a) Explain principle and working of hydroelectric power generation. [10]
- b) Discuss environmental impact of wind energy generation.
- Q7)** a) Describe with suitable diagram working of wind mill with main components. [10]
- b) Describe environmental impact of hydro energy generation.
- Q8)** Write short notes on: [10]
- a) Harnessing of geothermal energy.
- b) Problems and prospects of Tidal and wave energy.

