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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program/course	: B. Tech/CE+RP	Semester	: V
Subject	: Alternate Energy Sources	Max. Marks	: 100
Code	: CHEG 314	Duration	: 3 Hrs
No. of page/s	: 01		

***The question paper consists of two sections. Answer the questions section wise in the answer booklet.**

Part – A **5 X 12 = 60**

Answer any five questions.

1. What is meant by renewable energy sources? Explain in brief these energy sources with special reference to global context.
2. Write a short note elaborating the environmental impact of wind energy.
3. Write a short note on micro hydro-electric power plants.
4. Discuss the various ways of geothermal power generation.
5. Write short notes on single-basin and double-basin power plants.
6. With a neat diagram discuss the biomass gasification method.
7. Discuss and differentiate between reaction and impulse turbines.

Part – B **2 X 20 = 40**

Answer any two questions.

1. Discuss the different types of wind turbines used to extract wind energy.
2. Briefly discuss the different types of small hydro-power generating plants.
3. Discuss different types of hybrid systems.
