

S.B. Roll No.....

NON-CONVENTIONAL ENERGY SOURCES
5th exam/Electrical/5520/3552/May-2015

Duration: 3hours

M.M: 75

SECTION-A

Fill in the blanks:

(10x1.5=15)

1. WECS stands for _____
2. Solar cell is made up of _____
3. MHD stands for _____
4. Solar cell works on _____ principle
5. OTEC stands for _____
6. Waste product of H_2-O_2 fuel cell is water. (T/F)
7. Non-conventional sources and non-renewable sources are same. (T/F)
8. Biomass energy causes pollution. (T/F)
9. Solar furnace converts solar heat into electricity. (T/F)
10. Thermocouple works on Seeback Effect. (T/F)

SECTION-B

Do any Five:

(5x6=30)

1. Explain the working of Open cycle MHD with working principle and diagram.
2. Write a note on Biomass gasification.
3. Explain working of solar cooker with diagram.
4. Write short note on working of a fuel cell. Give advantages and disadvantages
5. Explain working of any one solar water heater with neat sketch.
6. Write about site selection considerations for WECS.
7. Define Seeback effect, Joule effect and Peltier effect.

SECTION-C

Do any Three:

(3x10=30)

1. What is Biomass? Write short note on various types of Biomass conversion techniques.
2. Explain the working of small hydro power plant using flow diagram.
3. Explain the working of closed cycle OTEC system with diagram.
4. Write short detail on basic components of WECS using diagram.