

QP Code: D132945	Total Pages: 1	Name:		
		Register No.		
<b>FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025</b>				
(CUFYUGP)				
PHY1MN105/APH1MN105: Non-Conventional Energy Sources				
2024 Admission onwards				
<b>Maximum Time :2 Hours</b>	<b>Maximum Marks :70</b>			
<b>Section A</b>				
<b>All Questions can be answered. Each Question carries 3 marks (Ceiling : 24 Marks)</b>				
1	List any three advantages of non- conventional energy sources			
2	What is Solar constant?			
3	What do you mean by solar cell?			
4	State the advantages of wind energy			
5	Why is geothermal energy renewable?			
6	What are the main issues associated with the use of hydrogen as energy source?			
7	What do you mean by ocean thermal energy?			
8	What are the disadvantages of wave energy?			
9	List the components of a biogas plant			
10	What are biogas plants?			
<b>Section B</b>				
<b>All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)</b>				
11	Discuss the structure of flat plate collectors with a suitable figure			
12	Explain the construction and working of a pyranometer			
13	With the help of a suitable block diagram, discuss the basic components of a wind energy conversion system			
14	Discuss the structure of Earth's interior			
15	How ocean wave energy is extracted?			
16	Briefly explain the components and working of a fuel cell			
17	Explain the various biogas applications			
18	Discuss the features of Thermoelectric OTEC system			
<b>Section C</b>				
<b>Answer any ONE .Each Question carries 10 marks (1x10=10 Marks)</b>				
19	Discuss wind electric power generating plant. What are the problems involved in large wind power generator?			
20	Briefly explain the different categories of the geothermal sources of energy. List any four advantages and disadvantages of geothermal energy			