

**APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY
08 PALAKKAD CLUSTER**

Q. P. Code :ES0819052 B-I

(Pages: 2)

Name:

Reg. No:.....

SECOND SEMESTER M.TECH. DEGREE EXAMINATION JUNE 2019

Branch: Electrical & Electronics Engineering Specialization: Energy Systems

08EE6052(B)ADVANCED SOLAR THERMAL AND PV SYSTEMS

Time:3 hours

Max.marks: 60

Answer all six questions.

Modules 1 to 6:Part 'a' of each question is compulsory and answer either part 'b' or part 'c' of each question.

Q.no.	Module 1	Marks
1.a	State any four positive implications the use of SET (Solar Energy Technology)	3
Answer b or c		
b	Sketch the schematic section of Abbot silver disc Pyrheliometer and explain its working principles.	6
c	State and the generic issues of solar energy technologies.	6
Q.no.	Module 2	Marks
2.a	Illustrate about the concept of photovoltaic effect.	3
Answer b or c		
b	Briefly explain the PV cell characteristics with necessary curves.	6
c	List out the current projects of solar energy in India. Explain.	6
Q.no.	Module 3	Marks
3.a	Describe the concept of flat plate collectors.	3
Answer b or c		
b	Explain the working concept of Evacuated Tube solar Collectors (ETC) with diagram.	6

