

B. E (Instn) - sem VIII - CBSE - 22/5/18
PPI

Time: 3 Hours

May 2018

Q. P. Code: 31965

1/1

Total Marks: 80

N.B. (1) Question No. ONE is compulsory.

(2) Solve any **three** questions from remaining **five** questions.

1. Answer the following: --

20

- (a) Explain the properties of moderator used in a nuclear reactor.
- (b) Explain the importance of nonconventional energy sources.
- (c) With respect to wind turbine, explain pitch control and yaw control system.
- (d) Explain briefly the following boiler accessories:--
 - (i) Economizer
 - (ii) Air Preheater.

2. (a) Explain water tube & fire tube boilers.

10

(b) Explain coal handling & ash handling plant of thermal power station.

10

3. (a) Draw the schematic diagram of modern steam power plant & explain its operation.

10

(b) Explain various methods of steam turbine compounding.

10

4. (a) Explain different types of wind turbines with neat diagram.

10

(b) With the help block diagrams, explain the operations of standalone & grid interactive

10

Solar photovoltaic systems.

5. (a) Classify turbines & explain the working of pelton turbine with neat diagram.

10

(b) Draw schematic diagram of nuclear power station and explain its operation.

10

6. Write short notes on **any two**: --

20

(a) Comparison of various power plants.

(b) Solar thermal system.

(c) Hydrology
