SUBJECT CODE NO:- P-154 FACULTY OF ENGINEERING AND TECHNOLOGY

B.E.(Mech) Examination May/June 2017

Elective-I: Power Plant Engineering (Revised)

| [Time: | : Three Hours] | [Max.Marks:80] |
|----------|---|----------------|
| | Please check whether you have got the right question paper. | |
| N.B | i)Q. No. 1 and 6 are compulsory | |
| | ii) Solve any two question from reaming in each section A & B iii) Assume suitable data | |
| | Section A | |
| Q.1 | a) Explain site selection for thermal power plant | |
| | b) Explain steps in coal handling system | 2 |
| Q.2 | a) Explain as handing system in detail | 7 |
| | b) Explain how combustion takes place in overfeed and underfeed stroker | 7 |
| Q.3 | a)Explain the factor which are considered for sleeting diesel power plant | 7 |
| | b) Explain cooling system in diesel power plant | 7 |
| Q.4 | a) Explain future trends in power industry | 7 |
| | b) Explain different sources of energy | 7 |
| Q.5 | a) Write short notes on | |
| | i)cold dust and its control | 5 |
| | ii) Supercharging's of diesel engine | 5 |
| | iii) unit Coal handling | 4 |
| | Section B | |
| | | |
| Q.6 | a) Explain construction and working of nuclear power plant | 6 |
| | b) Explain construction and working of BWR reactor | 6 |
| Q.7 | a) What is Kaplan turbine? Explain | 7 |
| | b) Explain water hammering effect and importance of surge tank | 7 |
| Q.8 | a) Explain Dam in detail | 7 |
| 35 7 00° | b) Explain spill way and its types | 7 |
| Q.9 | a) Explain Environment aspects of power generation | 7 |
| | b) Explain tariffs in detail | 7 |
| Q.10 | Write short notes on | |
| | i) Advantages of hydro-electric power plant | 5 |
| | ii) CANDU Reactor | 5 |
| | iii) Effect of Nuclear Radiation | 4 |