

SUBJECT CODE:- 383
FACULTY OF ENGINEERING AND TECHNOLOGY
B.E.(Mech) Examination Nov/Dec 2015
Elective-I: Power Plant Engineering
(Revised)

[Time: Three Hours]

[Max. Marks: 80]

“Please check whether you have got the right question paper.”

N.Bi) Attempt any three questions from section A & section B respectively.

ii) Marks to right indicate fill marks

iii) Assume suitable data if necessary.

Section A

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| Q.1 | a) Explain coordination of power from different sources. | 07 |
| | b) Explain the effect of variable load on power plant | 07 |
| Q.2 | a) Explain in detail working of thermal power plant. | 07 |
| | b) Explain working of multi retort stoker | 07 |
| Q.3 | a) Explain the construction & working of tangential burners | 07 |
| | b) Explain the construction & working of pneumatic ash handling system | 07 |
| Q.4 | a) Explain detail layout of low capacity diesel power plant. | 07 |
| | b) Explain present trends in diesel research | 07 |
| Q.5 | Write short notes on (any three) | 12 |
| | 1) Supercharging of diesel engines | |
| | 2) Water cooling system using cooling tower | |
| | 3) Bucket elevators | |
| | 4) Unit coal handling system. | |

Section – B

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| Q.6 | a) Explain general arrangement of storage type of hydroelectric power plant. | 07 |
| | b) Explain what is a dam & different types of dam | 07 |
| Q.7 | a) What is penstock & materials for penstock | 07 |
| | b) Explain surge tank & different types of surge tanks | 07 |
| Q.8 | a) What is a Kaplan turbine | 07 |
| | b) Explain advantages of hydroelectric power plant | 07 |
| Q.9 | a) Explain general components of nuclear reactor | 07 |
| | b) Explain construction & working of BWR reactor | 07 |
| Q.10 | Write short notes on (any three) | 12 |
| | a) CANDU reactor | |
| | b) Effects of nuclear radiations | |
| | c) Hydrographs | |
| | d) Radial gate & rolling gate. | |