

Code No: J2101/R16

M. Tech. II Semester Regular Examinations, May-2017

FUELS, COMBUSTION AND ENVIRONMENT

Thermal Engineering (21)

Time: 3 Hours

Max. Marks: 60

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*Answer any FIVE Questions*  
*All Questions Carry Equal Marks*

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|------|---|------|
| 1. a | Explain about Conventional and Unconventional Solid fuels.                      | 6M   |
| b    | Discuss in detail about gaseous fuels?  | 6M   |
| 2. a | What do you understand by “dew point of products”?                              | 6M   |
| b    | Explain in detail about General oxidation behavior of HC’s.                     | 6M   |
| 3. a | What is Enthalpy of formation?  | 6M   |
| b    | Discuss about Adiabatic flame Temperature in combustion analysis.               | 6M   |
| 4. a | What do you understand by the word “Turbulent Flame”                            | 4M   |
| b    | What are the factors affecting the burning velocity.                            | 8M   |
| 5.   | What are the effects of Air pollution on Environment? Explain.                  | 12 M |
| 6.   | With a neat sketch explain in detail about Fluidized Bed Systems.               | 12 M |
| 7.   | What do you understand by Equilibrium composition of gaseous mixtures? Explain. | 12 M |
| 8.   | What do you understand by complex reactions and chain reactions? Explain.       | 12 M |

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