

**BHAGWAN MAHAVIR COLLEGE OF ENGINEERING AND
TECHNOLOGY**

AUTOMOBILE DEPARTMENT

6TH SEM

SUB: ALTERNATIVE FUEL AND POWER SYSTEMS	SUB.CODE: 2160207	FACULTY NAME: Mr. CHINTAN PATEL	AUTOMOBILE DEPARTMENT
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ASSIGNMENT:-1

1. Explain the production process of methanol and ethanol.
2. Explain the performance characteristic of ethanol with its blend.
3. Explain the performance characteristic of methanol with its blend.
4. Explain emission characteristic of methanol.
5. Give the application of methanol and ethanol.
6. Comparison between methanol and ethanol fueled engine with gasoline.

ASSIGNMENT:-2

1. Explain the biogas.
2. Explain the properties of bio-gas.
3. Explain the factor affecting during bio-gas generation.
4. Give advantage and Dis-dvantage of biogas.
5. Explain production process of bio-gas.
6. Explain emission from bio-gas.

ASSIGNMENT:-3

1. Give the properties of C.N.G. and L.P.G.
2. Explain the C.N.G. dispensing system.
3. Explain the emission from C.N.G. and L.P.G. vehicle.
4. Give the advantage and disadvantages of C.N.G.
5. Explain the basic parts of C.N.G. vehicle.

ASSIGNMENT:-4

1. Explains properties of H_2 as automobile fuel.
2. Explain in brief storage method of hydrogen.
3. List advantages and disadvantages of hydrogen as fuel for I.C.engine.

ASSIGNMENT:-5

1. Explain process of transtertification.
2. Give performance characteristics of

-karanji oil

-neem oil

-sunflower oil

-soya been oil

-cotton seed oil

ASSIGNMENT:-6

1. Explain the layout of solar power vehicle with figure.
2. Explain the topology of electric hybrid system.
3. Explain the thermodynamic analysis of fuel cell.
4. Explain the types of fuel cell and its application in automobile.
5. Explain electric propulsion system.
6. Explain dy-methyle ether, eco-friendly plastic fuel.