

A

Reg. No. :

--	--	--	--	--	--	--	--	--	--

Question Paper Code: 59910

B.E./B.Tech. DEGREE EXAMINATION, NOV 2018

Elective

Chemical Engineering

15UCH910- ENERGY ENGINEERING

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- _____ is a primary energy sources which provide net supply of energy. CO1- R
(a) Coal (b) Solar energy (c) Wind energy (d) Water energy
- Oil Shale can be extracted from CO1- R
(a) Sedimentary rocks (b) Igneous rocks (c) Metamorphic rocks (d) Marble
- Which type of economizer is used in Natural Gas fired thermal plants CO2-U
(a) Condensing (b) Steaming (c) Integral (d) Independent
- _____ gaseous fuel is called as town gas CO2- U
(a) Natural gas (b) Coke oven gas (c) Coal gas (d) Mond gas
- The fraction of the free flow wind power that can be extracted by a rotor is called as _____ CO3-U
(a) Wind coefficient (b) Power Coefficient
(c) Thermal Coefficient (d) Hydro coefficient
- Which of the following is not a solar energy storage? CO3- R
(a) Thermal Energy storage (b) Chemical Storage
(c) Electromagnetic Energy storage (d) Magnetic Energy Storage
- Geothermal energy utilize _____ of the earth's core. CO4- R
(a) Pressure (b) Temperature (c) Volume (d) Magma

19. (a) Classify fuel cells. Explain the reactions and with the help of neat sketch the construction, working of any one of the fuel cells. CO4- U (16)

Or

(b) Explain the principles of Magnetohydrodynamic (MHD) power generation and classify MHD Systems. CO4- U (16)

20. (a) (i) Explain the direct And indirect benefits of waste heat recovery. CO5- U (8)

(ii) Discuss present Global issues and need for energy conservation. CO5- U (8)

Or

(b) Discuss Briefly about the principles of energy management and technology assessment. CO5- U (16)

