

**SANT GADGE BABA AMRAVATI UNIVERSITY**  
**BACHELOR OF ENGINEERING SEMESTER VII (CGS) EXAMINATION OF S-2020**

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**H.V.P.Mandal's College of Engineering & Technology, Amravati**

**Department of Mechanical Engineering**

**Academic Session: 2019-20**

**Semesters: VII**

**Unit- I ,II ,III, IV ,V,VI**

**Date: 30/10/2020**

**Subject Name: Energy Conversion-II**

**Subject Code:**

**Max Marks:**

**Note: Solve any 2 Questions out of 4 Question.**  
**All question Carry equal marks**

**Ques 01**

- a. List out the applications of compressed air. (03M)
- b. Briefly describe about 'rotary compressor'? (03M)
- c. What Will Be The Relative Humidity At Saturation Point? (01M)
- d. What are the merits and demerits of gas turbine plant (01M)
- e. How Energy Is Generated In Nuclear Power Plant? (01M)
- f. What do you mean by M.H.D. generator (01M)

**Ques 02**

- a. Define the term isothermal compression efficiency. (03M)
- b. What are the limitations of a centrifugal compressor operation? (03M)
- c. Difference between the Refrigeration and Heat Pump? (01M)
- d. Describe the operation of the gas turbine. What are the principal factors affecting its power and efficiency? (01M)
- e. What Are The Particles Used In Nuclear Fission? (01M)
- f. What are different renewable source of energy (01M)

**Ques 03**

- a. Define volumetric efficiency of an air compressor and write the expression for volumetric efficiency. (03M)
- b. What is stagnation temperature? (03M)
- c. Classify The Different Refrigeration Systems (01M)
- d. What is the efficiency of a gas turbine plant (01M)
- e. What Is Chain Reaction And How It Is Controlled In Nuclear Reactor? (01M)
- f. What are the different types of wind mill. (01M)

**Ques 04**

- a. Why clearance is necessary and what is the effect on performance of reciprocating compressor. (03M)
  - b. Define the term work done by impeller with its equation. (03M)
  - c. What Is The Unit Of Refrigeration? (01M)
  - d. What are the stages of gas turbine plant (01M)
  - e. What is Candu reactor in a nuclear reactor (01M)
  - f. What is fuel cells (01M)
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