

Reg. No. :

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

**Question Paper Code: 42705**

B.E. / B.Tech. DEGREE EXAMINATION, **APRIL 2019**

Second Semester

Computer Science and Engineering

14UME205 – BASIC CIVIL AND MECHANICAL ENGINEERING

(Common to EEE, ECE, EIE, ICE, MECH and IT)

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 1 = 10 Marks)

- The first reading from a level station is  
(a) fore sight      (b) intermediate sight      (c) back sight      (d) any sight
- Limestone is a \_\_\_\_\_ rock  
(a) igneous      (b) sedimentary      (c) metamorphic      (d) stratified
- The members which support covering material of a sloping roof are  
(a) rafters      (b) purlins      (c) battens      (d) struts
- Which of the following materials is most elastic  
(a) rubber      (b) plastic      (c) brass      (d) steel
- Economiser is used to heat  
(a) Air      (b) Feed water  
(c) Flue gases      (d) All of the above
- Which pump is not comes under the category of positive displacement pump?  
(a) Gear pump      (b) Vane pump  
(c) Axial piston pump      (d) Axial flow pump



18. (a) (i) Draw the layout of a steam power plant, explain its working principle. (12)  
(ii) List the merits and demerits of hydroelectric power plant. (4)

Or

- (b) (i) With a neat sketch, explain the construction and working of a double acting reciprocating pump. (10)  
(ii) Explain about the various types of casing in centrifugal pump. (6)
19. (a) (i) Explain the working of a four stroke diesel engine with a neat sketch. (10)  
(ii) Write briefly about the fuel supply system used in S.I engine. (6)

Or

- (b) Explain the construction and working principle of any one of the boiler with neat sketches. (16)
20. (a) Explain with a neat sketch the construction and working of vapour compression refrigeration system. (16)

Or

- (b) (i) Draw the neat diagram of a split air conditioning system and explain its working. (10)  
(ii) Differentiate the vapour compression and vapour absorption refrigeration system. (6)
-

