M. Arch. Sem-II (Sustainable Architecture) (CBCS 2018 Course) :
SUMMER - 2019

SUBJECT: ENERGY SYSTEMS AND UTILITIES

Day: Thursday
Date: 02/05/2019

S-2019-3748

Time: 10.00 A.M. TO 12.00 NOON
Max. Marks: 60

N.B.:

1) All questions are **COMPULSORY.**
2) Both the sections should be written in **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.
4) Assume suitable data and draw figures if necessary.

SECTION-I

Q.1 Write short notes on **ANY TWO** of the following: **(10)**

a) Ultimate Analysis
b) Classification of Insulation
c) Indian Boiler Regulation

Q.2 Explain in brief (**ANY TWO**): **(10)**

a) Benefits of Waste Heat Recovery
b) Efficient Steam Utilization
c) Condensate Recovery and its Benefits

Q.3 Answer **ANY ONE** of the following **(10)**

a) What is efficient steam utilization and energy saving opportunities?
b) What are energy conservation opportunities in boilers?

SECTION-II

Q.4 Write short notes on **ANY TWO** of the following: **(10)**

a) Motor efficiency
b) Refrigeration compressor types and applications
c) Efficient pumping system operation

Q.5 Explain in brief (**ANY TWO**): **(10)**

a) Electricity billing.
b) Transformer losses and efficiency.
c) ECBC guidelines for building envelopes.

Q.6 Answer **ANY ONE** of the following **(10)**

a) What are the energy saving opportunities in pumping systems?
b) What are flow control strategies in fan systems?

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