

22506

22232

3 Hours / 70 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following :

10

- (a) Define 'Environmental Audit'.
- (b) Define 'Environmental Impact Assessment'.
- (c) State any two objectives of Energy Conservation.
- (d) List any four non-renewable energy sources.
- (e) Define 'Green Building'.
- (f) Enlist various systems used for Green Building rating.
- (g) Enlist any four LEED Certification Criteria.

2. Attempt any THREE of the following :

12

- (a) Identify four causes of water pollution and explain their effects.
- (b) Define air pollution and explain the effects of air pollution.



- (c) Describe the process of reducing soil pollution.
- (d) Write any four benefits of 'Environmental Impact Assessment'.
- 3. Attempt any THREE of the following : 12**
- (a) Describe the steps in Environmental Audit process.
- (b) Describe salient features of Green Building.
- (c) Discuss about any four Green Building materials.
- (d) Summarize rating points for GRIHA Certification.
- 4. Attempt any THREE of the following : 12**
- (a) Discuss any four IGBC criterias for Green Building rating.
- (b) Explain the importance and role of various HVAC units in Green Building.
- (c) Discuss the LEED criterias for certification.
- (d) Compare IGBC and LEED rating system.
- (e) Discuss any four criterias of GRIHA for 'Green Building' rating in India.
- 5. Attempt any TWO of the following : 12**
- (a) Differentiate between Environmental Audit and Environmental Impact Assessment.
- (b) Compare renewable and non-renewable energy sources with respect to any four points.
- (c) Explain the use of Solar Energy in regards of energy conservation.
- 6. Attempt any TWO of the following : 12**
- (a) Explain the functions of Bureau of Energy Efficiency (BEE) and Maharashtra Energy Development Agency (MEDA).
- (b) Explain 'Green Roofing' and its benefits.
- (c) Explain the principles of Green Building in design of Residential apartment system.
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