



UG-6057

B. Arch. I (Sem. I) Examination

May/June – 2012

ARC-106 : Climatology and Environmental Studies

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दशांशके निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. Arch. I (Sem. I)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="ARC-106 : Climatology and Environmental Studies"/>	<input type="text"/>
Subject Code No. : <input type="text" value="6"/> <input type="text" value="0"/> <input type="text" value="5"/> <input type="text" value="7"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	

- (2) Figures to the right side indicate full marks.  
(3) Descriptive answers to be written point wise only.  
(4) Support your answers with neat sketches wherever needed.

1 True or false. 10

- (1) When the heat transfer takes place through the material in question, the process is referred to as conduction.
- (2) The earth's revolution around its axis results in the changing of seasons.
- (3) Difference between DBT and WBT is expected to be higher in the humid climatic zones.
- (4) Surat city has annual average rainfall of about 2500 mm.
- (5) Small dams are better solutions in hilly regions as compared to big dam.
- (6) Stevenson screen is an equipment used to measure wind velocity.
- (7) The air to air transmittance of heat is usually measured by the quantity called U-value of the material.

- (8) The angle which gives sun's position as relative to cardinal angles is called altitude angle.
- (9) Delhi has typical warm and humid climate.
- (10) Gir National Parks do not have tigers as their main wildlife.

**2** Write short notes on. (any two) **10**

- (1) Benefits of Green Architecture.
- (2) principles of sustainable Architecture.
- (3) Concept of ecosystem with spaceship example.

**3** Answer the following questions. **20**

- (1) What are the different types of shading devices ?  
Explain briefly the strategy to place each of them.
- (2) Discuss the climatic profile of warm and humid region along with design strategies in terms of plan, form, material, etc.

**4** Draw neat sketches. (any two) **10**

- (1) Hydrological cycle.
- (2) Heat exchange processes of a building.
- (3) Carbon cycle.

---