

- Q.26 Which are the five climatic zones in India?
- Q.27 How should the building be oriented with respect to the solar path?
- Q.28 What are the various causes of Noise pollution?
- Q.29 What are the primary air pollutants?
- Q.30 Which landscaping elements can be used to cool down the microclimate?
- Q.31 Write a short note on the thermal comfort zone.
- Q.32 Differentiate between cold and Warm-Humid climate.
- Q.33 How does natural daylight affect the indoor environment of a building?
- Q.34 What is Global Warming? How does it affect life on earth?
- Q.35 What is the role of building materials in construction of a climate-responsive building?

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Draw a bioclimatic chart showing the elements of climate and the comfort zone.
- Q.37 List down the various components of climate. Describe how these components can be used to design a climate-responsive building?
- Q.38 What are the different types of sun shading devices? Describe how these can be used to protect from direct sunlight and provide thermal comfort inside a building?

**3rd Sem / Architectural Assistantship
Subject:- Climatology**

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The natural place where the organisms or communities live is called:
a) Habitat b) Niche
c) Biome d) Dome
- Q.2 Earth revolves around the sun in:
a) 364 days b) 364.25 days
c) 365 days d) 365.25 days
- Q.3 The state of atmosphere regarding temperature, sunshine, wind and rain etc. at a place during any particular time is called:
a) Climate b) Meteor
c) Weather d) Atmosphere
- Q.4 Which of the following is not a sun shading device:
a) Awning b) Chajja
c) Trellis d) Sky light

- Q.5 The humidity of air at a particular location depends upon:
 a) Distance from sea b) Temperature
 c) Weather d) All of the above
- Q.6 Combination of horizontal sun shading device with vertical shading device is known as:
 a) Cantilever b) Curtain
 c) Egg crate d) sun screen
- Q.7 Lion is an example of:
 a) Abiotic component b) Biotic component
 c) Herbivorous d) All of the above
- Q.8 Cantilevered projections are more useful to protect solar radiations from:
 a) North b) South
 c) East d) West
- Q.9 Which is the most prevailing climatic zone in North India including Jammu & kashmir, Ladakh, Himachal, Haryana and Uttarakhand:
 a) Cold b) Warm-Humid
 c) Composite d) Temperate
- Q.10 Which of the following zone is generally the most polluting zone:
 a) Recreational b) Institutional
 c) Industrial d) Residential

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define Climate.
 Q.12 Define Relative Humidity.
 Q.13 Define Ecology.
 Q.14 Define Abiotic component of an ecosystem.
 Q.15 Define Monsoon.
 Q.16 Define Snowfall.
 Q.17 Define Bioclimatic chart.
 Q.18 Define Wind energy.
 Q.19 Define Noise.
 Q.20 Define Thermal insulation.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Draw the earth's orbit around the sun and earth's axial tilt angle to show the summer and winter seasons?
 Q.22 What do you mean by horizontal shading device and vertical shading device?
 Q.23 Differentiate between the macro-climate and micro-climate.
 Q.24 What is a sun path diagram?
 Q.25 Write a short note on Climate-responsive Building Design.

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