



**THE TECHNOCRACY**  
STUDENTS' TECHNICAL COMMITTEE, NIT RAIPUR

## **AAVARTAN'23-24**



### **VIGYAAN DEPARTMENT OF ARCHITECTURE**

#### **PROBLEM STATEMENTS**

**ARCH01.     Low-Cost Rural Housing Model**

Precast Concrete System is more economical than Conventional Cast in place method but still there are some conditions which have to be taken care while using precast. Construct a working model of low-cost housing in rural areas of Chhattisgarh

**ARCH02.     Modern Vernacular Architecture**

Vernacular Architecture is about using old method and techniques ,every region has its own Vernacular Architecture. Develop modern architecture using Vernacular elements of India, it should be energy efficient and modern in design.

**ARCH03.     Crematorium Settlement Redevelopment**

Redevelopment of crematorium workers' settlement at Varanasi for better quality of life.

ARCH04. Dharavi New Settlement Design

Makeover of Mumbai slum cluster Dharavi:- Dharavi is the biggest slum cluster of Asia that lies on prime property right in the middle of Mumbai. Design a plan and model for a new Settlement at low cost.

ARCH05. Using natural material to replace the air conditioner

Design a sculptural installation or a device that can cover all the three main things; the increase in temperature, worldwide energy consumption and green alternatives.

ARCH06. Old monuments in Modern Cloth

Monuments Historique is a designation given to some natural heritage sites what if these monuments changes its façade into modern era. Develop a model of any historic monument in which uses of material are modern and explain what changes can be there after changing the material.

ARCH07. Urban Low-Income Housing Plan

Design a master plan and model for the low income housing integrating urban architecture emphasizing. How will the impact of the cohesive social image on urban dwellers be achieved?

ARCH08. Indus Valley Sewage Design

Indus Valley civilization is known for its urban planning, baked brick house, elaborate drainage system, water supply system , cluster of large non residential buildings and techniques of handicraft and metallurgy. Design technique of the sewage system of Indus Valley civilization.

ARCH09. Earthquake-Resistant Building Model

Degree of architectural expression of earthquake resistance or implication of architectural configuration form or style in earthquake inspired by historical examples. Design a working model of building of earthquake resistance.

ARCH10. Indoor Vertical Farming in Vacant Buildings

Vacant buildings today are functionless structures of steel, glass, concrete. So making these structures useful in other terms can give major changes. Design the potential and challenges of transforming vacant buildings in dense urban areas into an indoor vertical farm.

ARCH11. Sustainable Revival of Traditional Manufacturing Structures

In the practice of repurposing old structures for entirely new repurposing structures. Accomplish this while preserving some of the historic elements. One of the main reasons is, it can reduce the environmental impact of urban development by reusing existing material. Design how traditional manufacturing structures will be made more environmentally sustainable and energy efficient.