B.Arch-III(R/S)-11.24-3470 Reg. No. | | | | | | | | | |

A

B.Arch. Degree III Semester Regular/Supplementary Examination November 2024

AR 1303 HISTORY OF ARCHITECTURE III : INDIAN ARCHITECTURE – ANCIENT TO MEDIEVAL PERIOD

(2021 Scheme)

Time: 3 Hours Maximum Marks: 100

(Illustrations in answers carry due marks)

PART A

(Answer *ALL* questions)

(8 × 5 = 40)

I. Write short notes on the following

(a) Social structure of Vedic society.

(b) Architectural features of Vedic homes.

(c) Viharas at Nasik.

(d) Ashoka Pillar.

(e) Sun Temple Konark.

(f) Kailasanatha Temple, Ellora.

(g) Rock cut productions under Pallavas.

(h) Temple towns.

PART B

(4 × 15 = 60)

II. Discuss the key features of a typical Vedic village, focusing on its social structure and economic activities. Elaborate on its layout and building materials used for construction.

OR

III. Discuss the various debates and theories regarding the origins of early Hinduism in connection with the Vedic Civilization.

IV. Examine the key features of Jain architecture, highlighting the importance of materials and construction techniques in temple architecture.

OR

V. Discuss the architectural elements and symbolism of Buddhist stupas, rock-cut caves and monasteries. How do these structures reflect the spiritual and cultural principles of Buddhism?

VI. Elaborate on the elements of temple architecture during the Gupta and Chalukyans period.

OR

VII. Compare and contrast the temple architecture of Northern India with Central India using suitable examples.

VIII. Discuss on the architectural style during Hoysala period using suitable examples

OR

IX. Compare and contrast the architectural features and cultural significance of the Shore Temple at Mahabalipuram and the Brihadeshwara Temple at Thanjavur.

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B.Arch-III(R/S)-11-24-3469 Reg. No. | | | | | | | | |

A

B.Arch. Degree III Semester Regular/Supplementary Examination November 2024

AR 1302 BUILDING MATERIALS AND CONSTRUCTION - III
(2021 Scheme)

Time: 4 Hours Maximum Marks: 100

Instructions:
i. *One drawing sheet to be supplied.*
ii. *Assume suitable details and dimensions wherever necessary.*
iii. *Illustrations in answer carry due mark.*
iv. *Credit will be given for following standard architectural drafting and detailing conventions.*

PART A
(Answer **ALL** questions)

(8 × 5 = 40)

I. Write short notes on the following

(a) Plate load test.
(b) Expansion and contraction joint in concrete.
(c) Criteria for selection of aluminium.
(d) Applications of copper.
(e) Dog-legged staircase.
(f) Timber flooring.
(g) Lintel beam.
(h) Shuttering.

PART B

(4 × 10 = 40)

II. Enumerate the several ways to boost soil bearing capacity and provide a detailed explanation of any two.

OR

III. List out and briefly explain the different components of concrete and their specific roles in its composition.

IV. Explain the properties, advantages and applications of mild steel as a construction material in architecture.

OR

V. With relevant sketches explain in detail any ten forms of steel in the market.

VI. What are the different types of stairs based on geometry? Illustrate and explain in detail.

OR

VII. What are the different types of flooring? Explain any two in detail with relevant sketches.

(P.T.O.)

VIII. Explain the principles and components of framed structures and list their advantages and disadvantages over load bearing structures.

OR

IX. What do you mean by shallow foundation? Explain in detail the different types of shallow foundations.

PART C

$(1 \times 20 = 20)$

X. Draw the plan and section of a straight RCC staircase with a mid-landing, spanning a height of 3 meters to a reasonable scale. Assume any other necessary dimensions.

XI. Draw the plan and section and view of a two-way slab, clearly indicating reinforcement details, support conditions and bending pattern in a suitable scale.

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