## MIZORAM PUBLIC SERVICE COMMISSION

Technical Competitive Examinations for

## Assistant Architect (Contract)

under Public Works Department, Government of Mizoram, July-2023

# ARCHITECTURE <br> PAPER-I 

Time Allowed : 3 hours
FM : 200

## SECTION - A (Multiple Choice questions) (100 Marks)

All questions carry equal mark of 2 each. Attempt all questions. This Section should be answered only on the OMR Response Sheet provided.

1. What type of balance is: (informal) a balance of unlike objects that create a "felt" balance of the total artwork; images on either side of a central line are different yet give the feeling of balance?
(a) Radial
(b) Asymmetrical
(c) Symmetrical
(d) Unimetrical
2. What is ergonomics?
(a) Study of human sensory experience during movement.
(b) Measurement and study of size of proportion of human body.
(c) Study of man-machine interaction.
(d) Imitation of model, system and elements of nature.
3. Which is the type of colour that should be used for bedrooms?
(a) Warm tones
(b) Cool tones
(c) Monochromatic tones
(d) Violet-green
4. What is the average service life of a building?
(a) 5 generations
(b) 1 generation
(c) 5 years
(d) 50-100 years
5. Anastylose and Translocation are types of which process in conservation
(a) Reconstruction
(b) Restoration
(c) Recreation
(d) Adaptive Reuse
6. Which one of these is present in the golden section series?
(a) The solar Plexus
(b) The head and the foot
(c) Both (a) \& (b)
(d) None of these
7. Building Biology is the $\qquad$ relationship between building and resident .
(a) General
(b) Holistic
(c) Natural
(d) Scientific
8. Munsell colour wheel was used for?
(a) Soil colour
(b) Soil texture
(c) Colour therapy
(d) None of these
9. The planning document submitted to the cities under JNNURM is
(a) City Development Plan
(b) District Plan
(c) Outline development plan
(d) Floor Plan
10. Combing two or more plots as a single plot is
(a) Frontage
(b) Amalgamation
(c) Bifurcation.
(d) Setting back
11. SEZ stands for
(a) Special Economic zone
(b) Social and economic zone
(c) Special electric zone
(d) Safe economic zone
12. Who was the architect and town planner of Islamabad?
(a) Abdul Rab Nishar
(b) Yahya Merchant
(c) Dr Constantinos Apostolou Doxiadis
(d) Rem Koolhaas
13. C.Perry denoted the area of neighbourhood to be
(a) 160 acres
(b) 180 acres
(c) 12000 hectares
(d) 56000 acres
14. Manasara has how many types of villages?
(a) 6 types
(b) 12 types
(c) 1 type
(d) 8 types
15. National urban transport policy 2014 talks about
(a) Better employment in urban areas
(b) Better public spaces connectivity
(c) Mixed land use development
(d) Intelligent transport system for traffic management
16. Xeriscaping means
(a) Type of garden
(b) Desert lawn
(c) Landscape design
(d) None of the above
17. Central park was designed by
(a) Ken smith
(b) Frank Gehry
(c) Daniel Libeskind
(d) Frederick law Olmsted
18. Landscape architecture is now recognised internationally by
(a) International Landscape forum
(b) American Society of Landscape architects.
(c) International Labour organization
(d) Both (b) \& (c)
19. What is the most striking feature of Rock Garden, Chandigarh?
(a) Bright and colourful
(b) Built of waste materials
(c) Muted and elegant
(d) Well lit
20. $\qquad$ is the ideal park system.
(a) Belt system
(b) Radial system
(c) Combination of A and B
(d) None of the above
21. The palace of Persepolis is an example of
(a) Gothic Revival
(b) Persian Architecture
(c) West Asiatic style
(d) Romanesque.
22. Which of these are the sculptural works found in Buddhist style of art and architecture?
(a) Jataka tales
(b) Serpents
(c) Yakshas
(d) All of the above
23. What was the main material of building in Babylon?
(a) Stone
(b) Brick
(c) Concrete
(d) Limestone
24. Which one of these is the other name of the golden temple?
(a) Harmandir
(b) Darbar sahib
(c) Both of the above
(d) None of the above
25. As per National Building Code 2016, the minimum size of a habitable room for plot above $50 \mathrm{~m}^{2}$ is
(a) $9.5 \mathrm{~m}^{2}$
(b) $10.5 \mathrm{~m}^{2}$
(c) $11.5 \mathrm{~m}^{2}$
(d) $12.5 \mathrm{~m}^{2}$
26. What is mostly placed at the centre of a Charbagh garden?
(a) A tomb
(b) A fountain
(c) A raised platform
(d) A tree
27. CBD in urban planning stands for?
(a) Central Business District
(b) Central Business Demarcation
(c) Central Boundary Demarcation
(d) Central Boundary District
28. How many types of angles are to be considered while reading the sun path diagram?
(a) 3
(b) 2
(c) 1
(d) None
29. What is the minimum height of a mezzanine floor as per NBC?
(a) 2.2 m
(b) 2.1 m
(c) 2.0 m
(d) 2.5 m
30. The cross slope of a wheelchair accessible ramp should not exceed
(a) $1: 40$
(b) $1: 50$
(c) 1:20
(d) $1: 12$
31. Which building is considered the first notable example of Gothic architecture?
(a) Abbey of Saint-Denis
(b) Notre Dame Cathedral
(c) St Vitus Cathedral
(d) Pantheon
32. The superstructures of Mohenjo-Daro buildings were made of which material?
(a) Wooden
(b) Mud
(c) Sun Dried bricks
(d) Baked bricks
33. Where was Renaissance architecture first developed?
(a) Rome
(b) Florence
(c) Venice
(d) Nice
34. Which is the first notable example of Mughal architecture in Delhi?
(a) Chandni Chowk
(b) Humayun's Tomb
(c) India gate
(d) Qutub Minar
35. Bamboo is a type of
(a) Shrub
(b) Timber
(c) Evergreen tree
(d) Perennial grass
36. Bauhaus meaning is
(a) To build
(b) House of building
(c) Fine houses
(d) Buildings of art
37. The concept of 'Dry Garden' is associated with
(a) Japanese Garden
(b) Chinese Garden
(c) Mughal Garden
(d) Egyptian Garden
38. The ratio of town area to agricultural land area as suggested by Sir Ebenezer Howard in 'Garden City' concept is
(a) $1: 20$
(b) $1: 15$
(c) $1: 10$
(d) $1: 5$
39. As per the Census of India 2011, the minimum population size for an 'Urban Agglomeration' is
(a) 50,000
(b) 40,000
(c) 30,000
(d) 20,000
40. Which of the following is Not a land use zone?
(a) Industrial zone
(b) Agriculture zone
(c) Heritage zone
(d) Commercial zone
41. In India, the term 'Town Planning Scheme' refers to
(a) Land renewal
(b) Land rejuvenation
(c) Land reclamation
(d) Land readjustment
42. The Principals of visual perception include
(a) Figure/Ground
(b) Shadow
(c) Hue
(d) None of the above
43. The term 'Necropolis' refers to
(a) Organically growing settlement
(b) Origin of settlement
(c) A dead settlement
(d) Merging of two settlement
44. 'Volumetric' in architecture is
(a) Measurement of height
(b) Study of spaces
(c) Massing
(d) Study of the volume
45. The correct chronological order of the given architectural movement is
(a) Romanesque; Roman; Baroque; Gothic; Renaissance
(b) Romanesque; Roman; Renaissance; Gothic; Baroque
(c) Roman; Romanesque; Gothic; Renaissance; Baroque
(d) Roman; Romanesque; Gothic; Baroque; Renaissance
46. What is Pietra Dura?
(a) Combination of Indian and Persian Art
(b) Buildings with glazed tiles and marble
(c) Decorating the ceilings with miniature paintings
(d) Flowers adorn the walls with precious stones
47. What is the architectural character of Renaissance architecture?
(a) Ratio
(b) Use of classical orders
(c) Symmetry
(d) All of the above
48. Horizontal projections provide the best shading for which direction?
(a) East
(b) West
(c) South
(d) North
49. The design element provided to ensure safety of vehicle travelling at a prescribed design speed along the curved segment of highway is
(a) Shoulder
(b) Super-elevation
(c) Median
(d) Footpath
50. The abrupt change or junction between two ecological zones is termed as
(a) Ecological niche
(b) Ecosystem
(c) Ecotype
(d) Ecotone

## SECTION - B (Short answer type question) ( 100 Marks)

All questions carry equal marks of 5 each. This Section should be answered only on the Answer Sheet provided.

1. What are the "seven lamps of architecture" by John Ruskin and how are they important for architectural design?
2. Define Contrast. What are the different ways of introducing contrast in architecture?
3. Define the laws of architectural composition.
4. Describe why Rammed earth is considered as an energy efficient material.
5. What are the objectives and benefits of bye laws?
6. Name any 5 disadvantages of automatic light signals.
7. What are cul de sacs? Define edge and vista.
8. How did the industrial revolution affect modern architecture?
9. What is the importance of mandapa in Indian architecture?
10. Define 5 features of gothic style of architecture.
11. What is Anthropometry? What is the use of Anthropometry in design?
12. What is the hierarchy of roads in India?
13. What are the important functions of Green Walls?
14. What are the important features of Mughal Gardens?
15. Explain the different shading devices for different orientation.
16. Explain the importance of landscaping in urban design.
17. What design solution will you give for passive heating and cooling strategy in Aizawl?
18. What are the important design considerations to be addressed while designing handicapped toilets?
19. What is the town planning scheme used in the Indus valley civilization?
20. Match the furniture in Group I with their standard dimension in Group II

## Group I

(a) Dining table
(b) Dining chair
(c) Counter top
(d) Study chair
(e) Arm chair

## Group II

1) $400 \mathrm{~mm}-450 \mathrm{~mm}$
2) $250 \mathrm{~mm}-350 \mathrm{~mm}$
3) $350 \mathrm{~mm}-400 \mathrm{~mm}$
4) $850 \mathrm{~mm}-920 \mathrm{~mm}$
5) $750 \mathrm{~mm}-780 \mathrm{~mm}$
6) $450 \mathrm{~mm}-480 \mathrm{~mm}$
