

PGCET-2022

Seat No. _____

SUB: Architecture(M.Arch)

Time:1 Hour 30 minutes

Instructions:

1. Ensure that all pages are printed.
2. Use Black ball pen only
3. Change in option is not allowed
4. There is no negative marking
5. Use of non -programmable scientific calculator is allowed

1.	The ratio of the length of the object represented on drawing to the actual length of the object represented is called			
	A	Graphical Scale	B	Representative Fraction
	C	Comparative Scale	D	Diagonal Scale
2.	Which scale is used when very minute distances are to be accurately measured			
	A	Comparative Scale	B	Plain Scale
	C	Diagonal Scale	D	None of the above
3.	A polyhedron having two equal and similar faces called as bases, parallel to each other and joined by other faces which are parallelograms is known as			
	A	Pyramid	B	Cylinder
	C	Tetrahedron	D	Prism
4.	A vertical transparent plane located between the station point and the object on which the perspective is formed is called			
	A	Picture Plane	B	Ground Plane
	C	Horizontal Plane	D	Central Plane
5.	Which command include both lines and arcs connected at end points			
	A	Polygon	B	Line
	C	Ellipse	D	Pline
6.	The distribution of the visual weight of objects, colors, texture, and space in architectural design is known as			
	A	Rhythm	B	Balance
	C	Harmony	D	None of the above
7.	The most common method of magnifying a portion of current drawing on the screen is			
	A	Zoom	B	Layer

	C	Array	D	Extend
8.	Which command is used to set the viewpoint in 3D space for viewing the 3D models			
	A	VPOINT	B	UCS
	C	ELEV	D	PFACE
9.	Which design principle represents the size of elements in relation to one another?			
	A	Emphasis	B	Proportion
	C	Contrast	D	Scale
10.	The author of the book titled “A Pattern Language” is			
	A	Le Corbusier	B	B.V. Doshi
	C	Frank Lloyd Write	D	Christopher Alexander
11.	Which of the following system of construction consist a combination of columns, beams and slabs for load transfer?			
	A	Frame structure	B	Folded plate structure
	C	Shell structure	D	Tensile structure
12.	The remedial measure to prevent failure of foundation due to unequal settlement of the sub-soil can be			
	A	Masonry should not be raised over the whole area	B	Masonry should be raised over the partial area
	C	Masonry should be raised uniformly over the whole area	D	A fast progress of masonry work
13.	A column or strut is a compression member in which			
	A	The effective length of which exceeds three times the least lateral dimension	B	The effective length of which exceeds five times the least lateral dimension
	C	The effective length of which exceeds ten times the least lateral dimension	D	The effective length of which equal to the least lateral dimension
14.	Concrete weighing less than 1600kg/cu mt. are generally termed as			
	A	Fine Concrete	B	Prestressed Concrete

	C	Lightweight Concrete	D	Heavy Concrete
15.	Which of the following foundations are most suitable for very soft/loose soils?			
	A	Isolated footings	B	Combined footings
	C	Pile foundation	D	Wall footings
16.	Name a composite material made of a polymer matrix reinforced with fibres.			
	A	Formaldehyde Resins Plastic	B	Fibre-Reinforced Plastic (FRP)
	C	FibreResins Plastic	D	None of the above
17.	Name the dense solid blocks compacted using a machine with a mixture of soil, sand, stabilizer (cement/lime) and water.			
	A	Steam cured blocks	B	Eco-Friendly Blocks
	C	Rammed earth blocks,	D	Stabilized Mud Blocks
18.	What is true for term PERT			
	A	A three-point activity estimating technique	B	Considers estimation uncertainty and risk by using three estimates
	C	Define an approximate probability for an activity's cost or duration	D	All the above three options
19.	Name the technique where you identify tasks that are necessary for project completion and determine scheduling flexibilities.			
	A	Project Analysis Method	B	Critical Path Method
	C	Project Evaluation Method	D	Critical evaluation Method
20.	Select the most appropriate about Bamboo			
	A	Bamboo is more susceptible to decay than timber, due to a lack of natural toxins	B	The bamboo must be kept dry throughout its life to protect it against rot
	C	The bamboo must be treated to protect it against insects	D	All the above three options
21.	Which of the following is true about Load Bearing Wall?			
	A	Load bearing walls transfer loads all the way to the foundation or other suitable frame members.	B	Load bearing walls can be used as an interior or exterior wall.
	C	It is a structural element	D	All of the above
22.	The maximum bearing capacity of soil is that of			
	A	Dry coarse sandy soil	B	Black cotton soil
	C	Hard rocks	D	Loose fine sandy soil

23.	Which of the following reasons is not responsible for setting up stresses in a wall?			
	A	Weight of superimposed loads	B	Cement
	C	Its own weight	D	Lateral pressure
24.	Which of the following method is best for the design of steel structure?			
	A	Ultimate Load Method	B	Limit State Method
	C	Working Stress Method	D	Earthquake Load Method
25.	Which of the following is not a type of steel structure design?			
	A	Semi-continuous steel design	B	Simple design
	C	Continuous design	D	Working Stress Design
26.	What type of steel is commonly used in building construction?			
	A	Mild type of steel	B	Complex Carbon Steel
	C	Hard Steel	D	None of the above
27	Select the correct statement			
	A	RCC structure has less strength and ductility	B	Steel structure have very high insulation
	C	Steel buildings should not be proven to be safe in seismic prone areas.	D	RCC structure has more strength and ductility
28	The strength of a hardened concrete largely depends upon			
	A	The water/cement ratio	B	The quality and characteristics of cement
	C	Curing	D	All of the above
29	The thermal expansion of concrete depends largely on			
	A	Type of aggregate only	B	Type of aggregate and the amount of cement used
	C	Type of cement only	D	Type of water used
30	Find the correct option			
	A	Funicular shells are single curved concrete units	B	Reinforcements are provided on all sides in funicular shells
	C	Funicular shells are doubly curved precast concrete units	D	Funicular shells are usually circular shaped

31	The momentary state of the atmospheric environment at a certain location is called			
	A	Climate	B	Weather
	C	Tropical Climate	D	Temperate climate
32	Time lag is the term used to			
	A	Periodic heat flow calculation	B	Determine the time at which heat exchange occurs
	C	A delay that exists between two related phenomena	D	Occasional heat flow calculation
33	For the urban geographer the term 'microclimate' means			
	A	Climate of the neighborhood	B	Climate of the residential society
	C	Climate of the whole town	D	None of the above
34	Choose the most appropriate factor causing deviations of the 'urban climate'			
	A	Window type	B	Changed surface qualities
	C	Type of water tanks	D	None of the above
35	To be effective, the air movement in a building must be directed			
	A	At the body surface of occupants	B	At the ventilator level
	C	At the roof level	D	At the beam bottom level
36	Numbers of Sustainable Development Goals (SDGs) by the United Nations are			
	A	17	B	18
	C	14	D	20
37	Find the incorrect answer. The Global Goals and the 2030 Agenda for Sustainable Development seek to			
	A	End poverty and hunger,	B	Realize the human rights of all
	C	Ensure the lasting protection of the planet and its natural resources.	D	None of the above
38	The major advantage of use of rainwater harvesting systems is			
	A	Allows groundwater levels to recharge	B	Growth of native plants
	C	Reduction in surface temperature	D	None of the above
39	What can prevent climate change?			

	A	Organic waste diversion	B	Environmentally sound waste disposal
	C	Safeguarding infrastructure against flooding	D	All the above three
40	Select the most important objective of ECBC			
	A	Design of buildings in warm and humid climate	B	Provide services in the building
	C	Provide minimum requirements for energy-efficient design	D	Waste management in the building
41	Surface drainage system is designed to			
	A	The removal of excess water from the surface of the land.	B	Removal of water from the rootzone.
	C	The removal of excess water from the terrace of the building	D	Removal of water from the washrooms
42	Single-split System, Multi-split System, Variable Air Volume (VAV) are the types of			
	A	HVAC system for basements	B	HVAC systems for commercial buildings
	C	AC system for auditorium	D	Water harvesting systems
43	Which type of elevators are most appropriate for mid and high-rise buildings?			
	A	Gearless Traction Elevators	B	Hydraulic Elevators
	C	Machine-room-less Elevators	D	Vacuum Elevators
44	Choose one of the correct specifications for electric supply in residential buildings			
	A	Single phase supply with nominal voltage of 1000V, range +20%, - 26%	B	Three phase supply with nominal voltage of 1000V, range +20%, - 16%;
	C	Earthing system type (TT System)	D	Permitted frequency is 400Hz + 1%
45	As per IRC classification, choose the correct rural or non-urban road category			
	A	Major District Roads	B	State Highways
	C	National Highway	D	All above three options
46	What is the function of expressways?			

	A	To cater for movement of heavy volumes of motor traffic at high speeds.	B	To cater for movement of light volumes of motor traffic at high speeds.
	C	To cater for movement of only cars at high speeds from one city to another.	D	To cater for movement of only cars at optimum speeds from one city to another.
47	One of the most appropriate primary factors in the design of parking structure is			
	A	Determining the number of cars	B	Determining the traffic flow
	C	Determining the road width	D	Determining the traffic island structure
48	A stacked car park that has multiple floor levels is known as			
	A	A multi-storey car park (MSCP)	B	Skyscraper car park (SCP)
	C	Elevated car park (ECP)	D	None of the above
49	Direct supply system from mains – public or private, Gravity distribution system, Pressurized distribution system, Combined distribution system are types of water supply system in the following building type			
	A	Low-rise residential building	B	High-rise residential building
	C	Low-rise commercial building	D	Low-rise School building
50	Permissible Ground Coverage, Permissible Floor Space Index, Permissible Height and the various floors are			
	A	Mandatory aspects of Development Requirements	B	Optional aspects of Development Requirements
	C	Optional aspects of only industrial area Development Requirements	D	None of the above
51	A building construction undertaken without grant of Development Permission, or undertaken after the Development Permission has lapsed, or, after the Development Permission has been cancelled, revoked or suspended is called			
	A	A building permission in process	B	A building to be demolished
	C	An Unauthorized Building	D	None of the above options
52	The full form of SWOT analysis is			
	A	Strength, Wastefulness, Opportunity and Tactfulness	B	Support, Wastefulness, Ownership and Transparency
	C	Sanction, Weakness, Ownership and Threat	D	Strength, Weakness, Opportunity and Threat

53	Selected sites include historic buildings, town sites, important archaeological sites, and works of monumental sculpture or painting is known as			
	A	Mixed Heritage	B	Cultural Heritage
	C	Natural Heritage	D	Historic Precincts
54	According to Kevin Lynch, the mental maps in the urban landscape consist of following elements			
	A	Paths, Edges, Nodes, Districts, Landmarks	B	Edges, Nodes, Districts, Transport hubs
	C	Nodes, Districts, Landmarks, Parks	D	Temples, Mosques, Churches, Traffic Islands
55	Which subject deals with the larger scale of groups of buildings, infrastructure, streets, and public spaces, entire neighborhoods and districts, and entire cities, with the goal of making urban environments that are equitable, beautiful, performative, and sustainable.			
	A	Architecture	B	Urban Design
	C	Neighbourhood design	D	None of the above
56	Select the name of first modern urban planning theorist, initiated the garden city movement			
	A	Frank Lloyd Wright	B	Le-Corbusier
	C	Ebenezer Howard	D	Tadao Ando
57	What is the first category of urban units known as			
	A	Metro City	B	Statutory Towns
	C	Mega City	D	Urban Agglomeration
58	Census Town is known as			
	A	First category of town	B	Third category of town
	C	Second category of town	D	None of the above
59	What is the tentative time frame of development plan in India			
	A	20-30 years	B	No time frame
	C	5-7 years	D	15-20 years

60	Any development, macro or micro that is focused around a transit node, and facilitates complete ease of access to the transit facility thereby inducing people to prefer to walk and use public transportation over personal modes of transport, is known as			
	A	Regional Planning	B	Local Area Planning
	C	Transit Oriented Development	D	Structure Planning
61	What can provide fast, convenient interchange options and spatial provision for various modes of intermediate Public Transport (IPT).			
	A	Network and Connectivity	B	Last Mile Connectivity
	C	Pedestrian Access	D	Streetscape Design
62	Which of the following statements describes one of the characteristics of an Islamic Garden?			
	A	Meditation was the garden's chief purpose, through which the meaning and purpose of life was revealed.	B	Water was the essential element of the garden for practical and symbolic purposes.
	C	The gardens were designed as intellectual retreats for scholars and artists.	D	The idea of the stroll garden by creation of a series of views and experiences in the garden.
63	Landscape planning can be defined as			
	A	An activity concerned with developing landscaping organically	B	An activity concerned with developing landscaping amongst various land uses
	C	An activity concerned with developing landscaping amongst competing land uses while protecting natural processes and significant cultural and natural resources.	D	Planting and maintaining flowering plants and grass in the city
64	Name the key landscape planner.			
	A	Frederick Law Olmsted	B	Tadao Ando
	C	Norman Foster	D	Zaha Hadid
65	Unity, Scale, Balance, Simplicity, Variety, Emphasis, and Sequence are principles of			
	A	Transport Planning	B	Landscape Design

	C	Town Planning Scheme	D	Development Plan
66	Mughal Garden style was primarily influenced by			
	A	Iranian Garden	B	Japanese Garden
	C	European Gardens	D	Persian Gardens particularly the Charbagh
67	Mughal gardens feature comprises			
	A	Canals and pools along the axes	B	Fountain or Koi pond along the axes.
	C	Fountains and waterfalls	D	All the above three options
68	Who were the primary designers of Central Park New York?			
	A	William Cullen Bryant,	B	Frederick Law Olmsted and Calvert Vaux
	C	Andrew Jackson Downing,	D	Ambrose Kingsland,
69	Which cities in India have most famous gardens?			
	A	Bengaluru, Mysore, Kolkata	B	Indore, Pune, Ahmedabad
	C	Rajkot, Bhopal, Ujjain	D	None of the above
70	Which of the following is considered to be amongst the world's oldest settlements?			
	A	Jericho	B	Jaipur
	C	Miletus	D	Rome
71	Name the city which was situated on the Acropolis rock. by 1400 BC, and it was a major centre of Mycenaean civilization,			
	A	Miletus	B	Athens
	C	Rome	D	Tokyo
72	Which of the following is regarded as the 'Think-tank of India' for providing policy and directional inputs in present time?			
	A	Ministry of Housing and Urban Affairs	B	Urban development Authority
	C	NITI Aayog	D	National Planning Board

73	Which region in India is designated as National Capital Region (NCR)?			
	A	Delhi and several districts surrounding it	B	Kolkata and several districts surrounding it
	C	Hyderabad and several districts surrounding it	D	Ahmedabad and several districts surrounding it
74	Name the unique institution under the Ministry of Housing and Urban Affairs (MoHUA), which has a motto of "Profitability with Social Justice"			
	A	BMTPC	B	DDA
	C	HUDCO	D	VUDA
75	Which affordable housing scheme focusing on homeless families and providing them with pucca houses with basic amenities?			
	A	Affordable Housing	B	Pradhan Mantri Awas Yojana – Gramin: PMAY G
	C	JNNURM	D	None of the above
76	Which organization is working towards operationalizing a comprehensive and integrated approach for promotion of cost-effective, environment-friendly & energy-efficient innovative building materials and construction?			
	A	CBRI	B	NIUA
	C	BMTPC	D	AUDA
77	Which building technologies are currently used in designing earthquake proof buildings?			
	A	Steel Plate Shear Walls.	B	Fly ash Brick construction
	C	Framed Construction	D	All the above three options
78	Which of following categories of housing has the lowest per sq.ft. construction cost?			
	A	HIG	B	EWS
	C	LIG	D	MIG
79	HFI stand for			
	A	Housing Finance Index	B	Housing Finance Institute
	C	Home Finance Institute	D	None of the above
80	Squatter is form of			
	A	Informal Housing	B	Formal Housing

	C	Slum	D	Corporate Housing
81	Choose the correct option, "Housing for All by 2022" aimed for urban areas with following components			
	A	Slum rehabilitation with participation of private developers using land as a resource	B	Promotion of affordable housing for weaker section through credit linked subsidy
	C	Affordable housing in partnership with Public & Private sectors	D	All the above three options
82	What is the name of the designer of Tara apartments which is one kind of social projects that is indented for the middleclass of Nehru Centre?			
	A	Architect B.V. Doshi	B	Architect Charles Correa
	C	Architect Achyut Kanvinde	D	Architect Bimal Patel
83	Unité d'Habitation in Marseille designed by			
	A	Le-Corbusier	B	Frank Lloyd Write
	C	Zaha Hadid	D	Santiago Calatrava
84	An architect who built "Latur Earthquake Proof Housing Project"; "Tsunami-proof Housing Project" and many cost-effective housing projects, awarded Padma Shri and Indian citizenship in 1994. Name the Architect.			
	A	B.V. Doshi	B	Laurie Baker
	C	Raj Reval	D	Achyut Kanvinde
85	Which of the following statement in reference to Taj Mahal is correct?			
	A	The tomb structure consists of a large dome.	B	Its basic elements are Greek in origin.
	C	The central chamber of the mausoleum is a hexagonal room.	D	Surrounded by a marble screen, the only cenotaph of Mumtaz begum lies in the center of the room.
86	"Acropolis of Athens" is			
	A	An ancient temple complex	B	An ancient citadel located above the city of Athens
	C	An ancient pyramid	D	None of the above

87	The most famous example of Byzantine architecture in Turkey is			
	A	Hagia Sophia	B	Basilica of San Vitale
	C	Parthenon	D	Cathedral of Saint Mark
88	Choose the correct one with reference to Gothic Architecture Characteristics			
	A	Small Stained-Glass Windows.	B	Circular Arches.
	C	Flying Buttresses.	D	Flat Ceilings.
89	Casa Battló, Barcelona, Spain is an example of			
	A	an example of Art Deco architecture	B	an example of Art Nouveau architecture
	C	an example Gothic Architecture	D	an example Roman Architecture
90	The essential feature of Indian temple architecture is			
	A	An inner sanctum, the <u>GarbhaGriha</u>	B	Movement space in anti-clockwise rotation
	C	There are no other structures and buildings near by	D	None of the above
91	Who is the first Indian architect to receive the Pritzker Architecture Prize,?			
	A	Charles Correa	B	Lauri Baker
	C	Balkrishna Doshi	D	Hasmukh Patel
92	One of the most influential Asian architects of his generation, principal force behind "tropical modernism". Name the architect			
	A	Geoffrey Bawa	B	Lauri Baker
	C	Ieoh Ming Pei	D	Maya Lin
93	An iconic building created out of glass, steel, aluminum, and reinforced concrete with designs of the logo of Expo 2020 embedded on the outer facade. Name the building			
	A	Burj Khalifa	B	The Dubai Frame
	C	Burj -Al-Arab	D	Atlantis, the Palm
94	The Council of Architecture (COA) has been constituted by the Government of India			
	A	under the provisions of the Architects Act, 1972,	B	under the provisions of the Architects Act, 1956,
	C	under the provisions of the Architects Act, 1999,	D	under the provisions of the Architects Act, 1912,

95	What is the fee for developing Single Block Housing and sites upto 0.5 hectare?			
	A	7 Percent on the cost of works assigned.	B	5 Percent on the cost of works assigned.
	C	10 Percent on the cost of works assigned.	D	15 Percent on the cost of works assigned.
96	Valuation of a rented property can be calculated by			
	A	Gross rent x year's purchase.	B	Net return x year's purchase + cost of land
	C	Net return x year's purchase,	D	(Gross rent – outgoings) x year's purchase + reversionary value of land.
97	How do you calculate property assessment?			
	A	Assessed Value = Market Value x (Assessment Rate / 100)	B	Assessed Value = Net return X (Assessment Rate / 100)
	C	Assessed Value = Land value X (Assessment Rate / 100)	D	None of the above
98	Guangzhou Opera House, China is designed by the following architect			
	A	Frank O Gehry	B	Rem Koolhaas
	C	Norman Foster	D	Zaha Hadid
99	Jewel Changi Airport, Singapore is designed by			
	A	Architect Norman Foster	B	Architect Moshie Safdie
	C	Fentress Architects	D	Estudio Lamela & Rogers Stirk Harbour + Partners
100	A magnificent example of the most groundbreaking 20th-century architecture, designed by architect Frank Gehry, name the building			
	A	Milwaukee Art Museum	B	Guggenheim Museum New York
	C	Turning Torso	D	Guggenheim Museum Bilbao