

PGCET-2020

Seat No. _____

SUB: 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.	Which statement is correct from the following?			
	A	Cut-sectional lines are darker than the projection lines.	B	Projection lines are darker than the cut-sectional lines.
	C	Both the lines have similar line intensity.	D	None of the above.
2.	How many surfaces are there in a hexagonal pyramid?			
	A	7	B	5
	C	6	D	8
3.	When a pyramid or a cone is cut by a plane parallel to its base, thus removing the top portion, the remaining portion is called its-----			
	A	Pyramid	B	Sphere
	C	Triangular Prism	D	Frustum
4.	What will be the outcome of the intersection of two different planes?			
	A	3D object	B	Plane
	C	Point	D	Line
5.	Which angles are considered while drawing presentation of Isometric and Axonometric projection method respectively?			
	A	35°, 60°	B	45°, 90°
	C	30° or 60°, 45°	D	50°, 80°
6.	Which Command is used to draw continuous wall type of 3D object with specific width & height directly?			
	A	Sweep	B	Extrude
	C	Polysolid	D	Revolve
7.	Which Command is a combination of Extrude & Subtract?			
	A	Slice	B	Presspull
	C	Loft	D	Revolve

8.	Which Command is used to merge two or more 3D solid objects?			
	A	Interfere	B	Subtract
	C	Union	D	Intersect
9.	Which Command is used to twist selected object on path.			
	A	Revolve	B	Sweep
	C	Loft	D	Extrude
10.	Which design principle represents the size of elements in relation to one another?			
	A	Scale	B	Contrast
	C	Proportion	D	Emphasis
11.	Name the piles that are constructed by depositing the freshly mixed concrete in place in the ground and letting it cure there.			
	A	End bearing pile	B	Cast in Situ concrete piles
	C	Pre-cast Concrete pile	D	Steel pile
12.	What is the name of the Piles used primarily to resist lateral pressures such as flow of water and loose soil?			
	A	Raft foundation	B	Friction Pile
	C	End bearing pile	D	Sheet Pile
13.	Which of the following foundations are not suitable for soft/loose soils?			
	A	Combined footings	B	Isolated footings
	C	Wall footings	D	Pile foundation
14.	Which of the following system of construction consist a combination of columns, beams and slabs for load transfer?			
	A	Folded plate structure	B	Frame structure
	C	Tensile structure	D	Shell structure

15.	Which of the following system of construction is commonly seen in Persian, Roman, Byzantine, and Islamic architecture?		
	A	Domes	B Tent structure
	C	Cable structures	D Frame structure
16.	Which of the following is not a system of classification of surfaces for Shell structures?		
	A	Monoclastic	B Anticlastic
	C	Multiclastic	D Synclastic
17.	Long-span buildings create unobstructed, column-free spaces greater than		
	A	20 meters	B 22 meters
	C	30 meters	D 28 meters
18.	A method of constructing high-rise buildings in which the chief horizontal and vertical members are of rolled steel is called		
	A	Frame structure	B Load bearing structure
	C	Organic structure	D Skeleton structure
19.	PERT analysis is based on		
	A	Pessimistic time	B Most likely time
	C	Optimistic time	D All three options.
20.	The critical path is		
	A	Is the longest path	B Is the shortest path
	C	Is a path that operates from the starting node to the end node.	D None of the above
21.	The cover to the main reinforced may be reduced up to one third of the specified cover but not less than		
	A	4 MM	B 8 MM
	C	5 MM	D 12 MM

22.	The slenderness ratio of a tie in a roof truss if subjected to action of wind and seismic forces, should not be greater than			
	A	350	B	235
	C	400	D	450
23.	Which is the correct statement from the following options?			
	A	The unit weight of reinforced concrete is assumed as 3500 N/m^3	B	The dead load includes self weight of the structural member plus weight of finishes and walls or partitions.
	C	The unit weight of plain concrete is assumed as 3000 N/m^3	D	None of the above.
24.	The thickness of the steel			
	A	In main members not directly exposed to weather should not be less than 4 mm.	B	Exposed to weather and accessible for repainting, should be not less than 6 mm.
	C	In secondary members not directly exposed to weather shall be not less than 6.5 mm.	D	In main members not directly exposed to weather should not be less than 10 mm.
25.	All reinforcement should be free from			
	A	Loose mill scales	B	Paints
	C	Loose rust	D	All of the above
26.	The actual length of a column provided with a cap and base, is the distance between			
	A	Bottom of the base and underside of the cap	B	Bottom of the base and top of the cap
	C	Top of the base and top of the cap	D	Top of the base and underside of the cap
27.	Moist curing of the exposed surfaces of concrete is done at least for			
	A	4 days	B	12 days
	C	10 days	D	7 days
28.	The pH value of water to be used in concrete shall generally be			
	A	Not less than 5	B	Not less than 13
	C	Not less than 4	D	Not less than 3

29.	Generally acceptable nominal size of aggregates for reinforced concrete, is			
	A	25 mm	B	20 mm
	C	30 mm	D	35 mm
30.	For all practical purposes, the modulus of elasticity of steel is assumed			
	A	300 kN/mm ²	B	340 kN/mm ²
	C	200 kN/mm ²	D	400 kN/mm ²
31.	Which are the different types of sources from which we can get surface water?			
	A	From rivers by continuous draft	B	From reservoir storage
	C	From river diversion	D	All of the above
32.	Ground water can be tapped from the following sources			
	A	From prepared catchments	B	From roof of houses
	C	From buildings	D	None of the above
33.	Which are the common methods used for desalination?			
	A	Distillation	B	Freezing
	C	Solar evaporation	D	All of the above
34.	Hydrologic cycle consists of the following process			
	A	Precipitation	B	Infiltration
	C	Evaporation and Transpiration	D	Basin recharge
35.	In the split air conditioner the outdoor unit has			
	A	Evaporator	B	Compressor and Condenser
	C	Compressor, Condenser and Expansion device	D	Condenser and Expansion device
36.	Floor carpet is a			
	A	Sound reflective material	B	Sound absorptive material
	C	Sound diffusive material	D	Sound refractive material

37.	Sound energy remains within a system through reflection and diffusion, whereas it leaves the system through the process of			
	A	Transmission	B	Absorption
	C	Absorption & Transmission	D	None of the above
38.	Normal human ear responds to sounds within the audio-frequency range of about.			
	A	20 to 20,000 Hz	B	4000 to 12,000 Hz
	C	20 to 2000 Hz	D	40 to 40,000 Hz
39.	When side walls of the enclosure is inadequate to provide a convenient condition to install acoustical treatment, the recommended absorber is			
	A	Space Absorber	B	Porous Absorber
	C	Movable absorber	D	Variable absorber
40.	What are the characteristics of good illumination?			
	A	Proper location should be made.	B	The type and size of the lamp should be correct.
	C	The light should not strike directly the eyes.	D	All of the above.
41.	WWR refers to			
	A	Volume of space	B	Wall to wall ratio
	C	Wall to window ratio	D	Area of building
42.	Time lag is the term used to			
	A	A delay that exists between two related phenomena	B	Determine the time at which heat exchange occurs.
	C	Periodic heat flow calculation	D	None of the above
43.	In warm and humid climate following type of planning is advisable			
	A	Smaller opening	B	Water body in the periphery
	C	Compact and dense	D	Courtyard planning

44.	Architectural style that is designed based on local needs, availability of construction materials and reflecting local			
	A	Regional architecture	B	Traditional architecture
	C	Vernacular Architecture	D	All of the above
45.	What is the full form of TERI?			
	A	The Energy and Resources Institute	B	The Environmental Research Institute
	C	The Environmental Resources Institute	D	The Energy and Research Institute
46.	Elements such as water fountain and water body are the examples of			
	A	Induced ventilation	B	Thermal mass
	C	Direct heat gain	D	Evaporative cooling
47.	ECBC stands for			
	A	Energy Conservation Building Code	B	Electrical Conduit in Building Construction
	C	Energy Credit in Building Construction	D	Electrical Credit in Building Code
48.	SWOT analysis is used for examining a situation's inherent			
	A	Sanction, Weakness, Ownership and Threat	B	Support, Wastefulness, Ownership and Transparency
	C	Strength, Weakness, Opportunity and Threat	D	Strength, Wastefulness, Opportunity and Tactfulness
49.	Auditorium for speech has _____ reverberation time than that of an auditorium for music, to achieve higher _____.			
	A	Higher, intelligibility	B	Equal, strength
	C	Lesser, clarity	D	Higher, liveliness

50.	Sites include hundreds of historic buildings and town sites, important archaeological sites, and works of monumental sculpture or painting.			
	A	Natural Heritage	B	Mixed Heritage
	C	Cultural Heritage	D	None of the above
51.	What involves the redevelopment of sites that are currently uninhabitable, creating areas where residential dwellings can be built?			
	A	Urban Regeneration	B	Urban Renewal
	C	Urban Planning	D	Urban Development
52.	What are the basic principles of conservation?			
	A	Participation in sustaining the historic environment	B	The historic environment is a shared resource.
	C	Management of significant places is necessary to sustain their values.	D	All of the above
53.	Which term can refer to any action or process that is used to repair, renew or re-establish a tangible or intangible asset?			
	A	Reconstruction	B	Rehabilitation
	C	Revitalization	D	Restoration
54.	What are the methods of building conservation?			
	A	Reconstruction	B	Restoration
	C	Preservation	D	All of the above

55.	“Grading” is necessary on site to accomplish which one of the following objectives?			
	A	To mark the foundation lines on the ground surface	B	To find the ground water tables at various points on the site
	C	To establish proper drainage	D	To enhance the fertility of the soil condition
56.	Which of the following aspects is NOT the part of the second phase of the site analysis part i.e. <i>Site assessment</i> ?			
	A	Site data	B	Visual values
	C	Visual relationships	D	Feelings and moods
57.	Identify the ‘incorrect’ statement among following, with reference to the sizes by which the plant material is categorized			
	A	Intermediate shrubs (between 1ft - 30cm and 3ft – 1m tall)	B	Large (40ft -12m tall or more) and intermediate trees (Max. 40ft -12 m tall) at maturity.
	C	Ground cover - smallest plant category by height- any low or spreading plant material that reaches a max height of 6 in - 15 cm to 12 in – 30 cm	D	Tall shrubs (3m -10ft to 15ft – 4.5 m tall) – Compare to small trees they’re not just slightly shorter but are distinguished by lack of canopy.
58.	Which of the following statements describes one of the characteristics of an Islamic Garden?			
	A	The idea of the stroll garden by creation of a series of views and experiences in the garden.	B	Meditation was the garden’s chief purpose, through which the meaning and purpose of life was revealed.
	C	The gardens were designed as intellectual retreats for scholars and artists.	D	Water was the essential element of the garden for practical and symbolic purposes.

59.	Urbanism is described here as			
	A	The connected system of public and private spaces	B	The space between buildings
	C	Big cities	D	The public realm
60.	Density is important because			
	A	It tends to be associated with lower carbon emissions	B	It can be used to create urban interaction and vitality
	C	It supports connectivity and public transport	D	All of the above
61.	Floor Area Ratio is the ratio of			
	A	Total floor area to half of the plot area	B	Plinth area to the half of the site area
	C	The ratio of a building's total floor area to the size of the piece of land upon which it is built.	D	Site area to half plinth area
62.	What is URDPFI guidelines?			
	A	Urban Region Development Plantation Form and Index	B	Urban and Regional Development Plans Formulation and Implementation.
	C	Urban Road Development, Plants and Forest Improvement	D	None of the above
63.	Which of the following concept can be primarily understood as a one which can constrict and control urban growth?			
	A	Concept of Green Belt	B	Neighborhood concept
	C	Generative and Parasitic city concept	D	Garden city concept
64.	According to Kevin Lynch, which of the following was not element of legibility for defining a city?			
	A	Cluster	B	Paths

	C	Nodes	D	Edges
65.	Which of the following is not amongst the world's oldest settlements?			
	A	Jerusalem	B	Jerico
	C	Jammu	D	Varanasi
66.	British town were classified in which of these three categories?			
	A	Cantonments, Provincial Capitals and Summer Destinations	B	Colonial Houses, Cantonments and Hill Stations
	C	Provincial Capitals, Hill Stations and Countryside	D	Cantonments, Provincial Capitals and Hill Stations
67.	Which of the following is regarded as the 'Think-tank of India' for providing policy and directional inputs in present time?			
	A	NITI Aayog	B	. Ministry of Urban Affairs
	C	National Planning commission	D	. Urban local body
68.	Which of the following gave the famous concentric zone theory?			
	A	Alfred Webber	B	Walter Christaller
	C	Ernest Burgess	D	Johann Heinrich von Thünen
69.	What is NCR?			

	A	National Capital Region	B	National Core Region
	C	National Central Region	D	None of the above
70.	Mohen Jodaro represents			
	A	Indus valley civilization	B	Egyptian civilization
	C	Greek civilization	D	Roman civilization
71.	Which of following is a form of informal housing?			
	A	Corporate housing	B	Group Housing
	C	Squatter	D	Apartment
72.	The centrally sponsored scheme where role of private participation is encouraged is			
	A	Basic Services for Urban poor	B	Pradhan Mantri Awas Yojna
	C	Indira Awas Yojna	D	Rental housing for government employees
73.	Which of the following is not a characteristic of housing situation for marginal section in India?			
	A	High Affordability	B	Diverse construction practices
	C	Land crunch	D	Demand Supply mismatch
74.	NUHHP stands for			
	A	National Upgraded Housing and Habitat Policy	B	National Urban Housing and Habitat Policy
	C	National Urban Habitat and House Policy	D	National United Housing and Habitat Policy
75.	Which of the following is not a major barrier in housing development?			
	A	Availability of Land	B	Housing affordability

	C	Absence of potential occupants of EWS and LIG category	D	Availability of skilled labour
76.	As per NBC 2016, the minimum turning radius (in metres) required for fire tender movement is			
	A	9.0	B	8.0
	C	8.5	D	10.5
77.	In mass transportation, LRTS stands for			
	A	Linear Rail Transportation System	B	Light Rail Transportation System
	C	Linear Rail Transit System	D	Light Rail Transit System
78.	Which of the following processes is not adopted in solid waste management?			
	A	Sanitary landfill	B	Flocculation
	C	Incineration	D	Pyrolysis
79.	Which of following categories of housing has the lowest per sq.ft. construction cost?			
	A	MIG	B	LIG
	C	EWS	D	HIG
80.	Generally, the predominant urban land use category in a city is			
	A	Transportation	B	Agriculture
	C	Residential	D	Green space
81.	Which of the following symbolizes the axis- mundi or skambha in a stupa?			
	A	Chattravali	B	Yasti
	C	Vedika	D	Harmika
82.	Which is the largest monolithic rock cut temple.			
	A	Kailashnath temple at Ellora	B	Pancharatha at Mahabalipuram

	C	Kailashnath temple at Kanchipuram	D	Deogarh temple
83.	Which of the following statement in reference to Taj Mahal is incorrect?			
	A	The central chamber of the mausoleum is an octagonal room.	B	Its basic elements are Persian in origin.
	C	Surrounded by a marble screen, the only cenotaph of Mumtaz begum lies in the center of the room.	D	The tomb structure consists of a large dome.
84.	This temple was the model for Virupaksha temple.			
	A	Rajasimhesvara temple	B	Lakshama temple
	C	Raja Rani temple	D	KandariyaMahadev temple
85.	Buildings meet nature in which style of architecture that can take on natural forms including the characteristics of plants or animals?			
	A	Brick Gothic	B	Organic Modernism
	C	Manueline	D	Googie
86.	Le Corbusier was an early 20th century architect who advocated the use of modern designs influential in which technique of development?			
	A	Industrial Revolution	B	Urban Planning
	C	Art Nouveau	D	Avant Garde
87.	Which architect designed the Rock and Roll Hall of Fame, Hancock Place and the Pyramide du Louvre?			
	A	Le corbusier	B	Frank Lloyed Wright
	C	I. M. Pei	D	B.V.Doshi
88.	Which architect designed the Burj Khalifa?			
	A	Adrian Smith, of Skidmore, Owings & Merrill,	B	Raj Rewal
	C	Zaha Hadid	D	I. M. Pei
89.	Who is the first woman architect to receive the Pritzker Architecture Prize, in 2004?			
	A	Marion Mahony Griffin	B	Zaha Hadid

	C	Julia Morgan	D	Maya Lin
90.	Who is the chief architect of National Museum of Qatar in Doha, Qatar?			
	A	Jaha Hadid	B	Le Corbusier
	C	Norman Foster	D	Jean Nouvel.
91.	What is the minimum fee, as per COA scale of charges for Interior Architecture work?			
	A	12%	B	14%
	C	7.5%	D	4%
92.	The project close out documents must be including all, except one of the following			
	A	Manuals & maintenance document of machinery installed	B	As-build drawing
	C	Project implementation report	D	Original drawing
93.	Every promise and every set of promise forming the consideration for each other is			
	A	Acceptance	B	Offer
	C	Agreement	D	Contract
94.	Valuation of a rented property will be given by			
	A	Net return x year's purchase + cost of land,	B	Gross rent x year's purchase.
	C	(Gross rent – outgoings) x year's purchase + reversionary value of land.	D	Net return x year's purchase,
95.	The book titled as Architecture: Form, Space, and Order is written by			
	A	Ebenezer Howard	B	Francis D. K. Ching
	C	Lewis Mumford	D	B.V. Doshi
96.	Which building is designed by architect Santiago Calatrava?			
	A	Milwaukee Art Museum	B	Turning Torso

	C	Dubai Creek Tower	D	All of the above
97.	The Council of Architecture (COA) has been constituted by the Government of India under the provisions of			
	A	Architects Act, 1947	B	Architects Act, 1972
	C	Architects Act, 2000	D	Architects Act, 2010
98.	Which airport design represent most eco-friendly vision			
	A	Chicago O'Hare International Airport	B	Kuwait International Airport
	C	Istanbul Airport (Turkey)	D	Singapore Changi Airport
99.	Name the architect who designed IIM Bangalore, IIM Udaipur, NIFT Delhi, Amdavad ni Gufa.			
	A	B.V. Doshi	B	Raj Reval
	C	Achyut Kanvinde	D	Bimal Patel
100.	Name the book written by Charles Correa			
	A	Housing and Urbanization	B	The New Landscape: Urbanization in the Third World
	C	Zero	D	All of the above