UPSEE 2019

PAPER-M ARCH CODE: AA*

ANSWER KEY, Examination Date: 21-04-2019

1	D	26	С	51	В	76	С
2	В	27	С	52	Α	77	С
3	D	28	С	53	С	78	С
4	В	29	В	54	D	79	Α
5	Α	30	D	55	В	80	В
6	Α	31	В	56	Α	81	D
7	В	32	Α	57	Α	82	D
8	С	33	С	58	В	83	D
9	Α	34	D	59	С	84	С
10	Α	35	С	60	В	85	В
11	D	36	Α	61	С	86	С
12	Α	37	С	62	С	87	Α
13	В	38	Α	63	Α	88	D
14	D	39	С	64	В	89	В
15	С	40	Α	65	С	90	Α
16	Α	41	Α	66	Α	91	С
17	В	42	С	67	В	92	В
18	В	43	С	68	С	93	D
19	D	44	Α	69	Α	94	Α
20	В	45	В	70	Α	95	В
21	Α	46	Α	71	В	96	В
22	В	47	С	72	В	97	Α
23	С	48	С	73	D	98	С
24	Α	49	С	74	С	99	D
25	С	50	С	75	Α	100	А

<u>Note:</u> In case of any grievance, it must be reported at upseegrievance@aktu.ac.in along with Students Roll No. with Paper Code, Question Booklet Code, Question No. and suggested answer with supporting documents on or before 03rd May 2019.

*प्रश्न पुस्तिका क्रमांक AA का प्रश्नपत्र एवं कुंजी प्रकाशित की जा रही है। प्रश्न पुस्तिका क्रमांक BB, CC तथा DD में प्रश्नों एवं उनके विकल्पों का क्रम परिवर्तित है कृपया तद्नुसार उत्तर मिलान करें।

M. ARCH	Ques	stion Booklet Sr. No	0.	Q. Booklet
Roll No.				$ \mathbf{A} $
OMR Answer Sheet No.				
Declaration : I have read and understood the instructions given on pa	age No. 1	Seal of Supe	erintendent of Examination	n Centre
Signature of Candidate				
as signed in application)		Si	gnature of the Invigilator	
Name of Candidate :				
To be copied by the candidate in your own ha				
"You will know you are in the right profession wh you know your work is important."			nk, you want to do you	best dany,
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* After cutting half upper part of this page, invigilate	or preserve it along	 with student's C	— — — — — — — — DMR sheet.	
				
No. of Pages in Booklet including title 12	Time 2 Hours	Marks 400	No. of Questions in E	Booklet
M. ARCH	uestion Booklet Sr. No.			
Roll No.				
		L	Signature of the Inv	igilator
				Q. Booklet
Name of Candidate :				A
INSTRI	UCTIONS TO	CANDIDATE		
1. Use BLUE or BLACK BALL POINT PEN onli	y for all entries an	d for filling the b	ubbles in the OMR Ans	swer Sheet
Before opening the SECURITY SEAL of the Answer-sheet Number in the space provided				
would mean that the Answer Sheet can not		-		
Each question carries FOUR marks. There we for each correct answer and ONE mark will be for unattempted questions.	pe deducted for ea	ich wrong answe	r. No marks will be ded	ucted/awar
Each multiple choice question has only one be treated as incorrect answer.	correct answer. M	lore than one an	swer indicated against	a question
Use of log table, mobile phones, any electrocalculator is permitted.	onic gadget and s	lide rule etc. is	strictly prohibited. Non-	-programm
Candidate will be allowed to leave the exam	ination hall at the	end of examina	tion time period only.	
7. If a candidate is found in possession of bo				n he/she m
derive assistance, he/she is liable to be trea (or attempting to give or obtain) assistance f	ated as disqualifie	d. Similarly, if a	candidate is found givi	
OMR sheet is placed within this paper and only at the start of paper.	I can be taken ou	it from this pape	er but seal of paper m	ust be ope

M. ARCH

M. Arch. : Q. 1 to Q. 100

- **001.** Concept of Dry Gardens is associated with:
 - (A) Mughal Architecture
 - (B) Egyptian Architecture
 - (C) Chinese Architecture
 - (D) Japanese Architecture
- **002.** Map is an
 - (A) Isometric projection
 - (B) Orthographic projection
 - (C) Axonometric projection
 - (D) Oblique projection

- **003.** 'Indore slum networking program' has been planned by
 - (A) B.V Doshi
 - (B) Daulat Mukharjee
 - (C) Anil Laul
 - (D) Himanshu Parikh
- **004.** 'Volume Zero' is a film based on the works of
 - (A) Peter Eisenman
 - (B) Charles Correa
 - (C) Daniel Libeskind
 - (D) Anant Raje

005.	Unit of thermal conductivity of a mat	erial is 010.	Dancing house Pargue is associated with
	(A) $W/(mK)$ (B) $W/(m^2K)$		(A) Frank Gehry
	(C) mK/W (D) m^2K/W		(B) Frank Lloyd Wright
			(C) Mies van der Rohe
006.	As per space standards for barrier fr	ree built	(D) Adolf Loos
	environment, the minimum turning ra	dius for	
	a wheel chair in mm is	011.	Damage of foundation due to 'soil
	(A) 900 (B) 1200		liquefaction' is related to
	(C) 1500 (D) 1800		(A) Cyclones (B) Landslides
			(C) Floods (D) Earthquakes
007.	Shodhan House at Ahmadabad was d	esigned	
	by	012.	Walls with high thermal inertia are suitable in
	(A) Anant Raje		which type of climate
	(B) Le Corbusier		(A) Hot Dry (B) Hot Humid
	(C) Louis I Kahn		(C) Temperate (D) Cold
	(D) B. V. Doshi		
		013.	'Demolition Contract' for a building is
008.	Low – emissivity coating on a glazing	g unit	awarded to a
	(A) Increases solar heat gain coeffic	ient	(A) Lowest Bidder
	(B) Increases visible light transmiss	ion	(B) Highest Bidder
	(C) Reduces solar heat gain coefficient	ent	(C) Second lowest Bidder
	(D) Increases solar heat gain coeffic	ient and	(D) Second highest Bidder
	visible light transmission		
		014.	The fundamental right pertaining to property
009.	Hoop and Meridional forces are ass	sociated	ownership in India does not embress
	with		(A) Sell, lease of donate
	(A) Dome		(B) Mortgage
	(B) Truss		(C) Grant agreement
	(C) Folded plates		(D) Change in use
	(D) Space frame		
		015.	Baluster is a term associated with
			(A) Door (B) Dome
			(C) Staircase (D) Arch

016.	Bracket is a term	associated with	022.	Room size of 8 m \times 13 m is in
	(A) Cornice	(B) Dome		(A) Root two Ratio
	(C) Arch	(D) Lintel		(B) Golden Ratio
				(C) Root three Ratio
017.	A colours combin	nation forming an equilateral		(D) Hindu Ratio
	triangle in a colo	ur wheel is called		
	(A) Analogous S	Scheme	023.	Concentric contour lines represents
	(B) Triad Schen	ne		(A) Hill (B) Valley
	(C) Split comple	ementary scheme		(C) Hill or valley (D) Ridge
	(D) Double com	plementary schems		
			024.	Plane table survey includes use of
018.	Invert level of a	pipe at given cross section		(A) Alidade (B) Theodolite
	refers to the			(C) Dumpy level (D) None of above
	(A) Highest poin	nt of the internal surface		
	(B) Lowest poin	at of the internal surface	025.	Marble is a type of
	(C) Highest poin	nt of the external surface		(A) Igneous rock
	(D) Lowest poin	at of the external surface		(B) Sedimentary rock
				(C) Metamorphic rock
019.	Pisa Cathedral Ita	aly is an example of		(D) Basalt
	(A) Gothic archi	itecture		
	(B) Egyptian are	chitecture	026.	Evaporative cooling does NOT work in
	(C) Byzantine A	rchitecture		(A) Low Relative Humidity
	(D) Romanesque	e Architecture		(B) Low Temperature
				(C) High Relative Humidity
020.	A 6 cm line on a	drawing sheet in 1:300 scale		(D) High Temperature
	represents an acti	ual dimension of		
	(A) 1800 mm	(B) 18.0 m	027.	Flying buttresses were used in
	(C) 50.0 cm	(D) 5.0 m		(A) Egyptian Architecture
				(B) Greek Architecture
021.	'Rhythm' is a ter	m related to		(C) Gothic Architecture
	(A) Flow	(B) Focus		(D) None of the above
	(C) Contrast	(D) Balance		

- **028.** Vidyadhar Nagar was planned by
 - (A) H.K.Mewada
 - (B) Vidyadhar Bhattacharya
 - (C) B.V.Doshi
 - (D) Charles Correa
- **029.** Mahoney's tables are used for
 - (A) Rental value calculation of property
 - (B) Climate based design
 - (C) Steel structure section design
 - (D) Depreciation assessment of machinery
- **030.** Architect Walter Gropius was associated with
 - (A) Interbau
 - (B) Art Deco
 - (C) Chicago school
 - (D) Bauhaus
- **031.** Flow of water in a bib-cock would increase if
 - (A) Height of the overhead tank is decreased
 - (B) The number of elbows and Ts in the pipe length decreased
 - (C) The number of elbows and Ts in the pipe length increased
 - (D) None of the above
- **032.** The plan of 'Pink City' Jaipur is
 - (A) Grid-Iron
- (B) Organic
- (C) Radial
- (D) Elliptical
- **033.** French colonial style planning and architecture is seen in
 - (A) New Delhi (B) Goa
 - (C) Pondicherry (D) Andaman islands

- **034.** Psychrometric chart is used for
 - (A) Electrical circuit Design
 - (B) Structural Design
 - (C) Water supply Piping Design
 - (D) HVAC Design
- **035.** Reverberation Time of an auditorium is affected by
 - (A) Occupancy
 - (B) Interior Surface area
 - (C) Both A & B
 - (D) None of the above
- **036.** In Project Management, CPM network time is
 - (A) Deterministic
 - (B) Optimistic
 - (C) Probabilistic
 - (D) Pessimistic
- **037.** In expansive soils the following foundation is used
 - (A) Isolated footing
 - (B) Strip footings
 - (C) Pile
 - (D) Combined footings
- **038.** In a cantilever RCC slab, the main reinforcement is at
 - (A) Top
 - (B) Bottom
 - (C) Middle
 - (D) The position of the reinforcement is irrelevant

039.	The buildable area available on a plot of one	045.	Daylight Factor (DF) is
	hectare with FAR of 2.25 is		(A) Amount of Daylight penetrating inside
	(A) 15500 sqm (B) 20500 sqm		the room
	(C) 22500 sqm (D) 25500 sqm		(B) Ratio of inside and outside daylight
			levels
040.	Minimum population to sustain a Primary		(C) Total light effect created by direct
	school as per NBC is		daylight and reflected light from internal
	(A) 4000 (B) 5000		surfaces, inside the room.
	(C) 2000 (D) 3000		(D) None of above
041.	Solomon R. Guggenheim Museum (1956),	046.	A power by which the government can acquire
	New York, was designed by		any private property for public welfare is
	(A) Frank Lloyd Wright		(A) Power of Eminent Domain
	(B) Joseph Allen Stein		(B) Power of Police
	(C) Le Corbusier		(C) Financial Power
	(D) Auguste Perret		(D) Power of Judiciary
042.	Which of the following is NOT a member of	047.	If the original cost of a building is Rs.
	a Steel Truss?		25,00,000/- and its scrap value after 55 years
	(A) Gusset Plate		is Rs.25,000/=, then its annual depreciation
	(B) Wall Plate		(in Rs.) using straight line method is
	(C) Fish Plate		(A) 25000 (B) 35000
	(D) Anchor Bolts		(C) 45000 (D) 55000
043.	ECBC stands for	048.	As per NBC, where there is only one room
	(A) Electrical Conduit in Building		The area of habitable room shall not be less
	Construction		than
	(B) Electrical Credit in Building Code		(A) 5.5 sqm (B) 15.0 sqm
	(C) Energy Conservation Building Code		(C) 9.5 sqm (D) 12 sqm
	(D) Energy Credit in Building Construction		
		049.	E.I.A stands for
044.	The Coefficient of sound Absorption for an		(A) East India Association
	open window is		(B) Environmental Impact Audit
	(A) 1.0 (B) 0.1		(C) Environmental Impact assessment
	(C) 0.01 (D) 0		(D) Ecological impact assessment

- **050.** Of the following types of landscape, which one produces 'heat –island'
 - (A) Islands
 - (B) Coastal areas
 - (C) Urban areas
 - (D) Mountain ranges
- **051.** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs is
 - (A) Health, education and welfare development
 - (B) Sustainable development
 - (C) Economic development
 - (D) Infrastructure development
- **052.** The role of government agencies in the field of housing started changing since 1970s in the following way
 - (A) From provider to facilitator
 - (B) From plot supplier to dwelling unit supplier
 - (C) From designer to builder
 - (D) From facilitator to provider
- **053.** The pH scale runs from 0 -14, the nearest value of drinking water is
 - (A) 0.0
- (B) 3.5
- (C) 7.0
- (D) 10.5
- **054.** Life-cycle costing includes
 - (A) Only initial cost
 - (B) Neither initial cost nor running cost
 - (C) Only running cost
 - (D) Both initial cost and running cost

- **055.** An activity in project network analysis means
 - (A) Start or completion of task in time and resource
 - (B) Actual performance of task that consumes time and resources
 - (C) Total project time for completion of work
 - (D) Least total time required for completing the work
- **056.** As per NBC the standard lighting required in a classroom is in the range of
 - (A) 200-300-500 lux
 - (B) 20-30-50 lux
 - (C) 2000-3000-5000 lux
 - (D) None of the above
- **057.** The architecture inspired by the local masses of a region is
 - (A) Vernacular architecture
 - (B) Green Architecture
 - (C) Traditional architecture
 - (D) Symbolic Architecture
- **058.** Cesspool is related to
 - (A) Water treatment
 - (B) Sewage treatment
 - (C) Swimming pool
 - (D) Leisure pool
- **059.** SI Unit of illumination is
 - (A) Lumens
- (B) Candela
- (C) Lux
- (D) None of these

- **060.** Lucknow is situated in which climatic zone
 - (A) Hot Dry
 - (B) Composite
 - (C) Warm Humid
 - (D) Maritime
- **061.** Desert settlement is characterized by
 - (A) Sparse Planning
 - (B) Large open spaces
 - (C) Compact Planning
 - (D) Dense vegetation
- **062.** In acoustics, Reverberation time is 0.16 V/A, 'A' is dependent on
 - (A) Absorption coefficient
 - (B) Surface area
 - (C) Both A and B
 - (D) Neither A nor B
- **063.** Which of the following is a water supply network system
 - (A) Grid iron
 - (B) Open ended
 - (C) Balanced input
 - (D) All of the above
- **064.** Flow through water in a tap will increase if
 - (A) Pipe length is increased
 - (B) Pipe length is decreased
 - (C) Head is decreased
 - (D) A and B both

- **065.** Which of the following modern architects had a major impact on post independence Indian Architecture
 - (A) Mies Van Der Rohe
 - (B) Frank Lloyd Wright
 - (C) Le Corbusier
 - (D) Walter Gropius
- **066.** For earthquake resistant RCC structures the design consideration is
 - (A) Strong column weak beam
 - (B) Weak column strong beam
 - (C) Strong column strong beam
 - (D) Weak column weak beam
- **067.** Bahai temple in Delhi is a
 - (A) Tensile structure
 - (B) Shell Structure
 - (C) Pneumatic structure
 - (D) Space structure
- **068.** Which bond is not used in brick masonry
 - (A) English bond
 - (B) Flemish bond
 - (C) Dutch bond
 - (D) Rat bond
- **069.** Munsell is related to
 - (A) Colour scale
 - (B) Linear city
 - (C) BOD
 - (D) Light intensity

070.	Vent pipe in the sewer lne of a house is used	076.	Number of common clay bricks required to
	(A) To protect the seal in the trap		make one cubic meter of brick masonry
	(B) To ventilate the bathroom		(A) 350 (B) 420
	(C) To ventilate the overhead tank		(C) 500 (D) 550
	(D) None of the above		
		077.	In two dimensional composition spatial depth
071.	Acidity of the soil is indicated by		can be created by the principle of
	(A) BOD (B) pH		(A) Balance (B) Rhythm
	(C) GL (D) CLO		(C) Perspective (D) Harmony
072.	WBLOCK command in autoCAD creates	078.	The minimum diameter of longitudinal
	(A) Wooden block		reinforcement in RCC column is
	(B) Drawing file		(A) 8 mm (B) 10 mm
	(C) ASCII file		(C) 12 mm (D) 16 mm
	(D) Data file		
		079.	Tie member in king post truss is
073.	UCS in AutoCAD		(A) Tension member
	(A) Cannot be altered		(B) Compression member
	(B) Can be rotated		(C) Tension and compression both
	(C) Can only be translated		(D) Neither tension nor compression
	(D) Can be rotated and translated		
		080.	Jharokha is an architectural element used in
074.	Psychometric scaling deals with		buildings as
	(A) Subjective weighting		(A) Gateway
	(B) Frequency of sound		(B) Balcony
	(C) Thermal comfort		(C) Column decoration
	(D) Colour intensity		(D) Ceiling decoration
075.	Wedge shaped brick or stone blocks forming	081.	Travel behavior characteristics of an urban
	an arch are called		area can be derived from
	(A) Voussoirs (B) Cornices		(A) Parking survey
	(C) Springers (D) Abutments		(B) Socio-economic survey
			(C) Demographic survey
			(D) Origin and destination survey
			· · · · · · · · · · · · · · · · · · ·
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082.	Central place theory was given by:	088.	Pure colour is described by the term		
	(A) Clarence Stein		(A) Chroma (B) Tone		
	(B) Von Thunen		(C) Value (D) Hue		
	(C) Soria Y Mata				
	(D) Christaller	089.	Sciography refers to		
			(A) Study of screen printing		
083.	Dry rot is a defect of		(B) Study of shadow projections		
	(A) Lime (B) Stone		(C) Study of graphic design		
	(C) Brick (D) Timber		(D) Study of textile design		
084.	Number of edges in an octahedron	090.	The valve which allows the flow of water in		
	(A) 8 (B) 10		one direction only		
	(C) 12 (D) 14		(A) Reflux valve		
			(B) Sluice valve		
085.	Stack effect is		(C) Relief valve		
	(A) The process of supplying fresh air by		(D) Score valve		
	electro mechanical means both vertica	ally			
	and horizontally	091.	Which pattern of layout is most commonly		
	(B) The tendency of hot air in a shaft to	rise	seen in Mughal gardens		
	and create a draft of cool air intake		(A) Chashme Shahi		
	(C) The air supply to a motor driven louve	red	(B) Jor bagh		
	opening in basement		(C) Char bagh		
	(D) The circulation of fresh air through	ıgh	(D) Firdausi		
	windows from the lintel level				
		092.	Gopuram refers to		
086.	Nosing is provided in		(A) Temple (B) Gateway		
	(A) Water proofing		(C) Village (D) Brick dome		
	(B) Masonry				
	(C) Staircase	093.	Complimentary colour of violet is		
	(D) Painted finish		(A) Red (B) Green		
			(C) Black (D) Yellow		
087.	Support system given to dilapidated build	ing			
	(A) Shoring (B) Centering				
	(C) Scaffolding (D) Shuttering				

- **094.** Workability of concrete mix with low water cement ratio is determined by
 - (A) Slump test
 - (B) Tensile strength test
 - (C) Flexural strength test
 - (D) Compaction factor test
- **095.** Most efficient arch for transferring load
 - (A) Flat
 - (B) Semi circular
 - (C) Pointed
 - (D) Catenary
- **096.** Le Corbusier put forth his theory of proportions in a book titled
 - (A) The dimensions
 - (B) The modular
 - (C) The golden section
 - (D) Towards the new architecture
- **097.** Term comfort zone is used in relation to
 - (A) Bio climatic chart
 - (B) Sun path diagram
 - (C) Wind rose
 - (D) Sundial
- **098.** Timber member Rail is associated with
 - (A) Timber floor
 - (B) Truss
 - (C) Door
 - (D) Staircase

- **099.** Size of queen closer is
 - (A) 100×100
 - (B) 100×50
 - (C) 200×100
 - (D) 200×50
- **100.** The parameter that does not appear in psychrometric chart
 - (A) Wind speed
 - (B) Dry bulb temperature
 - (C) Wet bulb temperature
 - (D) Relative humidity

