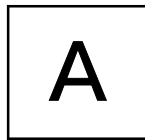


CODE



ENTRANCE TEST

July, 2018

Ph. D.	Architecture
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Duration : 90 Minutes

Max. Marks : 100

Total Pages : 27

Total Questions : 100

RESEARCH METHODOLOGY

1. The research process begins with formulating and defining.....
 - (A) Identifying research objectives
 - (B) Forming hypothesis statements
 - (C) Research Problem
 - (D) Observation and secondary data study

2. A research is *not* aimed at :
 - (A) Testing a hypothesis
 - (B) Proving an argument
 - (C) Filling gaps in the existing knowledge
 - (D) Finding new knowledge

3. A pilot study is :
 - (A) an extremely rigorous research design involving formal methods for collecting data
 - (B) a small-scale exploratory research technique that uses informal data collection methods
 - (C) a good example of backward linkage
 - (D) always the best way to approach architectural research situation

4. Which of the following is *not* part of the research process ?
 - (A) Analysis
 - (B) Data Documentation
 - (C) Formulation of a Research Questionnaire
 - (D) General Recommendations

5. What is the meaning of research design ?
 - (A) Framework of research
 - (B) Working of research
 - (C) Tool of research
 - (D) Process of research

6. The type of qualitative research that describes the culture of a group of people is called :
 - (A) Phenomenology
 - (B) Grounded theory
 - (C) Ethnography
 - (D) Case study

7. The main goal of casual research is :
 - (A) To directly seek the solution to a particular, pragmatic problem
 - (B) To identify cause-and-effect relationships between variables
 - (C) To clarify the nature of problems
 - (D) To provide a conclusive statement about the characteristics of particular population or phenomenon

8. When each member of a population has an equally likely chance of being selected, this is called :
 - (A) A nonrandom sampling method
 - (B) A quota sample
 - (C) A snowball sample
 - (D) An equal probability selection method

9. The.....is expected to influence the.....
- (A) Independent variable; moderating variable
 - (B) Independent variable; dependent variable
 - (C) Dependent variable; independent variable
 - (D) Dependent variable; moderating variable
10. Approval for a newly established library measured on 5-point Likert Scale, where the user satisfaction is “Strongly approve” and “Strongly disapprove”. Identify the correct level of measurement for the variables :
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
11. Which one of the following variables is *not* categorical ?
- (A) Age of a person
 - (B) Gender of a person : male or female
 - (C) Choice on a test item : true or false.
 - (D) Marital status of a person (single, married, divorced, other)
12. When an architect holds a 90-minute discussion with a client in order to determine the client’s ideas about the feasibility of a new building design, this is an example of a(n) :
- (A) Case study
 - (B) In-depth interview
 - (C) Secondary data analysis
 - (D) Word association

- 13.** What is the purpose of using direct personal observation when conducting an architectural research ?
- (A) To obtain sufficient responses
 - (B) To see the actions of the users
 - (C) To interview respondents
 - (D) To avoid communication problem
- 14.** What are the two methods of observations in research ?
- (A) Students and teachers
 - (B) Direct and indirect
 - (C) Participants and non-participants
 - (D) Close and open
- 15.** When conducting an interview, asking "Anything else ?, What do you mean ?, Why do you feel that way ?," etc. are all forms of :
- (A) Contingency questions
 - (B) Probes
 - (C) Protocols
 - (D) Response categories
- 16.** A magazine printed a survey in its monthly issue and asked readers to fill it out and send it in. Over 1000 readers did so. This type of sample is called a :
- (A) cluster sample
 - (B) self-selected deliberate sample
 - (C) stratified sample
 - (D) simple random sample

17. Case study in architecture is a(n) :
- (A) Empirical research method
 - (B) Exploratory research method
 - (C) Experimental research method
 - (D) Quasi-Experimental research method
18. Controlled group is a term which is used in :
- (A) Survey research
 - (B) Historical research
 - (C) Experimental research
 - (D) Descriptive research
19. When a researcher identifies so completely with the group being studied that he or she can no longer remain objective you have what is called ?
- (A) Culture shock
 - (B) Going native
 - (C) Regression
 - (D) Cultural relativism
20. What term refers to the insider's perspective in research methodology ?
- (A) Ethnocentrism
 - (B) Emic perspective
 - (C) Etic perspective
 - (D) Holism

21. The longitudinal approach of research deals with :
- (A) Horizontal researches
 - (B) Long-term researches
 - (C) Short-term researches
 - (D) None of the above
22. Determining the relationship between two or more variables occurs in :
- (A) Correlational research
 - (B) Action research
 - (C) Naturalistic observation
 - (D) Survey research
23. Research that is done to examine the findings of someone else using the "same variables but different people" is :
- (A) Exploration
 - (B) Hypothesis
 - (C) Replication
 - (D) Empiricism
24. Dr. Pandey is writing her observations of a historical monument, without interpretation, that the monument is architectural significance. Which of the following objectives does she appear to be using ?
- (A) Prediction
 - (B) Description
 - (C) Explanation
 - (D) Exploration

25. Action research is a type of :
- (A) Applied research
 - (B) Quantity research
 - (C) Survey research
 - (D) Population research
26. Hypothesis relates :
- (A) Constant to variables
 - (B) Constant to constant
 - (C) Variables to constant
 - (D) Variables to variables
27. Rene Descartes is associated with which of the following approached to knowledge generation ?
- (A) Empiricism
 - (B) Rationalism
 - (C) Expert opinion
 - (D) Theoretical
28. What is the basis of the Scientific Method ?
- (A) To test hypotheses in conditions that are conclusive to its success.
 - (B) To formulate a research problem and disprove the hypothesis.
 - (C) To formulate a research problem, test the hypothesis in carefully controlled conditions that challenge the hypothesis.
 - (D) To test hypotheses and if they are disproved, they should be abandoned completely

- 29.** Which form of reasoning is the process of drawing a specific conclusion from a set of premises ?
- (A) Rationalism
 - (B) Deductive reasoning
 - (C) Inductive reasoning
 - (D) Probabilistic
- 30.** What type of question is the following : “I am going to show you a building designed by an eminent architect.” What does this building mean to you ?
- (A) Open-ended
 - (B) Close-ended
 - (C) Dichotomous
 - (D) Multiple choice
- 31.** Which section of a technical report includes discussion of sampling design, research design, and data collection procedures ?
- (A) Introduction
 - (B) Background
 - (C) Methodology
 - (D) Appendix

- 32.** What term is used to refer to a concise summary of the major findings, conclusions, and recommendations ?
- (A) Introduction
 - (B) Synopsis
 - (C) Conclusion
 - (D) Executive summary
- 33.** Which of the following are characteristics of qualitative research ?
- (A) Naturalistic Inquiry
 - (B) Laboratory experiment
 - (C) Use of standardized tests
 - (D) A priori hypothesis
- 34.** Which of the following is characteristic of qualitative research ?
- (A) Deductive analysis
 - (B) Inductive analysis
 - (C) Control of variables
 - (D) Random assignment to groups
- 35.** One of following search engines is exclusively meant for scientific information :
- (A) Google
 - (B) Yahoo
 - (C) PLOS ONE
 - (D) Altavista

- 36.** Why do you need to review the existing literature ?
- (A) You enjoy reading the academic research on your topic.
 - (B) Because without it, you could never reach the required word-count.
 - (C) To find out what is already known about your area of interest.
 - (D) To make sure you have a long list of references.
- 37.** To read the literature critically means :
- (A) to suggest the previous research was always poorly conducted
 - (B) skimming through the material because most of it is just padding
 - (C) evaluating what you read in terms of your own research questions.
 - (D) being negative about something before you read it.
- 38.** A systematic literature review is :
- (A) one which generates a literature review using a treasure hunt system
 - (B) a replicable, scientific, and transparent process
 - (C) one which gives equal attention to the principal contributors to the area
 - (D) a manufactured system for generating literature reviews tailored to your subject.
- 39.** According to the Harvard referencing convention, pick out the correct version of showing this book in a bibliography :
- (A) Bryman, A. and Bell, E. (2011, 3e) *Business Research Methods*, Oxford; Oxford University Press.
 - (B) Bryman (2011, third edition), Oxford University Press
 - (C) Bryman and Bell, *Business Research Methods* (2011: OUP)
 - (D) Bryman, A. *Business Research Methods* (2011)

40. Which of the following statements about plagiarism is most accurate ?
- (A) It is so easy to "copy and paste" from the internet that everyone does it nowadays. If a proper reference is given, where is the harm in that ?
 - (B) How can we say for sure where our own ideas come from exactly ? If we tried to give a reference for everything we could never hope to succeed.
 - (C) Any suggestion that we have written what another actually wrote is morally wrong. The whole point of a literature review is to show what we have read and what we thought about it.
 - (D) Plagiarism is such an awful crime that those found guilty should be obliged to wear a scarlet "P" on their clothing.
41. A list of 5 data is : 70, 64, 80, 74, 92. What is the median for this list ?
- (A) 74
 - (B) 76
 - (C) 77
 - (D) 80
42. A researcher wants to study the relationship of family size to income. He classifies his population into different income slabs and then takes a random sample from each slab in order. Which technique of sampling is he working with ?
- (A) Cluster sampling
 - (B) Random sampling
 - (C) Stratified random sampling
 - (D) Systematic sampling
43. Participant observation is the process of immersing yourself in the study of.....
- (A) Outcomes
 - (B) Methods
 - (C) People
 - (D) Options

44. Sequential is a mixed inquiry strategy when :
- (A) results of one research is expanded by the other
 - (B) qualitative and quantitative methods are applied simultaneously
 - (C) researcher sets metaphysical frameworks for further investigation
 - (D) numerical data is used to process the information
45. Which of the following would be the strongest argument for the inductive claim, "The weather for tomorrow will be beautiful" ?
- (A) John says, "Tomorrow is my birthday, and the weather on my birthday is always beautiful."
 - (B) Bharati says, "The weather forecast in the newspaper is always wrong, and tomorrow's forecast is for rain, so it will probably be beautiful."
 - (C) Ajay says, "The weather forecast in the newspaper is always right, and tomorrow's forecast is for a beautiful day, so that's what it will be."
 - (D) Aamir says, "The barometric pressure has been rising for three days, and whenever that happens we have beautiful weather for the next week, so tomorrow is sure to be beautiful."
46. Which of the following claims would be best expressed by deductive reasoning ?
- (A) California's population growth rate slowed last year.
 - (B) California residents appreciate their good weather.
 - (C) California residents are residents of the United States.
 - (D) More cars are registered in California than in any other State.

47.refers to inferring about the whole population based on the observations made on a small part.
- (A) Deductive inference
 - (B) Inductive inference
 - (C) Pseudo-inference
 - (D) Objective inference
48. A census taker often collects data through which of the following ?
- (A) Standardized tests
 - (B) Interviews
 - (C) Secondary data
 - (D) Observations
49. Controlled group is a term which is used in :
- (A) Survey research
 - (B) Historical research
 - (C) Experimental research
 - (D) Descriptive research
50. Written accounts of quantitative research rarely include the results of reliability and validity tests because :
- (A) researchers are more interested in reporting their operational definitions
 - (B) researchers don't really think that these tests are important
 - (C) journal editors have banned these kinds of articles
 - (D) Researchers are more interested in reporting their substantive findings

ARCHITECTURE

51. Which of the following is *not* a principle of design ?
- (A) Likeness (B) Harmony
(C) Rhythm (D) Balance
52. Which of the following aspects is *not* pertinent to Universal Design ?
- (A) Anthropometrics
(B) Spatial Allowances
(C) Signage
(D) Orientation
53. In which year was the Persons with Disability Act that granted access to all to a barrier free built environment enacted ?
- (A) 2015
(B) 1995
(C) 2000
(D) 1975
54. Which of the following is *not* an architectural rendering software ?
- (A) Revit
(B) BRay
(C) Rhino
(D) Autocad

55. Who is the author of the book 'Complexity and Contradiction in Architecture' ?
- (A) Robert A.M. Stern
 - (B) Charles Moore
 - (C) Robert Venturi
 - (D) Mario Botta
56. Who among the following has been the recipient of the Pritzker Architecture Prize 2018 ?
- (A) B.E. Doctor
 - (B) Charles Correa
 - (C) C.P. Kukreja
 - (D) B.V. Doshi
57. Who among the following was *not* the director of the Bauhaus ?
- (A) Walter Gropius
 - (B) Gerrit Thomas Rietveld
 - (C) Ludwig Mies van der Rohe
 - (D) Hannes Meyer
58. Which of the following architectural works is regarded as an example of Post War Expressionist Architecture ?
- (A) Terminal Three, IGI Airport
 - (B) Terminal Five, Heathrow Airport
 - (C) TWA Terminal, JFK Airport
 - (D) Terminal Two, Kansai Airport

- 59.** Who among the following is *not* a part of the New York Five ?
- (A) John Hejduk
 - (B) Gordon Cullen
 - (C) Michael Graves
 - (D) Charles Gwathmey
- 60.** Which of the following tools is used to analyse the relationship of built and unbuilt spaces in a city ?
- (A) SPSS Data Analysis
 - (B) Visual Survey
 - (C) Topographical Study
 - (D) Figure-Ground Analysis
- 61.** Which of the following acts govern the building profession in India ?
- (A) Architects Act
 - (B) Town and Country Planning Act
 - (C) Environmental Protection Act
 - (D) Pollution Control Act
- 62.** Which of the following criteria needs to be satisfied by a structure in Limit State Design ?
- (A) UDL
 - (B) EIA
 - (C) ULS
 - (D) COA

63. Which of the following *does not* form part of the structural system of a building ?
- (A) Fenestration
 - (B) Superstructure Frame
 - (C) Foundation
 - (D) Roof Frame
64. Which among the following is regarded as a sustainable building material ?
- (A) POP
 - (B) AAC
 - (C) ACP
 - (D) PVC
65. Which of the following building material would be suitable for the floor finish of a staircase in a public building ?
- (A) Unpolished kota stone
 - (B) Polished wood
 - (C) Polished granite
 - (D) Brick on edge
66. Which of the following is *not* used as an aggregate in concrete ?
- (A) Plastic
 - (B) Glass
 - (C) Slag
 - (D) Gravel

67. Which of the following is *not* a planning tool used in construction management ?
- (A) PERT
 - (B) CPM
 - (C) PURA
 - (D) GANTT
68. Which of the following IS codes is applicable for improving the seismic resistance of earthen buildings ?
- (A) IS 13827:1993
 - (B) IS 1893:1984
 - (C) IS 13828:1993
 - (D) IS 13935:2009
69. Which of the following is *not* a type of Timber Truss ?
- (A) King Post
 - (B) Tong
 - (C) Queen Post
 - (D) Scissor
70. Which of the following is *not* a method of joinery in steel construction ?
- (A) Riveting
 - (B) Bolting
 - (C) Dowelling
 - (D) Welding

71. Which of the following is *not* a rating system used for energy consumption of the built environment ?
- (A) LEED
 - (B) PARAM
 - (C) GRIHA
 - (D) BREEAM
72. Which of the following is *not* a parameter for measuring indoor thermal comfort ?
- (A) Humidity
 - (B) Air Velocity
 - (C) Mean Radiant Temperature
 - (D) Transpiration
73. Which of the following is a unit of measurement of ozone in the atmosphere ?
- (A) Watt
 - (B) Dobson
 - (C) Joules
 - (D) Fahrenheit
74. Which of the following is *not* a level of energy efficiency as prescribed by ECBC 2017 ?
- (A) ECBC
 - (B) ECBC+
 - (C) ECBC++
 - (D) Super ECBC

75. Who is the author of the book 'Urban Space' ?
- (A) Le Corbusier
 - (B) Aldo Rossi
 - (C) Rob Krier
 - (D) John Ruskin
76. Which of the following is *not* a feature of the urban morphology of a traditional Indian town/city ?
- (A) Aala
 - (B) Chauk
 - (C) Kucha
 - (D) Maidaan
77. Which of the following international declarations addresses issues of conservation of urban districts in towns and cities ?
- (A) Vienna Convention
 - (B) Stockholm Declaration
 - (C) Kyoto Protocol
 - (D) Washington Charter
78. Where is the Piazza del Campidoglio situated ?
- (A) Milan
 - (B) Venice
 - (C) Rome
 - (D) Vicenza

79. Which of the following is *not* a contributor to Lynch's mental map making in a city ?
- (A) Landmark
 - (B) Shell
 - (C) Node
 - (D) District
80. Which of the following is the National tree of India ?
- (A) Delonix Regia
 - (B) Butea Monosperma
 - (C) Saraca Indica
 - (D) Ficus Benghalensis
81. Which of the following housing schemes of Government of India target both the rural and urban poor to achieve the target of building 20 million affordable homes by 2022 ?
- (A) RAY
 - (B) PMAY
 - (C) BSUP
 - (D) IAY
82. Who advocated the Neighbourhood Unit Theory in the early 20th century ?
- (A) Alvar Aalto
 - (B) Clarence Arthur Perry
 - (C) Edmund Bacon
 - (D) Denise Scott Brown

- 83.** Which of the following is *not* a consideration in TOD ?
- (A) Density
 - (B) Design
 - (C) Diversity
 - (D) Deflection
- 84.** The Master Plan was accorded a statutory status in which of the following vision documents of the Indian Government ?
- (A) Third Five Year Plan
 - (B) Eleventh Five Year Plan
 - (C) Seventh Five Year Plan
 - (D) Fifth Five Year Plan
- 85.** Which of the following has been offered by ISRO to provide Earth observation data to the public ?
- (A) Brahmo
 - (B) Agni
 - (C) Bhuvan
 - (D) Prithvi
- 86.** Which of the following does *not* qualify as an active remote sensor ?
- (A) Lidar
 - (B) Scatterometer
 - (C) Laser Altimeter
 - (D) Radiometer

- 87.** Which of the following cities was *not* inducted into the Smart City Mission in Round 1 ?
- (A) Solapur
 - (B) Jaipur
 - (C) Shimla
 - (D) Kakinada
- 88.** Who among the following propounded the Central Place Theory in urban settlement planning ?
- (A) Walter Christaller
 - (B) Kenneth Frampton
 - (C) Sigfried Giedion
 - (D) Charles Jencks
- 89.** In which year was the Municipal Solid Wastes (Management and Handling) Rules enacted by Government of India for a uniform framework for municipal solid waste management in the country ?
- (A) 1972
 - (B) 2010
 - (C) 1999
 - (D) 2000

90. Which of the following is *not* a water treatment process ?
- (A) Filtration
 - (B) Antiscale Magnetic Treatment
 - (C) Distillation
 - (D) Reverse Osmosis
91. Which of the following is a determinant of the Star Rating of an air-conditioner ?
- (A) Power of Compressor
 - (B) Energy Efficiency Ratio
 - (C) Power Consumption
 - (D) Cooling Capacity
92. Which of the following is *not* a part of the plumbing system in a building ?
- (A) Potable water
 - (B) Grey water
 - (C) Distilled water
 - (D) Black water
93. Which of the following does *not* qualify as fire fighting equipment ?
- (A) Sprinkler
 - (B) Extinguisher
 - (C) Hydrant
 - (D) Alarm

94. Which of the following is *not* a Grade Separated Interchange ?
- (A) Rhombus
 - (B) Trumpet
 - (C) Cloverleaf
 - (D) Diamond
95. Which of the following is *not* classified as an Urban Road in India ?
- (A) Arterial Road
 - (B) Local Street
 - (C) Major District Road
 - (D) Collector Street
96. Which among the following is *not* a method of traffic survey ?
- (A) Turning Radius Survey
 - (B) Willingness to pay Survey
 - (C) Speed and Delay Survey
 - (D) Origin - Destination Survey
97. Which of the following does *not* form part of the 4R's of a waste management system ?
- (A) Recycle
 - (B) Reduce
 - (C) Recover
 - (D) Reverse

- 98.** Which of the following is a popular para transit mode in Thailand ?
- (A) Tuk Tuk
 - (B) Auto
 - (C) Mini Van
 - (D) Matatu
- 99.** Which among the following is *not* a Platinum Rated LEED Certified Green Building ?
- (A) CII - Sohrabji Godrej Green Business Centre, Hyderabad
 - (B) Computer Maintenance Corporation, Mumbai
 - (C) ITC Green Centre, Gurugram
 - (D) Wipro Technologies, Gurugram
- 100.** When was the Land Acquisition Act that replaced the older colonial era Act enacted ?
- (A) 1968
 - (B) 1991
 - (C) 2005
 - (D) 2013