

M/P Ent.– 18

- 3) Research and Development become the index of development of country. Which of the following reasons are true with regards to this statement?
- A) Because R&D targets the human development
 - B) Because R&D can improve the standard of living of the people in a country
 - C) Because R&D reflect the true economic and social conditions prevailing in a country
 - D) All the above
- 4) The data of research is _____
- A) Qualitative only
 - B) Quantitative only
 - C) Both (A) and (B)
 - D) Neither (A) nor (B)
- 5) Evaluation research is concerned with
- A) Why are we doing?
 - B) What are we doing?
 - C) How well are we doing?
 - D) None of the above
- 6) Which of the following statement is correct?
- A) Discoveries are researches
 - B) Researches lead to discovery
 - C) Invention and Research are related
 - D) None of the above
- 7) Books and records are the primary sources of data in:
- A) Clinical research
 - B) Historical research
 - C) Laboratory research
 - D) Participatory research

- 8) What do you consider as the main aim of interdisciplinary research?
- A) To over simplify the problem of research
 - B) To bring out holistic approach to research
 - C) To create a new trend in research methodology
 - D) To reduce the emphasis of single subject in research domain
- 9) “A systematic step-by-step procedure following logical process of reasoning” called
- A) Experiment
 - B) Observation
 - C) Deduction
 - D) Scientific method
- 10) Research undertaken for knowledge sake is
- A) Pure Research
 - B) Action Research
 - C) Pilot study
 - D) Survey
- 11) Research related to abstract ideas or concepts is
- A) Empirical research
 - B) Conceptual Research
 - C) Quantitative research
 - D) Qualitative research
- 12) _____ is the first step of Research process
- A) Formulation of a problem
 - B) Collection of Data
 - C) Editing and Coding
 - D) Selection of a problem

- 13) The first step in formulating a problem is _____
- A) Statement of the problem
 - B) Gathering of Data
 - C) Measurement
 - D) Survey
- 14) A _____ is an abstraction formed by generalization from particulars
- A) Hypothesis
 - B) Variable
 - C) Concept
 - D) Facts
- 15) In testing a Hypothesis the common error is _____ -
- A) Type I
 - B) Type I and II
 - C) Type II
 - D) None of these
- 16) Final stage in the Research Process is _____
- A) Problem Formulation
 - B) Data Collection
 - C) Data Analysis
 - D) Report Writing
- 17) Selecting sample units in just a “hit and miss” fashion is called
- A) Convenience or Accidental sampling
 - B) Purposive sampling
 - C) Stratified sampling
 - D) Proportionate sampling

- 23) Mean, Median and Mode are.
- A) Measures of deviation
 - B) Ways of sampling
 - C) Measures of central tendency
 - D) None of the above
- 24) Observation is a Physical and _____ activity.
- A) Mental
 - B) Social
 - C) Psychological
 - D) Personal
- 25) A Hypothesis which develops while planning the research is
- A) Null Hypothesis
 - B) Working Hypothesis
 - C) Relational Hypothesis
 - D) Descriptive Hypothesis

SUBJECT SPECIFIC

- 26) A real (4×4) matrix A satisfies the equation $A^2 = I$, where I is the (4×4) identity matrix. The positive Eigen value of A is _____.
- A) 1
 - B) 2
 - C) 3
 - D) 4
- 27) Let $X_1, X_2,$ and X_3 be independent and identically distributed random variables with the uniform distribution on $[0, 1]$. The probability $P\{X_1 \text{ is the largest}\}$ is _____
- A) 0.52-0.43
 - B) 0.32-0.34
 - C) 0.45-0.46
 - D) 0.21-0.20

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- 42) A two – wire transmission line terminates in a television set. The VSWR measured on the line is 5.8. The percentage of power that is reflected from the television set is _____
- A) 84.0 to 91.0
 - B) 48.0 to 51.0
 - C) 56.0 to 65.0
 - D) 70.0 to 81.0
- 43) Which of the following statements is incorrect?
- A) Lead compensator is used to reduce the settling time.
 - B) Lag compensator is used to reduce the steady state error.
 - C) Lead compensator may increase the order of a system.
 - D) Lag compensator always stabilizes an unstable system.
- 44) The transfer function of a causal LTI system is $H(s) = 1/s$. If the input to the system is $x(t) = [\sin(t)/\pi t]u(t)$, where $u(t)$ is a unit step function, the system output $y(t)$ as $t \rightarrow \infty$ is _____
- A) 0.45 to 0.55
 - B) 0.35 to 0.40
 - C) 0.55 to 0.60
 - D) 0.35 to 0.40
- 45) The Miller effect in the context of a Common Emitter amplifier explains
- A) an increase in the low-frequency cutoff frequency
 - B) an increase in the high-frequency cutoff frequency
 - C) a decrease in the low-frequency cutoff frequency
 - D) a decrease in the high-frequency cutoff frequency

Rough Work