PhD Health Sciences (Public Health)
Entrance Examination - 2021
$\square$
Hall Ticket Number

## Time: 2 hours

Total Marks: 70 (Part I - 35 marks + Part II - 35 marks)

## PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE ANSWERING.

## INSTRUCTIONS

1. This booklet has (12) pages. Please check thoroughly for all the pages.
2. Write your Hall ticket number on the first page of this booklet in the space provided above and also write your Hall ticket number in the OMR answer sheet.
3. There are two PARTS in the question paper -PART A (Question nos. 1-35) and PART B (Question nos. 36-70). In case of a tie, marks obtained in PART A will be considered for resolving the tie.
4. Each question carries 1 mark and there is no negative marking
5. Answers are to be marked on the OMR answer sheet following the instructions provided there upon.
6. No additional sheets will be provided. Rough work can be done in the question paper itself/ space provided at the end of the booklet.

## 7. Calculators are not permitted.

## PART A

1. In a particular study conducted in a company, it was stated that - "As a result of employee training program, there will be a significant decrease in employee absenteeism."
The above statement is :
A. One tailed hypothesis
B. Two tailed hypothesis
C. Null hypothesis
D. None of the above
2. If you are studying the homeless, you are not likely to be able to find good lists of homeless people within a specific geographical area. If you go to that area and identify
one/two you may find that they know about other homeless people in their vicinity. What is the sampling method applicable to above example?
A. Systematic sampling
B. Quota sampling
C. Convenient sampling
D. Snowball sampling
3. Which of the following is not true about deductive reasoning?
A. Exploratory in nature
B. Top down approach
C. Tests hypothesis
D. Confirms hypothesis
4. Hypothesis cannot be stated in
A. Declarative terms
B. Null and question forms terms
C. General terms
D. Directional terms
5. If a researcher is studying the effect of using laptops in his classroom to ascertain their merit and worth, he is likely conducting which type of research?
A. Basic
B. Applied
C. Experimental
D. Evaluation
6. What is a research design?
A. A way of conducting research that is not grounded in theory
B. The choice between using qualitative or quantitative methods
C. The style in which you present your research findings, e.g. a graph
-D. A framework for every stage of the collection and analysis of data
7. In an experimental design, the dependent variable is:
A. The one that is not manipulated and in which any changes are observed
B. The one that is manipulated in order to observe any effects on the other
C. A measure of the extent to which personal values affect research
D. An ambiguous concept whose meaning depends on how it is defined
8. When the number of educated females is expressed as a percentage of total females present in a village, It is known as:
A. Proportion
B. Rate
C. Ratio
D. Frequency
9. The trend in mortality from tuberculosis in England showed a steady fall in years 1855 1965 but thereafter a gradual rise in the incidence of this disease was reported. This type of time trend or fluctuation in disease occurrence is termed as:
A. Epidemic trend
B. Cyclical trend
C. Seasonal trend
D. Secular trend
10. In the mid nineteenth century, an epidemiologist suggested that cholera was caused by drinking water in which an invisible agent is present. This type of association gives:
A. Specificity
B. Temporal sequence
C. Biological plausibility
D. Gradient
11. The approach to health promotion aims to promote health by addressing socioeconomic and environmental determinants of health within the community.
A. behaviour change approach
B. community development approach
C. biomedical approach
D. social change approach
12. Uniting various qualitative methods with quantitative methods can be called as
A. Coalesce
B. Triangulation
C. Bipartite
D. Impassive
13. Which is the most common method associated with a lack of informed consent?
A. Qualitative content analysis
B. In-depth interviewing
C. Covert observation
D. Structured interviewing
14. If you find some published work similar to yours before your project is completed, what could you do?
A. Acknowledge and refer it in your report.
B. Change your hypotheses and aims.
C. Completely revamp your ideas so you are not replicating their study:
D. There is nothing you can do so do not mention it in your study.
15. Research ethics do not include
A. Honesty
B. Subjectivity
C. Integrity
D. Objectivity
16. The sequential operations in scientific research are
A. Co-variation, Elimination of Spurious Relations, Generalisation, Theorisation
B. Generalisation, Co-variation, Theorisation, Elimination of Spurious Relations
C. Theorisation, Generalisation, Elimination of Spurious Relations, Co-variation
D. Elimination of Spurious Relations, Theorisation, Generalisation, Co-variation.
17. Which of the following options are the main tasks of research in modern society?
(I) to keep pace with the advancement in knowledge.
(II) to discover new things.
(III) to write a critique on the earlier writings.
(IV) to systematically examine and critically analyze the investigations/sources with objectivity
A. IV, II and I
B. I, II and III
C. I and III
D. II, III and IV
18. What do you consider as the main aim of inter disciplinary research?
A. To bring out holistic approach to research.
B. To reduce the emphasis of single subject in research domain.
C. To over simplify the problem of research.
D. To create a new trend in research methodology.
19. The research studies that explore the effect of one thing on another and more specifically, the effect of one variable on another are known as
A. Causal research
B. Applied research
C. Conclusive research
D. Exploratory research
20. One of the most important aspects of a research study is that it must be?
A. Fund rising
B. Experimental
C. Replicable
D. Community based
21. Which of these is not a step in the problem identification process?
A. Discussion with subject experts
B. Review of existing literature
C. Theoretical foundation and model building
D. Decision making by Institute management
22. The American Psychological Association's (APA) ethics committee is charged with reviewing the ethics code every $\qquad$ years
A. Seven
B. Two
C. Ten
D. Five
23. Cronbach's alpha reliability is
A. An average of all possible split-half reliabilities
B. The correlation of each item with the sum of the items
C. The correlation of halfof the items with the total participants
D. None of these
24. A formal document that presents the research objectives, design and the expected outcomes of the study is called
A. Research design
B. Research proposal
C. Research hypothesis
D. Research report
25. In a research proposal, the time-bound dissemination of the study with the major phases of the research is presented using the
A. Objectives
B. Research calendar
C. GANTT charts
D. Budget lines
26. The statement "the results fit with other knowledge" best refers to which of the following?
A. Coherence
B. Biological gradient
C. Specificity
D. Plausibility
27. The research problem determines
A. The amount of support you get from your supervisor
B. What methodology will be used
C. How long the report will be
D. How good your research skills are
28. Which two of the following are legitimate frameworks for setting out a literature review:
29. Constructing inter-textual coherence
30. Deconstruction of textual coherence

- 3. Problematizing the situation

4. Resolving discovered problems?
A. 1 and 2
B. 2 and 3
C. 1 and 3
D. 2 and 4
5. A cohort may be defined based on which of the following?
6. Race
7. Gender
8. Behavioral Characteristics
9. Age
10. Geography
A. $1,2,3,4$
B. $1,2,3,4,5$
C. $1,2,4,5$
D. $1,3,4,5$
11. One of the preoccupations of quantitative researchers is with generalization, which is a sign of:
A. External validity
B. Internal reliability
C. External reliability
D. Internal validity
12. What effect does increasing the sample size have upon the sampling error?
A. It reduces the sampling error
B. It increases the sampling error
C. It has no effect on the sampling error
D. None of the above
13. Subjects are selected into case-control studies based on their:
A. Health outcome or disease status
B. Health outcome and exposure status
C. Exposure status
D. None of the above
14. Which of the following studies is best described in this statement: "A study where the participants receive one drug for heart disease and then later receive a different drug for heart disease."
A. Crossover clinical trial
B. Case-control study
C. Randomized controlled trial
D. Cohort study
15. What is the "ecological fallacy"?
A. The assumption that secondary data analysis can be carried out at home
B. The mistake of observing people in their natural setting
C. The error of making inferences about individual behaviour from aggregate data
D. The myth that it is easy to research environmentalist action groups
16. The correct Pathway to transition \& dissemination in public health is:
A. Change, Discovery, Translation and Dissemination
B. Discovery, Dissemination, Change and Translation
C. Discovery, Change, Translation and Dissemination
D. Discovery, Translation, Dissemination and Change

## Part B

36. Required amount of chlorine was added to a large body of water after sedimentation. The pH of water was 4.0 and level of sulphides was negligible. A contact period of one hour was ensured. Eventually, it was found that chlorination was not successful. The likely reason was:
A. Suspended impurities
B. Low pH
C. Less contact time
D. Less chlorine
37. Japan has low incidence of prostate cancer as compared to the incidence in US. The incidence of carcinoma prostate in Japanese did not change with their migration to the U.S. It supported:
A. Nutrition effect
B. Metabolic effect
C. Genetic effect
D. Environmental effect
38. The non-clinical Vitamin-A deficiency is more common as compared to the clinical, threatening the health of as many as one third of the world's children. The best proxy indicator of this is:
A. Infant mortality rate
B. Maternal mortality rate
C. Literacy rate
D. Proportion of the rural population
39. The most sensitive indicator to judge iron deficiency as a public health problem is
A. Hemoglobin estimation
B. Conjunctival paleness on clinical examination
C. Serum Ferritin
D. Iron estimation
40. The Multi Purpose Health Worker (MPHW) was recommended by which committee
A. Kartar Singh
B. Bhore
C. Mukherji
D. Srivastava
41. In calculating RDA for a particular nutrient, 2 SD are not added for
A. Iron
B. Calcium
C. Energy
D. Vitamin A
42. The protein quality indicator adopted by ICMR in recommending dietary protein requirement is
A. Amino acid score
B. Net protein utilization
C. Biological value
D. Protein efficiency ratio
43. A component of Coenzyme A
A. Retinoic acid
B. Pyridoxine
C. Pantothenic acid
D. Retinol
44. Which of the following vitamin serves as a hormone precursor
A. Vitamin C
B. Vitamin A
C. Vitamin K
D. Vitamin D
45. Increasing age may not be associated with which of the following?
A. An increased appetite
B. Decreased appetite
C. Decreased functional capacity
D. Sleep problems
46. Germ Theory is a perspective which asserts:
A. Diseases are caused by a biological agent.
B. Medicine is the only true way to treat disease.
C. Illness can be caused by lifestyle choices.
D. Germs are conscious agents which intentionally harm their hosts.
47. The following method is usually recommended to screen for malnutrition on hospitalized adults?
A. Demi-span
B. The MUST tool
C. 7-day food diary
D. Serum albumin concentration
48. The social gradient that reflects the disparity in morbidity and mortality between those in different socioeconomic classes is often referred to as a $\qquad$ .
A. health gradient
B. sex gradient
C. postcode gradient
D. income gradient
49. When was right to health was expressed as a fundamental human right by World Health Organization?
A. 1946
B. 1952
C. 1987
D. 2000
50. Which of the following is integrating perspectives and realities of men, women and other gender Populations?
A. Gender mainstreaming
B. Gender stratification
C. Gender inclusion
D. Gender bias
51. Which of the following is more relevant if we want to improve people's health?
A. Considering factors such as poverty that have a negative impact
B. build more hospitals
C. tell people that they should take more responsibility for their own health
D. Taking account of morbidity pattern
52. An image, perception or concept that is capable of measurement is called $\qquad$ .
A. Hypothesis
B. Scale
C. Variable
D. Type
53. A vignette question is one that asks respondents to think about::
A. Family obligations to care for sick relatives
B. An intensely painful and sensitive issue in their personal life
C. A scenario involving imaginary characters in a realistic situation
D. Their favourite kind of salad dressing
54. If there were a perfect positive correlation between two interval/ratio variables, the Pearson's $r$ test would give a correlation coefficient of:
A. -0.328
B. +1
C. +0.328
D. -1
55. A test of statistical significance indicates how confident the researcher is about:
A. The inter-coder reliability of their structured interview schedule

- B. Passing their driving test
C. Understanding the difference between bivariate and multivariate analysis
D. Generalizing their findings from the sample to the population

56. Which of the following is NOT an epidemiologic measure of person?
A. Diet
B. Genetic Factors
C. Education Level
D. Physical Location
57. The denominator of a rate is affected by which of the following?
58. Births
59. Study Drop-Outs
60. Deaths
61. Migration
62. Loss To Follow-Up
A. $1,2,3$
B. $1,2,3,4$
C. $1,2,3,4,5$
D. $1,2,3,5$
63. If you are studying the rate of breast cancer, which of the following events would affect a participant's person-time?
64. Participant decides to no longer participate in the study
65. Diagnosis with uterine cancer
66. Patient undergoes a double mastectomy
67. Death
68. Loss to follow-up
A. $1,2,3,4,5$
B. $1,3,4,5$
C. $1,2,4,5$
D. $1,2,3,4$
69. Aggregate level data provide information on which of the following?
70. The health outcome rate of the group, but we don't know exposures of individuals who became diseased and those who did not
71. The average exposure of the group, but not of individuals
72. Exposures of each person
73. The ability to link exposures and other risk factors to those who became diseased and those who did not
A. 1,2
B. 1,3
C. $1,2,3$
D. 1,4
74. Interpret the meaning of one study's reported odds ratio of 1.6 ( $95 \%$ CI 1.1, 3.4) for the association between high level of fish oil consumption and prostate cancer.
A. Cases are more likely than controls to have a high level of consumption of fish oil, but it is not statistically significant.
B. Fish oil is protective against prostate cancer.
C. There is no association between fish oil intake and prostate cancer.
D. Cases are statistically significantly more likely than controls to have a high level of consumption of fish oil
75. Interpret the meaning of one study's reported rate ratio of $0.5(95 \% \mathrm{CI} 0.2,0.9)$ for the association between high level of Vitamin D consumption and breast cancer incidence.
A. High Vitamin D consumption is associated with an increased breast cancer rate.
B. Those who consume a high level of Vitamin D are statistically significantly less likely than those who consume low or no Vitamin D, to have a high rate of breast cancer incidence.
C. Those who consume a high level of Vitamin D are less likely than those who consume little or Vitamin D, to have a high rate of breast cancer incidence, but it is not statistically significant.
D. There is no association between high Vitamin D consumption and breast cancer rates.
76. The standard error is a statistical measure of:
A. The normal distribution of scores around the sample mean
B. The extent to which a sample mean is likely to differ from the population mean,
C. The clustering of scores at each end of a survey scale
D. The degree to which a sample has been accurately stratified
77. "One health" approach includes all except:
A. Access to vaccines, devices and medicines
B. Food safety
C. Control of Zoonosis
D. Combating antibiotic resistance
78. What is the job of an ethno-pharmacologist?
A. To treat patients
B. To discover new effective drugs
C. To dispense drugs at their doorstep
D. To dispense drugs only at the pharmacy
79. Indirect transmission includes which all of the following except
A. Droplet spread
B. Mosquito borne
C. Food Borne
D. Doorknobs or Toilet seats
${ }^{\bullet} 66$. Using purgatives on a regular basis is harmful to health. Which deficiency does it cause?
A. Sodium
B. Zinc
C. Potassium
D. Iodine
80. The "Right to Health" means:
A. The Right to be Healthy by all irrespective of any discrimination
B. Policies \& plans to make available and accessible health care for all
C. The Right to Emergency health care services
D. Access to Expensive Health Services for poor
81. This is true of Human Rights except:
A. Are guaranteed by international standards
B. Are legally protected
C. Protect individuals and groups
D. Can be waived or taken away
82. Which of the following statements is true?
A. The curing practices of any medical system may be effective in relieving pain and curing minor illnesses.
B. Folk medicines and curing practices have no curative powers and are based purely on superstition
C. Ill people rarely get well without the help of a medical doctor or folk curer.
D. Superstitious practices does supplement folk medicine and medical systems
83. Health inequities are differences in health status or in the distribution of between different population groups, arising from the social conditions in which people are born, grow, live, work and age.
A. Health Resources
B. Health Facilities
C. Health Education
D. Health Promotion

University of Hyderabad
Entrance Examinations - 2021

School/Department/Centre
Course/Subject
: School of Medical Sciences
: PhD - Public Health

| Q.No. | Answer | Q.No. | Answer | Q.No. | Answer | Q.No. | Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A | 26 | A | 51 | A | 76 |  |
| 2 | D | 27 | B | 52 | C | 77 |  |
| 3 | A | 28 | C | 53 | C | 78 |  |
| 4 | C | 29 | B | 54 | B | 79 |  |
| 5 | D | 30 | A | 55 | D | 80 |  |
| 6 | D | 31 | A | 56 | D | 81 |  |
| 7 | A | 32 | A | 57 | C | 82 |  |
| 8 | A | 33 | A | 58 | B | 83 |  |
| 9 | D | 34 | C | 59 | A | 84 |  |
| 10 | C | 35 | D | 60 | D | 85 |  |
| 11 | B | 36 | B | 61 | B | 86 |  |
| 12 | B | 37 | C | 62 | B | 87 |  |
| 13 | C | 38 | A | 63 | A | 88 |  |
| 14 | A | 39 | C | 64 | B | 89 |  |
| 15 | B | 40 | A | 65 | A | 90 |  |
| 16 | A | 41 | C | 66 | C | 91 |  |
| 17 | A | 42 | B | 67 | B | 92 |  |
| 18 | A | 43 | C | 68 | D | 93 |  |
| 19 | A | 44 | D | 69 | A | 94 |  |
| 20 | C | 45 | A | 70 | A | 95 |  |
| 21 | D | 46 | A | 71 |  | 96 |  |
| 22 | D | 47 | B | : 72 |  | 97 |  |
| 23 | A | 48 | A | 73 |  | 98 |  |
| 24 | B | 49 | A | 74 |  | 99 |  |
| 25 | C | 50 | A | 75 |  | 100 |  |

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[^0]:    Note/Remarks:

