Entrance Examination - 2019
Master of Public Health - MPH

## Hall Ticket Number

Time: $\mathbf{2}$ hours
Total Marks: $\mathbf{1 0 0}$

## PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE ANSWERING.

## INSTRUCTIONS

1. This booklet has fifteen (15) pages. Please check thoroughly for all the pages.
2. Enter the Hall Ticket number on the first page of this booklet as well as on the OMR sheet.
3. There are two PARTS in the question paper - PART A (Question numbers 1-25) and PART B (Question numbers $26-100$ ). In case of a tie, marks obtained in PART A will be considered for resolving the tie.
4. There is negative marking for questions in Part A. For each wrong answer $\underline{0.33}$ marks will be deducted.
5. Scientific Calculators are not permitted.

## PART A

1. Direct standardization is used to compare the mortality rates between two countries. This is done because of the difference in:
A. Cause of death
B. Numerators
C. Age distributions
D. Denominators
2. Results of a test were given as - very satisfied, satisfied, dissatisfied, it represents:
A. Nominal scale
B. Ordinal scale
C. Interval scale
D. Ratio scale
3. Two drugs were given to two subsets of population and the response was noted as cured and not cured. From the data given below-

| Drugs | Cured | Not cured |
| :--- | :--- | :--- |
| A | 510 | 100 |
| $B$ | 110 | 50 |
| Total | 620 | 150 |

Which test of significance is more suitable?
A. Chi-square test
B. Paired T-test
C. Student T-test
D. Anova test
4. All of the following are true in a randomized control trial (RCT) except:
A. Baseline characteristics of intervention and control groups should be similar
B. Investigators bias is minimized by double blinding
C. The sample size required depends on the hypothesis
D. The dropouts from the trial should be excluded from the analysis
5. When a drug is evaluated for its usefulness in controlled conditions, it is termed as a trial signifying:
A. Efficacy
B. Effectiveness
C. Efficiency
D. Effect modification
6. The Haemoglobin level in healthy women has mean $13.5 \mathrm{gms} / \mathrm{dl}$ and standard deviation $1.5 \mathrm{gms} / \mathrm{dl}$. What is the z score for a woman with haemoglobin level $15.0 \mathrm{gms} / \mathrm{dl}$ ?
A. 9.0
B. 10.0
C. 2.0
D. 1.0
7. If the systolic blood pressure in a population has a mean of 130 mm of Hg and a median of 140 mm of Hg , the distribution is said to be
A. Symmetrical
B. Positively skewed
C. Negątively skewed
D. Either positively (or) negatively skewed depending on the standard deviation
8. The usefulness of a 'screening test' in a community depends on its:
A. Sensitivity
B. Specificity
C. Positive predictive value
D. Negative predictive value
9. Chi-square test is used to measure the degree of:
A. Causal relationships between exposure and effect
B. Association between two variables
C. Correlation between two variable
D. Agreement between two observations
10. The best method to show the association between height and weight of children in a class is by:
A. Bar chart
B. Line diagram
C. Scatter diagram
D. Histogram
11. $95 \%$ of confidence limit exist between:
a. $+/-1 \mathrm{SD}$
b. $+/-2 S D$
c. $+/-3 \mathrm{SD}$
d. $+/-4 \mathrm{SD}$
12. Berkson's bias refers to:
A. Bias arising from different rates of admission to the hospital
B. Bias arising from presence of confounding factors
C. Bias arising from the case not being representative of the general population
D. Bias arising from improper selection of cases
13. While testing a hypo-lipidemic (fats and cholesterol lowering) drug, serum lipid (fat) levels were tested both before and after its use. Which test is best suited for the statistical analysis of the results?
A. Paired ' $t$ ' test
B. Unpaired ' $t$ ' test
C. Chisquare test
D. None of the above
14. All the following are example of Nominal scale except:
A. Race
B. Sex
C. Iris colour
D. Blood pressure
15. While applying Chi-square test to a contingency table of 4 rows and 4 columns, the degrees of freedom would be?
A. 1
B. 4
C. 9
D. 8
16. In an investigation to study the effect of smoking on Renal cell cancer, it is observed that 30 of the 50 patients were smokers as compared to 10 out of 50 control subjects. The odds ratio of Renal cancer associated with smoking will be:
A. 3.0
B. 0.33
C. 6.0
D. 0.16
17. Mean Haemoglobin of a sample of 100 pregnant women was found to be $10 \mathrm{mg} \%$ with a standard deviation of $1.0 \mathrm{mg} \%$. The standard error of the estimate would be:
A. 0.01
B. 0.1
C. 1.0
D. 10.0
18. In a Normal distribution curve, the true statement is:
A. Mean = SD
B. Median $=\mathrm{SD}$
C. Mean $=2$ Median
D. Mean $=$ Mode
19. The Mean weight of 100 children is 12 kg . The Standard deviation is 3 . Calculate the percentage co-efficient of variance:
A. $25 \%$
B. $35 \%$
C. $45 \%$
D. $55 \%$
20. What will be the BMI of a male whose weight is 89 kg and height is 172 cm ?
A. 27
B. 30
C. 33
D. 36
21. Which of the following statement about influence of smoking on risk of coronary heart disease (CHD) is not true?
A. Influence of smoking is independent of other risk factors for CHD
B. Influence of smoking is only addictive to other risk factors for CHD
C. Influence of smoking is synergistic to other risk factors for CHD
D. Influence of smoking is directly related to number of cigarettes smoked per day
22. Measures of primary prevention of hyper tension include all of the following except:
A. Weight reduction
B. Exercise promotion
C. Reduction of salt intake
D. Early diagnosis of Hypertension
23. The most common cancer among females in India is:
A. Breast cancer
B. Cervical cancer
C. Ovarian cancer
D. Uterine cancer
24. Dietary changes advocated by WHO for prevention of heart diseases include all of the following except:
A. A decrease in complex carbohydrate consumption
B. Reduction in fat intake to $20-30 \%$ of caloric intake
C. Consumption of saturated fats be limited to less than $10 \%$ of total energy intake
D. Reduction of cholesterol to below 100 mg per 1000 kcal per day
25. The term "Tracking" of blood pressure refers to:
A. 24 hr BP monitoring
B. Identifying children at risk of developing Hypertension at future date
C. Pictorial representation of BP
D. BP control with medication as tablet

## PART B

26. Iron is used in the body to:
A. make blood
B. make muscle
C. make teeth and bones
D. protect the body against scurvy
27. Which of the following is the lowest source of energy in our diet?
A. Proteins
B. Fats and oils
C. Carbohydrates
D. Fibre
28. Water soluble yitamins are:
A. Vit. C \& Vit. B
B. Vit. B \& Vit. D
C. Vit. C \& Vit. E
D. Vit.D \& Vit.E
29. Kidneys maintain blood pressure by regulating:
A. Salt and Fluid levels in the body
B. Nutrients levels in the body
C. Toxins levels in the body
D. Lipids and Proteins in the body
30. Genetic engineering refers to:
A. Methods to treat defective genes in change a human being
B. Is a preferred method to treat genetic diseases
C. deliberate manipulation of DNA, using techniques in the laboratory to alter genes in organisms

- D. A simple reliable cost effect innovative and disruptive technique

31. Which is the not correct regarding commercial Surrogacy?
A. Made commercial surrogacy legal in India
B. Only allows altruistic surrogacy for needy, infertile Indian couples
C. Requires intended parents to be married for five years and have a doctor's certificate of their infertility
D. Restricts women to being surrogates only once, and only if they are a close relative of the intended parents, are married and have a biological child
32. Which association about cancer is false?
A. Smoking and Cancer
B. Asbestosis and Cancer
C. Multiple pregnancy and Cancer
D. Breast feẹding and Cancer

## 33. Multiple Myeloma is a tumor of:

A. Plasma cells
B. Mutiple Bones
C. Myelin of the nerve
D. Brain
34. Which is false about Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act:
A. Is an An Act to provide for the regulation of the use of pre-natal diagnostic techniques for the purpose of specific diseases
B. Prevent the misuse of such techniques for the purpose of pre-natal sex determination leading to female foeticide
C. Introduced to bring in balance in sex ratio in the country
D. The Act prohibits determination and disclosure of the sex of foetus.
35. Identify the biggest hip muscle of the human body:
A. Biceps
B. Gluteus Maximus
C. Sterno Mastoid
D. Trapezitis.
36. Which of the following physician helped to establish the germ theory with his set of postulates?
A. Dr. Alexander Fleming
B. Dr. Christian Gram
C. Dr. Robert Koch
D. Dr. Edward Jenner
37. What is a pandemic?
A. A disease epidemic which breaks out across many countries
B. A disease which is endemic in many countries
C. A disease which has been noticed for the first time in a country
D. A disease which has occurred in a country after 10 years.
38. All the following are common diseases transmitted by mosquitoes, except:
A. Filaria
B. Leptospirosis
C. Japanese encephalitis
D. Chikungunya
39. All the following are food-borne diseases except:
A. Cholera
B. Diphtheria
C. Taeniasis
D. Hydatid cyst
40. Single blind study is one where:
A. Study subjects know who is getting experimental drug
B. An experimental drug is administered to one blind person
C. An experimental drug is administered on a control group and an experimental group without their knowledge.
D. An experimental drug is administered to group of un-blind people
41. What is the most serious potential side effect of vaccination?
A. Swelling
B. Soreness
C. Fever
D. Anaphylaxis
42. Surveys are usually:
A. Cross sectional in design
B. Case control in design
C. Trials in design
D. Cohorts in design

## 43. Median is defined as:

A. Sum of measurements in a series divided by number of measurements.
B. Middle value of the series arranged in an ascending or descending order.
C. Value which occurs most frequently in a series.
D. Middle value in a series
44. Standard deviation is the deviation of an individual value from the:
A. Median
B. Mode
C. Range
D. Mean
45. A nosocomial infection refers to:
A. Infection acquired from animals
B. Infection acquired by a neonate from the mother during delivery
C. Infection acquired in a hospital
D. Infection acquired at farms
46. Prevalence refers to:
A. All new cases detected in a population at one point in time
B. All old cases detected in a population at one point in time
C. All new and old cases detected in a population at one point in time
D. (D). All new cases reported in a hospital over a one year period.
47. The spread of cancer cells to other parts of the body is called:
A. Metastasis
B. Pneumothorax
C. Peritonitis
D. Hemophilia

## 48. NFHS stands for:

A. National.Family and Housing Survey
B. National Food and Health Survey
C. National Family Health Survey
D. None of the Above

## T-14

49. KAP studies investigate:
A. Knowledge, attitude and practice
B. Knowledge, activities and performance
C. Knowledge, aims and performance
D. Knowledge, ancient culture and path
50. The best word that describes the following sentence: 'sample taken from a population should be':
A. Representative
B. Best in quality
C. Precise
D. Valid
51. What is herd immunity?
A. The immune status of a population
B. The immune status of shepherds
C. The immune status of domestic animals
D. The immune status of the head of the household
52. Diseases that cannot be explained by current medical knowledge are called:
A. Idiopathic
B. Iatrogenic
C. Anomalies
D. Toxins
53. Measures of dispersion includes all except:
A. Median deviation
B. Standard deviation
C. Range
D. Correlation
54. SPSS stands for:
A. Statistical Package for Social Sciences
B. Social Package for Statistical Sciences
C. Science Package for Social Sciences
D. None of the Above
55. 'Anthropology" is a study of:
A. Primates
B. Humankind
C. Arthropods
D. None of the Above
56. Measles vaccine is not given before:
A. 9 months
B. 12 months
C. 15 months
D. 18 months
57. Census in India is done every:
A. 10 years
B. 05 years
C. 15 years
D. 01 Year
58. The "The National Institute of Nutrition (NIN)" is located in:
A. Delhi
B. Mumbai
C. Hyderabad
D. Chennai
59. Which hormone secretion deficiency leads to diabetes?
A. Thyroxin
B. Gastrin
C. Insulin
D. Calcitonin
60. The list of every individual in the population for survey is called as:
A. Sampling frame
B. Sampling error
C. Sampling ratio
D. Sampling procedure
61. The acronym" SOP" stands for:
A. Sample Operational Plan
B. Single Operational Plan
C. Standard Operating Plan
D. Standard Operating Procedure
62. "Hyperthemia" is the term used to describe what disease condition?
A. Dystocia
B. Heat stroke
C. Frost bite
D. Seizures
63. Which type of white blood cell produces antibodies?
A. Neutrophils
B. Lymphocytes
C. Eosinophils
D. Basophils
64. Which of the following class of toxins is produced by fungi?
A. Mycotoxins
B. Endotoxins
C. Exotoxins
D. Systemic toxins

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65. A family of married couple with their children is:
A. Joint
B. Extended
C. Nuclear
D. Inadequate
66. The low birth weight babies die of the following except:
A. Prematurity
B. Hypothermia
C. Infection
D. Vit. E deficiency
67. Urban malaria is mainly transmitted by:
A. Anopheles Stephensi
B. Anopheles Culicifacies
C. Phlebotomus
D. Aedes Aegypti
68. According to International Health Regulation (IHR), there is no risk of spread of yellow fever if the Aedes Aegypti Index remain:
A. $1 \%$
B. $5 \%$
C. $8 \%$
D. $10 \%$
69. Viral hepatitis is transmitted by all routes, except:
A. Faeco-oral route
B. Parenteral route
C. Sexual route
D. Aerosol route
70. The change occurring in the disease frequency over many years is called:
A. Cyclical
B. Secular
C. Sporadic
D. Seasonal
71. At the village level, which one of the following is the executive organ and agency for planning and development?
A. Gram Sabha
B. Gram Panchayat
C. Nyaya Panchayat
D. Zila Panchayat
72. As per IMNCI, a child aged 4 months, had cough for 3 days. He had breathing rate of 52 breaths per minute. He has chest in-drawing also. What will be the treatment by frontline worker?
A. Give one dose of oral antibiotic and refer urgently.
B. Advice full course of antibiotic treatment and assess after 2 days
C. Only observe and continue feeding during illness.
D. Give first dose of injectable antibiotics and refer urgently.
73. The following are examples of non-probability sampling, except:
A. Cluster sampling
B. Convenience sampling
C. Judgemental sampling
D. Accidental sampling
74. The most commonly abused drug causing addiction among Indians is:
A. Amphetamine
B. Cocaine
C. Cannabis
D. LSD
75. Ortho-tolidine test determines:
A. Free chlorine
B. Combined chlorine
C. Chlorine demand
D. Both free and combined chlorine
76. Food poisoning is caused by:
A. Cl. perfringes
B. Salmonella paratyphi A
C. Vibrio Cholerae
D. Staph. epidermis
77. Child mortality rate due to AIDS is highest in:
A. Asia
B. Sub-Saharan Africa
C. Latin America
D. Carribbean
78. Rickettsial pox is transmitted by: sped
A. Flea
B. Mite
C. Tick
D. Mosquito
79. Following rate does not use mid-year population as a denominator:
A. Pregnancy rate
B. Marriage rate
C. Death rate
D. Birth rate
80. The occurrence of a group of illness of similar nature at a rate above the expected number is called:
A. Hyper endemic
B. Epidemic
C. Endemic
D. Pandemic

## $T-14$

81. The most common occupational disease is:
A. Asbestosis
B. Plumbism
C. Dermatosis
D. Silicosis
82. Small for date in comparison to premature birth has:
A. Low birth weight
B. More congenital anomalies
C. More chances of mental retardation
D. Less survival chances
83. World No tobacco day is on:
A. $30^{\text {th }}$ January
B. $7^{\text {th }}$ April
C. $22^{\text {nd }}$ April
D. $31^{\text {st }}$ May
84. Prevalence of Blindness in India is:
A. $0.2 \%$
B. $0.5 \%$
C. $1.0 \%$
D. $1.5 \%$
85. Vitamin $\mathbf{B 1 2}$ is not found in:
A. Milk
B. Liver
C. Soyabean
D. Fish
86. All of the following diseases require surveillance according to WHO, except:
A. Chickenpox
B. Yellow fever
C. Malaria
D. Rabies
87. The largest constituent of human body is:
A. Proteins
B. Fats
C. Water
D. Minerals
88. All are indicators of air pollution except:
A. Sulphur di-oxide
B. Smoke
C. Carbon di oxide
D. Dust particles
89. All of the following constituents are high in human milk than in Cow's milk except:
A. Protein
B. Cystine
C. Taurine
D. Lactose
90. What is the most common kind of litter, by number, found in waterways?
A. plastic bags
B. plastic bottles
C. aluminium cans
D. All of these
91. What is sediment?
A. sand and rocks that are too heavy to be carried by water
B. the organic solids that are suspend in wastewater
C. soil or bits of rock suspended in water
D. the solids, like fats, grease and oils, that float on top of wastewater
92. What causes acid rain?
A. sulfur and nitrogen compounds from power plants, factories and motor vehicles
B. sulfur and nitrogen compounds given off by plants as the weather warms in the summer
C. carbon dioxide from power plants, factories and motor vehicles
D. carbon dioxide and methane given off by arctic soils as they warm in the spring
93. How many people in the world do not have access to toilets?
A. about 10 million
B. about 1 million
C. about 100 million
D. about 1 billion
94. Which of these diseases can happen from drinking contaminated water?
A. Pneumonia
B. Small pox
C. Malaria
D. Cholera
95. Moulds, yeast and fungi are examples of a:
A. Physical hazard
B. Chemical hazard
C. Pathogenic bacterium
D. Biological hazard
96. Medical research indicates that $\qquad$ is a leading cause of growth stunting.
A. Lack of exercise
B. Eating unhealthy foods
C. Defecating in the open
D. Sleeping on hard surfaces

97. What is the single most effective way to prevent the transmission of disease?
A. Antibiotics
B. Hand washing with water only
C. Hand washing with soap and water
D. No way
98. Which of the following is not a "Graphic representation"?
A. Pie Chart
B. Bar Chart
C. Table
D. Histogram
99. A periodical evaluation of an employee is done through $\qquad$
A. Job rotation
B. Performance appraisal
C. Refresher course
D. Work guide
100. Action research means:
A. A longitudinal research
B. An applied research
C. A research initiated to solve an immediate problem
D. A research with socioeconomic objective

END

## University of Hyderabad

## Entrance Examinations - 2019

School/Department/Centre : SCHOOL OF MEDICAL SCIENCES

Course/Subject
: MASTER OF PUBLIC HEALTH - Code: T-14

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

Note/Remarks: NEGATIVE MARKING FROM QUESTIONS 1-25

