Reg. No.:

Name:

FIRST YEAR HIGHER SECONDARY EXAMINATION SAMPLE QUESTION PAPER

Part III

Time: 2 Hours Cool-off time: 15 Minutes

STATISTICS Maximum : 60 Scores

| General 1 | Instructions to Candidates. |
|------------------------|---|
| | There is a 'Cool off time' of 15 minutes in addition to the writing time. Use the 'Cool of time' to get familiar with questions and to plan your |
| | answers |
| • | Read questions carefully before answering. |
| • | Read the instructions carefully. |
| • | Calculations, figures and graphs should be shown in the answer sheet itself. Malayalam version of the questions is also provided. |
| | Give equations wherever necessary. |
| | Electronic devices except non programmable calculators are not allowed in the examination hall. |
| വിദ്യാർത്ഥിം • • | കൾക്കുള്ള പൊതു നിർദ്ദേശങ്ങൾ നിർദ്ദിഷ്ട സമയത്തിന് പുറമെ 15 മിനിട്ടു 'കൂൾ ഓഫ് ടൈം' ഉണ്ടായിരിക്കും 'കൂൾ ഓഫ് ടൈം' ചോദ്യങ്ങൾ പരിചയപ്പെടാനും ഉത്തരങ്ങൾ ആസൂത്രണം ചെയ്യാനും ഉപയോഗിക്കുക |
| • | ഉത്തരങ്ങൾ എഴുഇന്നതിനു മുമ്പ് ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം |
| • | നിർദ്ദേശങ്ങൾ മുഴവന്രം ശ്രദ്ധാപൂർവ്വം വായിക്കണം |
| • | കണക്ക കൂട്ടലുകൾ, ചിത്രങ്ങൾ , ഗ്രാഫുകൾ എന്നിവ ഉത്തരക്കടലാസിൽ തന്നെ ഉണ്ടായിരിക്കണം |
| • | ചോദ്യങ്ങൾ മലയാളത്തിലും നൽകിയിട്ടുണ്ട് |
| • | ആവശ്യമുള്ള സ്ഥലത്തു സമവാക്യങ്ങൾ കൊടുക്കണം |
| • | പ്രോഗ്രാമുകൾ ചെയ്യാനാകാത്ത കാൽക്കലേറ്ററുകൾ ഒഴികെയുള്ള ഒരു ഇലക്ലോണിക് ഉപകരണവും പരീക്ഷ ഹാളിൽ ഉപയോഗിക്കവാൻ പാടുള്ളതല്ല |
| | |

Answer any five questions from 1 to 6 each question carries 2 scores

1. Find quartiles for the given data.

9, 16, 9, 14, 20, 18, 19, 20, 3, 8, 5, 12

- 2. Distinguish between Primary and Secondary data
- 3. Which are the types of classification?
- 4. Draw a pie diagram to represent the following data

| City | А | В | С | D |
|-------|----|----|-----|-----|
| Angle | 65 | 85 | 100 | 110 |

5. Explain the following terms

1) Sample space 2) Mutually exclusive events

6. A person goes from his house to office at a speed of 20 km/hr and returns from office to home at a speed of 35 km/hr . Find the average speed of his journey?

Answer any six questions from 7 to 13 each question carries 3 scores

7. find covariance of given data

| X | 55 | 60 | 50 | 65 | 60 | 50 |
|---|----|----|----|----|----|----|
| Y | 16 | 15 | 11 | 15 | 13 | 12 |

8. Prepare a blank table with following information

Stream : Science, Commerce, Humanities

Sex : Male, Female

Second Language : Hindi, Malayalam, Arabic

9. a) The industrial statistics wing of CSO is located in

i) New Delhi ii) Kolkata iii) Chennai iv) Mumbai

- b) Write short note on ISI
- 10. Prepare a questionnaire about use of drugs among higher secondary students in Kerala
- 11. The mean wage of 150 workers of the first shift in a factory is Rs. 400/- the mean wage of 75 Workers in the second shift is Rs. 600/-. Find the mean wage of all the workers in the factory ?
- 12. a) For a set of 50 observations the AM is calculated as 65. Later on it was discovered that one of the observation 18 was wrongly taken as 80. Calculate the correct mean of the data?
 - b) For a frequency distribution mean = 32, Median = 31. Find Mode ?

13. Prepare a frequency table for the observations given below. Take class interval as 5.

| 5 | 14 | 7 | 11 | 9 | 3 | 5 | 3 | 2 | 20 | 24 | 27 | 29 | 21 |
|----|----|----|----|---|---|----|----|---|----|----|----|----|----|
| 18 | 14 | 15 | 12 | 4 | 6 | 19 | 22 | 8 | 10 | 12 | 7 | 4 | 26 |
| 25 | 24 | | | | | | | | | | | | |

Answer any five questions from 14 to 19 each question carries 4 scores

14. a) Draw a histogram to the following data

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-----------|------|-------|-------|-------|-------|-------|
| Frequency | 8 | 12 | 15 | 11 | 7 | 3 |

b) The graph used to represent a bivariate data is

a) multiple bar diagram b) frequency polygon c) box plot d) scatter plot

15. Find the median of the following data?

| Daily wage | 0-4 | 4-8 | 8-12 | 12-16 | 16-20 |
|----------------|-----|-----|------|-------|-------|
| No. of persons | 14 | 25 | 30 | 7 | 4 |

- 16. i) ------ is a Non probability sampling
 - a) Quota sampling b) Multi stage sampling c) Stratified sampling
 - d) Simple random sampling
 - ii) Explain Systematic sampling.
- 17. a) Two coins were tossed once. Write down the sample space obtained and find the probability of getting two heads ?
 - b) For a random experiment P(A)= 0.25, P(B) = 0.5 and P(A and B) = 0.2. Find P(A or B)?
- 18. A class consists of 45 students of which 22 are girls. 10 girls and 6 boys in the class got 90% marks in the first year examination. A student is selected at random is found to have scored 90% mark. What is the probability that the selected student was a boy?
- 19. Find mode from the following data

| Class | 30-35 | 35-40 | 40-45 | 45-50 | 50-55 | 55-60 | 60-65 |
|-----------|-------|-------|-------|-------|-------|-------|-------|
| Frequency | 3 | 5 | 12 | 18 | 14 | 6 | 2 |

Answer any two questions from 20 to 22 each question carries 6 scores

20. The price of share of X and Y are given below. State which share is more stable in value.

| X | 55 | 54 | 52 | 53 | 56 | 58 |
|---|-----|-----|-----|-----|-----|-----|
| Y | 108 | 107 | 105 | 105 | 106 | 107 |

- 21. a) Explain different types of kurtosis.
 - b) In the distribution of wages of workers in a factory the difference of third and first quartile is 25, their sum is 55 and median is 20. Find the Bowley's coefficient?
- 22. draw ogives for the following data and hence find median

| marks | 0-20 | 10-20 | 20-30 | 30-40 | 40-50 |
|----------------|------|-------|-------|-------|-------|
| No of students | 8 | 12 | 20 | 10 | 4 |

TEAM LEADER MEMBERS 1 SREEJA TN 2 SOORAJ KUMAR V 3 MANSOOR VP 4 PRADEEP KUMAR B 5 ANJU K 6 PUSHPALATHA KC 7 SAJNA P

9 SOUMYA MOL KK

8 PRIYA VA

10 ASWATHY TP

448069 HSST STATISTICS

494091 HSST STATISTICS 152245 HSST STATISTICS 453776 HSST STATISTICS 846851 HSST STATISTICS 522710 HSST STATISTICS 843467 HSST STATISTICS 748754 HSST STATISTICS 836489 HSST STATISTICS GUEST LECTU HSST STATISTICS

GHSS PULAMANTHOL

EMEAHSS KONDOTTY GHSS THADATHILPARAME GHSS VAZHAKKAD MMMHSS KOOTTAYI GHSS KUNNAKKAVU MSMHSS KALLINGALPARA GRHSS KOTTAKKAL GHSS MARANCHARI GHSS ALIPARAMBA