NATIONAL REMOTE SENSING CENTRE
ADVERTISEMENT NO.NRSC/RMT/1/2018 DATED 17.01.2018
Name of the Post : Scientific Assistant
Post Code : 12
<u>SYLLABUS – SKILL TEST</u>
Qualification Requirement : First Class BSc. In Maths, Statistics,
Computer Science

MATHEMATICS

1. Prove theorems on sequences, series, continuity, differentiation, Riemann integration with appropriate illustrations/graphs.
2. Solve the given problem using - Exact differential equations, linear differential equations, Bernoulli's differential equations, orthogonal trajectories as applicable.
3. Given the data sets calculate Rank of a matrix, Eigen values, Eigen vectors.

STATISTICS

1. Given data sets plot the histogram, pi chart, calculate univariate statistics such as mean, mode ,median, Standard deviation. Analyse and Explain
2. Given data sets calculate multivariate statistics such as correlation, covariance and regression based on two variables. Analyse and Explain
3. Prove theorems on probability and distribution theory.

COMPUTER SCIENCE

1. Given simple problems/ Algorithms, draw flowchart and write programmes, execute on computer and show results
2. Write simple programmes using data types, variables, operators, loops, functions, arrays, pointers
3. Explain various types of file operations and operating system environments
4. Identify and Show different Hardware units in Computer components like CPU, Memory, SMPS, IO slots and types, serial port, parallel port, USB etc in a PC , Peripherals and explain the functionality.
5. What is backup and significance of data and network security in computer environment