

Name of the Post - Assistant Controller of Legal Metrology. Group-B.

DETAILS REGARDING SYLLABUS & SCREENING TEST :

If it is decided to hold Screening Test, the syllabus & other details of the test will be as under :-

The Screening Test will be held in Mumbai only.

The candidates should note that the purpose of the Screening test is only to short-list candidates for interview. The test will be of objective type. While assessing Objective type answer sheets, every 4 wrong answers, one mark will be deducted as penalty mark. Only correct answers given by candidate will be considered for the purpose of valuation. **The marks obtained in the Screening Test will be added to the marks obtained in interview.** Marks obtained in the Screening Test will not be communicated to candidates and no result will be communicated to unsuccessful candidates nor will any correspondence be entertained in this regard including representations for verification of marks.

The candidates should note that the purpose of the Screening test is only to short-list candidates for interview. While assessing Objective type answer sheets, no penalty marks will be deducted for wrong answers marked by a candidate in his answer sheet. Only correct answers given by candidate will be considered for valuation purpose. **The marks obtained in the Screening Test will not be taken into consideration for final selection, which will be decided on performance in the interview alone.** Marks obtained in the Screening Test will not be communicated to candidates and no result will be communicated to unsuccessful candidates nor any correspondence will be entertained in this regard including representations for verification of marks.

The details of the Screening Test -- The Screening Test will be consist of only one question paper of the objective type (i.e. having multiple-choice question). The question paper will carry maximum 100 marks and contain 100 questions. It will be of one hour duration. The paper will be of B.Sc./B.E. degree level. The question paper will be set in English only.

The syllabus for the test will be as follows --

- 1) Basic concepts & definitions -- Mass, Weight, Force, Length, Density, Work, Energy, Temperature, Pressure.
- 2) Systems of Measurement & Interconversion -- British Units of Length, Volume, Mass, Weight, Energy.
Metric Units of Length, Volume, Mass, Weight, Energy.
International S.I. Length, Volume, Mass, Weight, Energy.
Large & small units of Length, Weight & volume.
Ordinary, Bullion & Carat.
- 3) Fundamental of Metrology -- Venire & Micrometer Screw gauge, Working, Least Count, Levers-Types & applications, Scales & Tapes for measuring length (Flexible & non-flexible).
- 4) Menstruation -- Dimensions, Area, Volume of Rectangular, Conical & Cylindrical, Spherical Bodies.
- 5) Effect of Temperature variation on measurements -- Linear & volumetric coefficients of expansion of common metals, cast iron, Brass, Steel.
- 6) Weighing Machines (Mechanical) -- Spring balances, Scale balances effect of unequal arms, Weigh Bridges & Platform machines, Crane type machines.
- 7) Weighing Machines (Electronic & Digital) -- Automatic conveyor Belt-type weighing, Nucleonic Weight machine, Load cells-Resistance Strain gauge type.
- 8) Volume measurement -- Ordinary Measuring flasks, Cups, etc. their calibration, Liquor measuring, Petroleum products, Measurements on pumps, Automatic Volumetric filling machines e.g. Bottling of soft drinks, Storage tanks Calibration & operation.

- 9) Other Instruments -- Thermometers, Monometers, Measurement of Blood Pressure, Flow meters for water & oil, Distance meter, Speedometers on Automobiles, Electrical power & energy meters.
- 10) Fundamentals of Statistics -- Mean, Standard deviation, Precision & Accuracy of Instruments, Error analysis, Tolerances.

Candidates whose applications are complete & are accompanied by prescribed fee will be admitted to the Screening Test. The candidates admitted to the Screening Test will be informed by admission letter, the Syllabus, the venue and the timetable of the Screening Test. Such letters will be issued by the Commission's Office well in advance and announcement regarding admission letters issued to candidates will be Published in Newspapers and also on Commission's Web-site before three weeks of the test. If however, candidates do not receive such letter before three working days of the test, they should come personally to the Commission's office, to obtain duplicate admission letter. Duplicate letters will be issued to only such candidates whose names are there in the list of admitted candidates. Neither any correspondence will be entertained in this connection nor duplicate letters will be sent by post. As far as possible, only the candidates, who are eligible in terms of this notification, will be admitted for the Screening Test. However, in case of a candidate whose eligibility is disputed, may be admitted provisionally subject to the verification of his eligibility. If at any stage of selection, it is found that the information given by a candidate in the application is false or wrong or that a candidate does not satisfy the conditions of prescribed qualifications for the post, his candidature for the examination will be cancelled. Candidates should keep ready a copy of recent photograph for affixing on the admission letter. Candidates should appear for the examination at their own expenses.

Viva - Voce and Personality Test :- The candidates who attain qualifying in marks in the Screening Test and who are eligible for the post according to the provisions mentioned in advertisement, will alone be interviewed by Commission. All such candidates will be summoned by the Commission for Viva-Voce and Personality Test, which they will have to attend at their own expenses.

Place : Mumbai
Date : 23rd July, 2009

N. S. Patwardhan
Deputy Secretary,
Maharashtra Public Service Commission.