

INDIAN COUNCIL OF MEDICAL RESEARCH
V.Ramalingaswami Bhavan, Ansari Nagar, New Delhi-110029

NOTICE

No.ICMR/Rectt/Sc-B/VRDL/2023-Pers.

Dated 14th August, 2024

Subject: Syllabus for Computer Based Test for filling up of 30 vacancies of Scientist-B(15 Medical & 15 Non-Medical) (VRDL) under ICMR-

This refers to ICMR Adv.No.ICMR/Sc-B/VRDL/2023/02-Pers. issued on 29.12.2023 regarding filling up of 30 vacancies of Scientist-B (15 Medical & 15 Non-Medical) (VRDL) under ICMR.

The syllabus for Computer Based Test is as under:-

Scientist B (Medical)(VRDL)

Topic	Marks
1. Research Methodology (Basics) <ul style="list-style-type: none"> • Study designs (observational and experimental designs) • Measures of disease frequency • Measures of association • Measures of population impact • Errors in epidemiological studies 	25
2. Basic Biostatistics <ul style="list-style-type: none"> • Rates, ratio, proportion, risk, odds • Summary statistics for quantitative data • P value and confidence intervals 	10
3. Validity and Reliability of Diagnostic and Screening Tests <ul style="list-style-type: none"> • Sensitivity, specificity, positive and negative predictive value • Likelihood ratio 	5
4. Communicable Diseases <ul style="list-style-type: none"> • Major Communicable Diseases in India • Transmission routes and vectors • Prevention and Control Strategies • Covid Response (Vaccines' Tests) 	20
5. Bioethics <ul style="list-style-type: none"> • Ethical Principles in Research • Responsible Conduct of Research • Consent process 	5
6. Clinical & Public Health Microbiology <ul style="list-style-type: none"> • Physical and chemical methods of infection control • Characteristics of viruses, detection and culture methods • Polymerase chain reaction and its variants • First and next generation sequencing methods. • Immunity - types and mechanisms • Outbreak Investigation & Field Epidemiology • Antimicrobial Resistance (AMR) • Pandemic Preparedness & Mitigation Measures 	20
7. Logical Reasoning	5
8. General Knowledge	5
9. English Language Aptitude	5

Contd...2

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Scientist B (Non-Medical)(VRDL): Syllabus for Computer Based Test

Topic	Marks
1. Research Methodology (Basics) <ul style="list-style-type: none"> • Study designs (observational and experimental designs) • Measures of disease frequency • Measures of association • Measures of population impact • Errors in epidemiological studies 	25
2. Basic Biostatistics <ul style="list-style-type: none"> • Rates, ratio, proportion, risk, odds • Summary statistics for quantitative data • P value and confidence intervals 	10
3. Validity and Reliability of Diagnostic and Screening Tests <ul style="list-style-type: none"> • Sensitivity, specificity, positive and negative predictive value • Likelihood ratio 	5
4. Communicable Diseases <ul style="list-style-type: none"> • Major Communicable Diseases in India • Transmission routes and vectors • Prevention and Control Strategies • Covid Response (Vaccines' Tests) 	20
5. Bioethics <ul style="list-style-type: none"> • Ethical Principles in Research • Responsible Conduct of Research • Consent process 	5
6. Basic Microbiology <ul style="list-style-type: none"> • Principles and applications of microscopic techniques • Principles and types of bacterial staining • Bacterial nutritional requirements • Physical and chemical methods of microbial control • Characteristics of viruses, detection and culture methods • Types and structure of DNA and RNA • Replication and Repair Mechanisms • Gene cloning - principles and strategies • Polymerase chain reaction and its variants • First and next generation sequencing methods. • Immunity - types and mechanisms 	20
7. Logical Reasoning	5
8. General Knowledge	5
9. English Language Aptitude	5

Asstt. Director General (A)

Note:- The date of CBT will be announced shortly. You are requested to regularly visit ICMR website on www.icmr.nic.in for further information in this regard.