

SUGGESTED SYLLABUS OF BIO-MEDICAL ENGINEER

Quantitative Ability:

The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be percentage, Ratio & Proportion, Square roots, Averages, Interest, Profit & Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & work.

Logical & Numerical reasoning:

This component may include questions on analogies, similarities and differences, space visualisation, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc

General awareness:

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current event and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring Countries especially pertaining History, Culture, Geography, Economic Scene, General Policy, Indian Constitution & Scientific Research . Some questions may be specifically related to Madhya Pradesh in section

Basic Knowledge in Computer Applications:

The questions on basic computer knowledge will be from Characteristics of Computers, Computer Organisation including RAM, ROM, File System, Input Devices, Computer Software-Relationship between Hardware and Software, Operating System, MS-Office (exposure of Word, Excel/spread sheet, Power point), Information Technology and Society-Indian IT Act, Digital Signatures, Application of information technology in Government for E-Governance, Information Kiosks


Dean & C.E.O.
M.G.M. Medical College &
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(Autonomous Society) Indore (M.P.)

Domain Syllabus of Bio-Medical Engineering

- Basics of Human Physiology
- Electrical Network Analysis and Synthesis
- Electronic Circuit Analysis and Design
- Biomaterials, Prosthetics and Orthotics
- Biomedical Transducers and Measuring Instruments
- Digital Electronics
- Introduction to Simulations Tools
- Signals and Control Systems
- Biomathematics & Biostatistics
- Medical Imaging Techniques
- Biomedical Digital Signal Processing
- Modelling of Physiological Systems
- Bionanotechnology
- Tissue Engineering
- Biotelemetry & Telemedicine
- Medical Robotics & Automation
- Lasers & Optics in Medicine
- Hospital Engineering & Management
- Biomedical Hazards & Safety


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