



# Saudi Classification Examination Biomedical Engineering - Medical Devices

## EXAMINATION CONTENT GUIDELINE



**Blueprint outlines:**

| Evaluation Item     | Sections                                          | Percentage (%) |
|---------------------|---------------------------------------------------|----------------|
| (150 MCQs, 3 hours) | 1. Biomedical Equipment Technology                | 15%            |
|                     | 2. Advanced Electronics and Electricity           | 15%            |
|                     | 3. Anatomy and Physiology                         | 10%            |
|                     | 4. Mathematics                                    | 5%             |
|                     | 5. Physics                                        | 5%             |
|                     | 6. Chemistry                                      | 5%             |
|                     | 7. Medical Informatics                            | 10%            |
|                     | 8. Professionalism                                | 10%            |
|                     | 9. Practical Experience                           | 5%             |
|                     | 10. Research and Design                           | 5%             |
|                     | 11. Patient Safety, Electrical Safety and Hazards | 10%            |
|                     | 12. Regulation and Standards                      | 5%             |

**Note:**

**Passing Score**

Specialist: 60%

- **Blueprint distributions of the examination may differ up to +/-5% in each category.**
- **Percentages and content are subject to change at any time. See the SCFHS website for the most up-to-date information.**

## References

- Webster J. Medical Instrumentation: Application and Design. Wiley & Sons: USA. 4th (or latest) Edition.
- Carr J and Brown J. Introduction to Biomedical Equipment Technology. John Wiley & Sons: Australia, Limited, 4th (or latest) Edition.
- Ritter A, Hazelwood V, Valdevit A, and Ascione A. Biomedical Engineering Principles. Taylor & Francis Group: FL, USA, 2nd (or latest) Edition.
- Bushberg J, Seibert J, Leidholdt E, and Boone J. The Essential Physics of Medical Imaging. Lippincott Williams & Wilkins: PA, USA. 3rd (or latest) Edition.
- Floyd T. Electronic Devices (Conventional Current Version). Pearson: England, UK. 10th (or latest) Edition.
- Tocci R. Digital Systems: Principles and Application. 6th (or latest) Edition.
- Johnson A. Biology for Engineers. CRC Press: FL, USA. 2nd (or latest) Edition.
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- Barnett R, Ziegler M, Byleen K, and Sobecki D. Precalculus. McGraw-Hill: USA. 7th (or latest) Edition.
- Croft A, Davison R. Mathematics for Engineers: A Modern Interactive Approach. Pearson: England, UK. 3rd (or latest) Edition.
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- Glantz S. Primer of Biostatistics. McGraw-Hill: NY, USA. 5th (or latest) Edition.
- Rao S and Richard J. Introduction to Biostatistics and Research Methods. PHI Learning: Delhi, India. 5th (or latest) Edition.



- Vasudeva A. Modern Engineering Physics. S. Chand & Co.: New Delhi, India. Revised Edition.
- Ryan L and Norris R. Chemistry Course book. Cambridge Un. Press: Cambridge, Cambridge, UK. 2nd (or latest) Edition.
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- Hall D. Microprocessor and Interfacing Programming and Hardware. McGraw-Hill: NY, USA. 2nd (or latest) Edition.

**Note:** This list is intended for use as a study aid only. SCFHS does not intend the list to imply endorsement of these specific references, nor are the exam questions necessarily taken from these sources.

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