D　It is imperative that the system guarantees the integrity, availability, and confidentiality of medical information. It must authenticate users to ascertain their authority to access the electronic medical record and leave a time stamp on the medical records to achieve accountability, thus ensuring information security and the protection of personal information.

E　It is essential that the system provides 24x7 service and prevents the entire system from shutting down during any disruption or disaster. All data must be backed up without suspending the system at any time. As a measure against cyber attacks, systems must be backed up offline, either logically or physically. To mitigate risk in the event of a disaster, backup data must be stored in a secure location separate from the site where the Integrated Hospital Information System is operated.

F　It is essential that the EHR client terminal be equipped with dual 19-inch or larger monitors. Some client terminals should be capable of displaying high-resolution medical images, for a filmless diagnosis. Some client terminals should be capable of connecting three or more high-resolution monitors.

G　The system must support the standard medical information model and terminology adopted by HELICS (Healthcare Information and Communication Standards Committee). It means as well as patient profile, appointment, prescription and dosage, injection, procedure, blood transfusion, surgery, dental care, nursing care, bed management, nutrition, JLAC10, NANDA, NIC-NOC, ICD-10 and MEDIS disease codes, DPC, CDISC, and all master data for the all system must be centrally managed in a database. In the event of future revisions, the database must be updated in accordance with the maintenance contract. The history of master data must be managed, and synchronized with annalysis by the Data Warehouse.

H　It is essential that the system employs virtualization and unified storage technologies to consolidate servers and storage, thereby reducing costs, ensuring long-term medical record archiving, and enhancing system stability. It is essential that the virtualization system be capable of supporting the migration of legacy systems to the new servers. It is essential that the system be equipped with a maintenance function to prevent performance degradation over an extended period of use. The system should allow for seamless and cost-effective performance upgrades at any time. It should also provide a secure thin client system with a fast response time, enabling users to access the system from various locations using virtual desktop infrastructure. The server system providing the virtual machine infrastructure must perform at a level that surpasses that of the legacy system, ensuring a fast response even during peak loads.

I　To prevent patient mix-ups, medical professional must be able to authenticate patients using patient barcodes or patient ID cards. The system shall be designed with safety as a primary objective, with the aim of preventing medical accidents. The system must be able to communicate with smartphones and premises telephones.

J　The system must include features for the management of incident reports and analysis. The incident report system should be accessible to users across organizations.

K　It is essential that the ordering system retain order information with a time stamp, operator's name, place, and other relevant details to guarantee traceability and safety management.

L　To provide a comfortable working environment by unifying the GUI of the system. A centralized management system for each terminal is required. For mobile terminals, the system must provide highly secure authentication and management functions to support BYOD (bring your own device) management. It must also provide highly secure authentication and management functions that satisfy the BYOD requirements of the latest version of the Guidelines for the Secure Management of Medical Information Systems. Additionally, the system must provide secure information exchange of information, including personal information, among healthcare professionals.

M　It is essential that the system has document management capabilities. Clinical documents must be digitized and can be signed electronically. The document management system allows users to design forms and apply tags to items in the form with complete freedom. These forms data can then be imported to the DWH for secondary use. All documents can be printed on paper, exported as PDF documents, or XML format with standardized tag elements. The document management system must register metadata and documents in the DWH and provide full-text search services. It also guides users in creating and managing documents required for admission and discharge, team medical care, and medical billing conditions. The system centralizes management of all medical documents and serves as a backup reference in the event of a disaster.

N　By utilizing a VPN, users can securely access electronic medical records and perform remote maintenance on medical information systems.

O　The University will construct and provide the Hospital Information Network. Network equipment, cables, etc. to connect to the hospital information network shall be included in this procurement.

P　It is the responsibility of the system provider to provide comprehensive training in maintenance management and operation. All data and master data from the legacy system must be migrated into the new system in its entirety.

Q　The logistics system must provide inventory management by scanning barcodes on supplies. The logistics system must use the moving average method for counting wholesale property. The system should support SPD and electronic commerce using a standardized supply master code. The logistics system can read and manage lot numbers and expiration dates from the barcodes on supplies. All messages from the ordering system and sub systems to the medical accounting system must be captured and loaded into the management analysis reporting system.

R　The system should establish the traceability of medical drugs by managing expiration dates and lot numbers of drugs utilizing GS1 barcodes and QR codes on prescriptions, medication record, wristbands, and drug label documents.

S　All medical information must be stored in the data warehouse (DWH). The DWH must have centralized administrative control over the data and provide high-speed search ability by utilizing the data cube model. The system must have a BI tool with the capability of exporting data and printing in a variety of document formats. The DWH can be connected from FileMaker (through ESS connection), Microsoft Access (through ODBC connection), and other systems through the JDBC connection.