1. Read the three paragraphs below. Then select the correct answers from the following questions. For each question write the letter answers (A, B, or C) in your examination book. (5% for each question: 30% total)

"Telemedicine involves the exchange of medical information from one clinical site to another via electronic communications to improve patients' health status. Closely associated with telemedicine is the term "telehealth," which covers a broader definition of remote healthcare that does not necessarily involve clinical services. Videoconferencing, transmission of still images, remote monitoring of the vital signs of a patient, continuing medical education, and nursing call centers are all considered part of telemedicine and telehealth.

There are a variety of telemedicine applications ranging from basic to complex. One basic application is the use of videoconferencing systems for business meetings in a hospital setting. In more complex situations a doctor might participate in a conference with the patient and a remote medical expert or laboratory personnel in a hospital. Certain segments within the healthcare industry have adopted videoconferencing as their telemedicine medium. These include psychiatry, dermatology, radiology, neurology, dentistry, pathology, and cardiology.

The next evolution in telemedicine is mobile solutions that bring telemedicine to rural communities that otherwise have no easy access to healthcare facilities. In addition, mobile solutions are expected to have a big impact in nursing homes and in-home health services in both rural and urban areas. Often it is costly and not safe to transport nursing home patients or patients recovering in their homes to the hospital, so instead the physician can come remotely to them."

Questions (record A, B, or C for each question in your exam book):

1. The general topic of this article is
   A. The characteristics of telemedicine
   B. The cost of healthcare insurance
   C. High-definition television systems

2. Remote monitoring of the vital signs of a patient is part of telemedicine
   A. No
   B. Yes
   C. Unknown

3. Vaccinations are part of telemedicine
   A. No
   B. Yes
   C. Unknown

4. Videoconferencing is already being used in telemedicine
   A. Yes
   B. No
   C. Unknown
5. Videoconferencing-based telemedicine
   A. can be used only in city healthcare clinics
   B. can be used only by medical experts
   C. can be used in healthcare clinics and nursing homes

6. Mobile telemedicine procedures
   A. will be useful in both rural and urban environments
   B. are currently in wide use
   C. are not attractive to people living in remote areas

II. The following paragraph describes information exchange in communication links. The underlined words are spelled incorrectly. Please spell them correctly and put all the responses on the answer sheet. (2% for each question; 20% total)

   To exchanging (1) information between any two devices in a communication system, some type of electrical or optical signal who (2) carries this information has to be transmitted (3) from one device to the other over (4) a communication channel. This channel could consist of a wire, radio, microwave, satellite (5), infrared, or optical fiber link. Each of the media used for such communication channels has unique perform (6) characteristics associated with it. Regardless of its typiing (7), the medium degrades the fidelity of the transmitted signal because of an imperfect responding (8) to the signal and because of the presents (9) of electrical noise, optical noise (10), and interference. This can lead to misinterpretations of the signal by the electronics at the receiving end.
III. Translate the following paragraphs from English to Chinese (50%)

President Sets Better Buildings Initiative for Energy Efficiency
Following his call in his State of the Union for clean energy advances, President Obama proposed on February 3 new efforts to improve energy efficiency in commercial buildings across the country. His “Better Buildings Initiative” will aim to make commercial buildings 20% more energy efficient over the next decade, and it could reduce energy bills by about $40 billion at today’s prices. Through a series of incentives, the plan will encourage private-sector investment to upgrade all types of buildings ranging from offices and schools to universities and hospitals. In 2010, commercial buildings consumed roughly 20% of all energy in the U.S. economy.

The President’s budget, subject to Congressional approval, will propose to make U.S. businesses more energy efficient through a series of new initiatives: new tax incentives for building efficiency would transform the current deduction to a credit that is more generous and that will encourage building property retrofits; more financing opportunities for those commercial retrofits, with the Small Business Administration working to encourage existing lenders to take advantage of recently increased loan size limits to promote new energy efficiency retrofit loans for small businesses; a new DOE pilot program to guarantee loans for energy efficiency upgrades at hospitals, schools, and commercial buildings.

Other elements of the proposal are a "Race to Green" for state and municipal governments that streamline regulations and attract private investment for retrofit projects, using new competitive grants to states and local governments that streamline standards; a Better Buildings Challenge to spur CEOs and university presidents to make their organizations leaders in saving energy; and more training for the next generation of commercial building technology workers by launching a Building Construction Technology Extension Partnership modeled on the successful Manufacturing Extension Partnership at the Department of Commerce, and by providing more workforce training in areas such as energy auditing and building operations. The White House said the Better Buildings Initiative will complement programs already launched for government and residential buildings, including the $20 billion in funding for building energy efficiency in American Recovery and Reinvestment Act.