IELTS READING 11

SECTION 1

You should spend about 20 minutes on Questions 1-9 which are based on IELTS Reading Passage below:

A REVOLUTION IN KNOWLEDGE SHARING

The pressure to transform our institutions of learning continues. Virtually every enterprise and institution are grappling with the disruptions and opportunities caused by Web-enabled infrastructures and practices. New best practices, business models, innovations, and strategies are emerging, including new ways to acquire, assimilate, and share knowledge. Using technologies that are already developed or that will be deployed over the next five years, best practices in knowledge sharing not only are diffusing rapidly but will be substantially reinvented in all settings: educational institutions, corporations, government organizations, associations, and nonprofits. But institutions of learning are in a unique position to benefit from an added opportunity: providing leadership in e-knowledge.

E-knowledge finds expression in many shapes and forms in a profoundly networked world. It is not just a digitized collection of knowledge. E-knowledge consists of knowledge objects and knowledge flow that combine contents, contexts, and insights on applications. E-knowledge also emerges from interactivity within and among communities of practice and from the troves of tacit knowledge and tradecraft that can be understood only through conversations with knowledgeable practitioners.

E-knowing is the act of achieving understanding by interacting with individuals, communities of practice, and knowledge in a networked world. E-knowledge commerce consists of the transactions based on the sharing of knowledge. These transactions can involve the exchange of digital content/context and/or tacit knowledge through interactivity.

Transactable e-knowledge can be exchanged for free or for fees. E-knowledge is enabling not only the emergence of new best practices but also the reinvention of the fundamental business models and strategies that exist for e-learning and knowledge management. E-knowledge is technologically realized by the fusion of e-learning and knowledge management and through the networking of knowledge workers.

Transactable e-knowledge and knowledge networking will become the lifeblood of knowledge sharing. They will create a vibrant market for e-knowledge commerce and will stimulate dramatic changes in the knowledge ecologies of enterprises of all kinds. They will support a "Knowledge Economy" based on creating, distributing, and adding value to knowledge, the very activities in which colleges and universities are engaged. Yet few colleges and universities have taken sufficient account of the need to use their knowledge assets to achieve strategic differentiation.

In "It Doesn't Matter," a recent article in Harvard Business Review, Nicholas G. Carr endorsed corporate leaders' growing view that information technology offers only a limited potential for strategic differentiation. Similar points are starting to be made about e-learning, and knowledge management has been under fire as ineffectual for some time.

The truth is that e-learning and knowledge management can provide strategic differentiation only if they drive genuine innovation and business practice changes that yield greater value for learners. Carr's article provoked a host of contrary responses, including a letter from John Seely Brown and John Hagel III. Brown is well-known for his insights into the ways in which knowledge sharing can provide organizations with a solid basis for strategic differentiation.

Reprinted with permission. © 2003 Donald M. Norris, Jon Mason, Robby Robson, Paul Lefrere, and Geoff Collier. "A Revolution in Knowledge Sharing," EDUCAUSE Review, vol. 38, no. 5 (September/October 2003): 14-26.

QUESTIONS 1-4

Write your answer in NO MORE than TWO WORDS for each answer.

Thanks to the advent of the computer, learning institutions today are providing new ways of acquiring knowledge, through tools that are 1.....fast and which are being already 2.....in all fields and settings, despite the 3.....the process may entail, which all institutions are now 4.....

QUESTIONS 5-9

The following questions are based on reading passage 1.In boxes 5 - 9 on your answer sheet, write

YES **if the statement agrees with the views of the writer**

NO **if the statement contradicts the views of the writer**

NOT GIVEN **if it is impossible to say what the writer thinks about this**

5. E-knowledge is primarily based on practices used in business.

6. Educational institutions can be leaders in knowledge networking.

7. E-knowledge has several benefits to it.

8. Communities of practice are one source of E-knowledge.

9. The key to the success of knowledge management and e-learning is offering strategic differentiation.

SECTION 2

A CHRONICLE OF TIMEKEEPING

Our conception of time depends on the way we measure it

A According to archaeological evidence, at least 5, 000 years ago, and long before the advent of the Roman Empire, the Babylonians began to measure time, introducing calendars to co-ordinate communal activities, to plan the shipment of goods and, in particular, to regulate planting and harvesting. They based their calendars on three natural cycles: the solar day, marked by the successive periods of light and darkness as the earth rotates on its axis; the lunar month, following the phases of the moon as it orbits the earth; and the solar year, defined by the changing seasons that accompany our planet's revolution around the sun.

B Before the invention of artificial light, the moon had greater social impact. And, for those living near the equator in particular, its waxing and waning was more conspicuous than the passing of the seasons. Hence, the calendars that were developed at the lower latitudes were influenced more by the lunar cycle than by the solar year. In more northern climes, however, where seasonal agriculture was

practiced, the solar year became more crucial. As the Roman Empire expanded northward, it organized its activity chart for the most part around the solar year.

C Centuries before the Roman Empire, the Egyptians had formulated a municipal calendar having 12 months of 30 days, with five days added to approximate the solar year. Each period of ten days was marked by the appearance of special groups of stars called decans. At the rise of the star Sirius just before sunrise, which occurred around the all-important annual flooding of the Nile, 12 decans could be seen spanning the heavens. The cosmic significance the Egyptians placed in the 12 decans led them to develop a system in which each interval of darkness (and later, each interval of daylight) was divided into a dozen equal parts. These periods became known as temporal hours because their duration varied according to the changing length of days and nights with the passing of the seasons. Summer hours were long, winter ones short; only at the spring and autumn equinoxes were the hours of daylight and darkness equal. Temporal hours, which were first adopted by the Greeks and then the Romans, who disseminated them through Europe, remained in use for more than 2, 500 years.

D In order to track temporal hours during the day, inventors created sundials, which indicate time by the length or direction of the sun's shadow. The sundial's counterpart, the water clock, was designed to measure temporal hours at night. One of the first water clocks was a basin with a small hole near the bottom through which the water dripped out. The falling water level denoted the passing hour as it dipped below hour lines inscribed on the inner surface. Although these devices performed satisfactorily around the Mediterranean, they could not always be depended on in the cloudy and often freezing weather of northern Europe.

E The advent of the mechanical clock meant that although it could be adjusted to maintain temporal hours, it was naturally suited to keeping equal ones. With these, however, arose the question of when to begin counting, and so, in the early 14th century, a number of systems evolved. The schemes that divided the day into 24 equal parts varied according to the start of the count: Italian hours began at sunset, Babylonian hours at sunrise, astronomical hours at midday and 'great clock' hours, used for some large public clocks in Germany, at midnight. Eventually these were superseded by 'small clock', or French, hours, which split the day into two 12-hour periods commencing at midnight.

F The earliest recorded weight-driven mechanical clock was built in 1283 in Bedfordshire in England. The revolutionary aspect of this new timekeeper was neither the descending weight that provided its motive force nor the gear wheels (which had been around for at least 1, 300 years) that transferred the power; it was the part called the escapement. In the early 1400s came the invention of the coiled spring or fuse which maintained constant force to the gear wheels of the timekeeper despite the changing tension of its mainspring. By the 16th century, a pendulum clock had been devised, but the pendulum swung in a large arc and thus was not very efficient.

G To address this, a variation on the original escapement was invented in 1670, in England. It was called the anchor escapement, which was a lever-based device shaped like a ship's anchor. The motion of a pendulum rocks this device so that it catches and then releases each tooth of the escape wheel, in turn allowing it to turn a precise amount. Unlike the original form used in early pendulum clocks, the anchor escapement permitted the pendulum to travel in a very small arc. Moreover, this invention allowed the use of a long pendulum which could beat once a second and thus led to the development of a new floor-standing case design, which became known as the grandfather clock.

H Today, highly accurate timekeeping instruments set the beat for most electronic devices. Nearly all computers contain a quartz-crystal clock to regulate their operation. Moreover, not only do time signals beamed down from Global Positioning System satellites calibrate the functions of precision navigation equipment, they do so as well for mobile phones, instant stock-trading systems and nationwide power-distribution grids. So integral have these time-based technologies become to day-to-day existence that our dependency on them is recognized only when they fail to work.

Questions 10-13

Reading Passage 2 has eight paragraphs, A-H. Which paragraph contains the following information? Write the correct letter, A-H, in boxes 1- 4 on your answer sheet.

10. A description of an early timekeeping invention affected by cold temperatures

11. An explanation of the importance of geography in the development of the calendar in farming communities

12. A description of the origins of the pendulum clock

13. Details of the simultaneous efforts of different societies to calculate time using uniform hours

Questions 14-17

Look at the following events and the list of nationalities below. Match each event with the correct nationality, A-F. Write the correct letter, A-F, in boxes 5-8 on your answer sheet.

14. They devised a civil calendar in which the months were equal in length.

15. They divided the day into two equal halves.

16. They developed a new cabinet shape for a type of timekeeper.

17. They created a calendar to organize public events and work schedules.

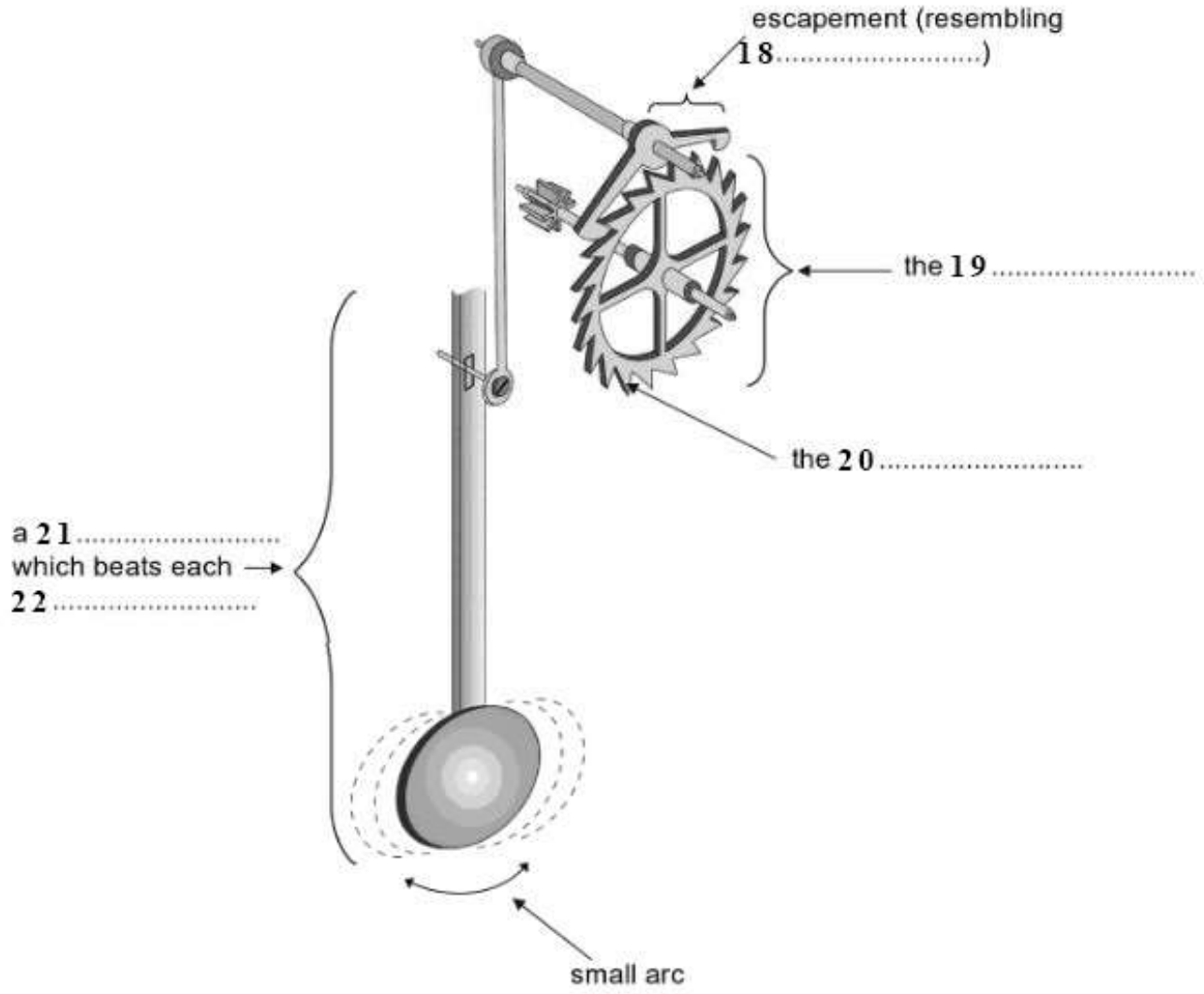
List of Nationalities:

A Babylonians
B Egyptians
C Greeks
D English
E Germans
F French

Questions 18-22

Label the diagram below. Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 18-22 in your answer sheet

How the 1670 lever-based device worked



SECTION 3

MAKETE INTEGRATED RURAL TRANSPORT PROJECT

Section A

The disappointing results of many conventional road transport projects in Africa led some experts to rethink the strategy by which rural transport problems were to be tackled at the beginning of the 1980s. A request for help in improving the availability of transport within the remote Makete District of south-western Tanzania presented the opportunity to try a new approach.

The concept of' integrated rural transport was adopted in the task of examining the transport needs of the rural households m the district The objective was to reduce the time and effort needed to obtain access to essential goods and services -through an improved rural transport system. The underlying assumption was that the time saved would be used instead for activities that would improve the social and economic development of the communities. The Makete Integrated Rural Transport -Project (MIRT P) started in 1985 with financial support from the Swiss Development Corporation and was coordinated .with the help of the Tanzanian government.

Section B

When the project began Makete District was virtually totally isolated during the rainy season. The regional road was in such bad shape that access to the main towns was impossible for about three months of the year. Road traffic was extremely rare with the district, and alternative means of transport were restricted to donkeys in the north of the distinct people relied primarily on the paths, which were supper and dangerous during the rains.

Before solutions could be proposed, the problems had to be understood. Little was known about the transport demands of the rural households, so Phase I, between December 1985 and December 1987, focused on research. The socio-economic survey of more than 400 households in the district indicates that a household in Makete spent, on average, seven hours a day on transporting themselves and their goods, a figure which seemed extreme but which has also been obtained in surveys in other rural areas in Africa. Interesting facts regarding transport were found- 95%

was on foot, 80% was within the locality and 70% was related to the collection of water and firewood and travelling to running mills.

Section C

Having determined the main transport needs, possible solutions were identified which might reduce the time and burden During Phase II. from January to February 1991, a number of approaches were implemented in an effort to improve mobility and access to transport

An improvement of the rotted network was considered necessary to ensure the import and export of goods to the distinct. These improvements were carried out using methods that were heavily dependent on labor. In addition to the improvement of roads, these methods provided training in the operation of a mechanical workshop and bus and truck services. Hoverer the difference from the conventional approach was that this time consideration was given to local transport needs outside the road network.

Most goods were transported along the paths that provide shortcuts up and down the hillsides, but the paths were a real safety ask and made the journey on foot even more arduous. It made sense to improve the paths by building steps, handrails and footbridges.

It was uncommon to fix the means of transport that were more efficient than walking but less technologically advanced than motor vehicles. The use of bicycles was constrained by their high cost and the lack of available spare parts. Oxen were not used at all but donkeys were used by a few households in the northern part of the district MIRTP focused on what would be most appropriate for the inhabitants of Makete in terms of what was available, how much they could afford and what they are willing to accept . After careful consideration, the project chose the promotion of donkeys - a donkey costs less than a bicycle - and the introduction of a locally manufacturable wheelbarrow.

Section D

At the end of Phase II, it was dear that the selected approaches to Makete's transport problems had had different degrees of success. Phase III. from March 1991 to March 1993, focused on the refinement and must of these activities.

The road improvements and accompanying maintenance system had helped make the district centre accessible throughout the year. Essential goods from outside the district had become more readily available at the market and prices did not fluctuate as much as they had done before.

Paths and secondary roads were improved only at the request of communists who were willing to participate in construction and maintenance. However, the improved paths impressed the inhabitants, and requests for assistance greatly increased soon after only a few improvements had been completed.

The efforts to improve the efficiency of the existing transport services were not very successful because most of the motorized vehicles in the district broke down and there were no resources to repair them. Even the introduction of low-cost means of transport was difficult because of the general poverty of the district. The locally manufactured wheelbarrows were still too expensive for all but a few of the households. Modifications to the original design by local carpenters cut- production time and costs. Other local carpenters have been trained in the new design So that they can respond to requests. Nevertheless, a locally produced wooden wheelbarrow which costs around 500QTanzanian shillings (less than US$20) in Makete, and is about one-quarter the cost of a metal wheelbarrow, is still too expensive for most people.

Donkeys, which were imported to the district have become more common and contribute, in particular, to the transportation of crops and goods to market. Those who have bought donkeys are mainly from richer households but with an increased supply through local breeding, donkeys should become more affordable. Meanwhile, local initiatives are promoting the renting out of the existing donkeys.

It should be noted, however, that a donkey, which at 20,000 Tanzanian shillings costs less than a bicycle, is still an investment equal to an average household's income over half a year. This dearly illustrates the need for supplementary measures if one wants to assist the rural poor.

Section E

It would have been easy to criticize the MIRTP for using in the early phases a top-down approach, in which decisions were made by experts and officials before being handed down to communities, but it was necessary to start the process from the level of the governmental authorities of the district It would have been, difficult to respond

to the requests of villagers and other rural inhabitants without the support and understanding of district authorities.

Section F

Today, nobody in the district argues about, the importance of improved paths and inexpensive means of transport. But this is the result of dedicated work over a long penned particularly from the officers in charge of community development They played an essential role in raising awareness and interest among the rural communities.

The concept of integrated rural transport is now well established in Tanzania, where a major program of rural transport is just about to start. The experiences from Makete will help in this initiative, and Makete Distinct will act as a reference for future work.

Questions 23-28

Reading Passage 3 has six sections, A-F. Write the correct number, i-xi, in boxes 23-28 on your answer sheet.

List of Headings

i. MIRTP as a future model
ii. Identifying the main transport problems
iii. Preference for motorized vehicles
iv. Government Authorities' instructions
v. Initial improvements in mobility and transport modes
vi. Request for improves transport in Makete
vii. Transport improvements in the northern part of the district
viii. Improvements in the rail network
ix. Effects of initial MIRTP measures
x. Co-operation of district officials
xi. Role of wheelbarrows and donkeys

23 Section A

24 Section B

25 Section C

26 Section D

27 Section E

28 Section F

Questions 29-33

Do the following statements agree with the claims of the writer in reading passage 3. In boxes 29-33 on your answer sheet write:

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

29. MIRTP was divided into five phases.

30. Prior to the start of the MIRTP, the Makete district was almost inaccessible during the rainy reason.

31. Phase I of MIRTP consisted of a survey of household expenditure on transport.

32. The survey concluded that one-fifth or 20% of the household transport requirement as outside the local area.

33. MIRTP hopes to improve the movements of goods from Makete district to the country's capital.

Questions 34-37

Complete each sentence with the correct ending, A-J, below. Write the correct letters, A-J, in boxes 36-39 on your answer sheet.

34. Construction of footbridges, steps and handrails

35. Frequent breakdown of buses and trucks in Makete

36. The improvement of secondary roads and paths

37. The isolation of Makete for part of the year

A	provided the people of Makete with experience in running bus and truck services.
B	was especially successful in the northern part of the district.
C	differed from earlier phases in that the community became less actively involved.
D	improved paths used for transport up and down hillsides.
E	was no longer a problem once the roads had been improved.
F	cost less than locally made wheelbarrows.
G	was done only at the request of local people who were willing to lend a hand.
H	was at first considered by MIRTP to be affordable for the people of the district.
I	hindered attempts to make the existing transport services more efficient.
J	was thought to be the most important objective of Phase III.

Question 38

Choose the correct letter A, B, C or D. Write the correct letter in box 40 on your answer sheet.

Which of the following phrases best describes the main aim of Reading Passage 3?

A. To suggest that projects such as MIRTP are needed in other countries
B. To describe how MIRTP was implemented and how successful it was
C. To examine how MIRTP promoted the use of donkeys
D. To warn that projects such as MIRTP are likely to have serious problems