09年12月英语六级模拟试卷及解析之四(文都)英语六级考试
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https://www.100test.com/kao_ti2020/645/2021_2022_09_E5_B9_B412_E6_9C_88_c84_645302.htm jiefu"> Part I Writing (30 minutes) Directions: In this part, you are allowed 30 minutes to write a short essay entitled An Eye-witness Account of a Traffic Accident. You should write at least 150 words following the outline given below。 1.车祸发生的时间及地点； 2.你所见到的车祸情况； 3.你对车祸原因的分析。来源：www.examda.com Part II Reading Comprehension (Skimming and Scanning) (15 minutes) A Brief History of Clock Clocks At best, historians know that 5,000-6,000 years ago, great civilizations in the Middle East and North Africa started to examine forms of clock-making instead of working with only the monthly and annual calendar. Little is known on exactly how these forms worked or indeed the actual deconstruction of the time, but it has been suggested that the intention was to maximize time available to achieve more as the size of the population grew. Perhaps such future periods of time were intended to benefit the community by allotting specific lengths of time to tasks. Was this the beginning of the working week? Sun Clocks With the disappearance of any ancient civilization, such as the Sumerian culture, knowledge is also lost. Whilst we can only hypothesize on the reasons of why the equivalent to the modern wristwatch was never completed, we know that the ancient Egyptians were next to layout a system of dividing the day into parts, similar to hours。 "Obelisks" (tall four-sided tapered monuments) were carefully constructed and even

purposefully geographically located around 3500 BC. A shadow was east as the Sun moved across the sky by the obelisk, which it appears was then marked out in sections, allowing people to clearly see the two halves of the day. Some of the sections have also been found to indicate the "year"s longest and shortest days, which it is thought were developments added later to allow identification of other important time subdivisions。 Another ancient Egyptian "shadow clock" or "sundial" has been discovered to have been in use around 1500 BC, which allowed the measuring of the passage of "hours". The sections were divided into ten parts, With two "twilight hours" indicated, occurring in the morning and the evening. For it to work successfully then at midday or noon, the device had to be turned 180 degrees to measure the afternoon hours。 Water Clocks "Water clocks" were among the earliest time keeping devices that didnt use the observation of the celestial bodies to calculate the passage of time. The ancient Greeks, it is believed, began using water clocks around 325 BC. Most of these clocks were used to determine the hours of the night, but may have also been used during daylight. An inherent problem with the water clock was that they were not totally accurate, as the system of measurement was based on the flow of water either into, or out of, a container which had markers around the sides. Another very similar form was that of a bowl that sank during a period as it was filled of water from a regulated flow. It is known that water clocks were common across the Middle East, and that these were still being used in North Africa during the early part of the twentieth-century。 Mechanical Clocks In 1656, "Christian

Huygens (Dutch scientist)， made the first "Pendulum(钟摆) clock", with a mechanism using a "natural" period of oscillation(振幅). "Galileo Galilei" is credited, in most historical books, for inventing the pendulum as early as 1582, but his design was not built before his death. Huygens clock, when built, had an error of "less than only one minute a day". This was a massive leap in the development of maintaining accuracy, as this had previously never been achieved. Later refinements to the pendulum clock reduced this margin of error to "less than 10 seconds a day"。 The mechanical clock continued to develop until they achieved an accuracy of "a hundredth-of- a-second a day", when the pendulum clock became the accepted standard in most astronomical observatories。 Quartz Clocks The running of a "Quartz clock" is based on the piezoelectric property of the quartz crystal. When an electric field is applied to a quartz crystal, it actually changes the shape of the crystal itself, If you then squeeze it or bend it, an electric field is generated. When placed in an appropriate electronic circuit, this interaction between the mechanical stress and the electrical field causes the crystal to vibrate, generating a constant electric signal which can then be used for example on an electronic clock display. The first wrist-watches that appeared in mass production used "LED", "Light Emitting Diode" displays. By the 1970s these were to be replaced by a "LCD", "Liquid Crystal Display"。 Quartz clocks continue to dominate the market because of the accuracy and reliability of the performance, also being inexpensive to produce on mass scale. The time keeping performance of the quartz clock has now been surpassed by the

"Atomic clock"。 Atomic Clocks Scientists discovered some time ago that atoms and molecules have "resonances" and that each chemical element and compound absorbs and emits "electromagnetic radiation" within its own characteristic "frequencies". This we are told is highly accurate even over "Time and Space"。 The development of radar and the subsequent experimentation with high frequency radio communications during the 1930s and 1940s created a vast amount of knowledge regarding "electromagnetic waves", also known as "microwaves". which interact with the atoms. The development of atomic clocks focused firstly on microwave resonances in the chemical Ammonia and its molecules. In 1957. "NIST". the "National Institute of Standards and Technology", completed a series of tests using a "Cesium Atomic Beam" device, followed by a second program of experiments by NIST in order to have something for comparison when working at the atomic level. By 1960, as the outcome of the programs, "Cesium Time Standards" were incorporated as the official time keeping system at NIST。 The "Natural frequency" recognized currently is the measurement of time. used by all scientists, defines the period of "one second" as exactly "9,192,631,770 Oscillations" or "9,192,631,770 Cycles of the Cesium Atoms Resonant Frequency". From the "Macrocosm", or "Planetary Alignment", to the "Microcosm", or "Atomic Frequency", the cesium now maintains accuracy with a degree of error to about "one-millionth of a second per year"。 Much of modern life has come to depend on such precise measurements of time. The day is long past when we could

get by with a timepiece(钟)accurate to the nearest quarter hour. Transportation, financial markets, communication, manufacturing, electric power and many other technologies have become dependent on super-accurate clocks. Scientific research and the demands of modern technology continue re drive our search for ever more accuracy, The next generation of Cesium Time Standards is presently under development at NISTs "Boulder Laboratory" and other laboratories around the world。 Something to Remember百考试题论坛 The only thing that should be remembered during all this technological development is that we should never lose the ability to tell the time approximately by natural means and the powers of deduction without requiring crutches(拐杖)to lean on。 Our concept of TIME and using it together with TECHNOLOGY still has room for radical reassessment in terms of mans evolutionary thinking regarding our view of the past, our onward journey into the future and our concept of time in relationship to universe。 1. It is suggested that 5,000-6,000 years ago people in the Middle East and North Africa started to allot specific lengths of time to tasks。 2. Ancient Egyptian "shadow clock" or "sundial" discovered around 1500 BC, could measure passage of "hours" automatically and continuously。 3. "Water clocks" was the first device that didnt use the observation of the celestial bodies to calculate the passage of time 。 4. Galileo Galilei built the first "pendulum clock" as early as 1656. 5. Water clocks were mostly used to determine _____。 6. Huygens clock, a mechanical one, had an error of "less than only one minute a day", which was a massive leap in the development of

_____。 7. Since Quartz clocks are both inexpensive to produce in mass scale and _____ in performance, they continue to dominate the market。 8. Scientific research and the _____ continue to drive our search for ever more accuracy in time。 9. Of all the clocks introduced in the passage, the one with the most accuracy is _____。 10. No matter how advanced the technology of measuring time will be we should never lose the ability to tell the time approximately by _____。 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com