

I. 選擇題 (每題 3 分, 共 30 分) 請作答於試卷內之「選擇題作答區」

1. The sun's position in space is best described as the approximate center of (A) a constellation (B) the universe (C) the Milky Way galaxy (D) our solar system.
2. The time it takes the earth to make one (A) turn (B) spin (C) revolution (D) rotation around the sun is called a year.
3. Which layer of the earth's interior is liquid? (A) the upper mantle (B) the lower mantle (C) the outer core (D) the inner core
4. What is the lithosphere composed of? (A) the continental and oceanic crust (B) the crust and upper mantle (C) the upper mantle (D) the lower mantle
5. What finally convinced geologists that the continents did move? (A) Bouguer anomaly distribution (B) mantle convection (C) paleomagnetism (D) the mid-Atlantic ridge
6. In what order do earthquake waves arrive at seismic stations? (A) P-waves, then S-wave, then surface waves (B) S-waves, then P-waves, then surface waves (C) S-waves, then surface waves, then P-waves (D) surface waves, then P-waves, then S-waves
7. Longitude is given in degrees (A) east and west of the equator (B) north and south of the equator (C) east and west of the prime meridian (D) north and south of the prime meridian.
8. Relationships between oceanic depths or land elevations and the earth's area are shown on a (A) Mercator projection (B) bathymetric chart (C) hypsographic curve (D) navigational chart.
9. The East China Sea is a (A) wide open (B) semi-open (C) pelagic (D) marginal sea.
10. The (A) ultraviolet (B) infrared (C) red (D) blue wavelengths of light penetrate deepest into the ocean.

II. 是非題 (對的打○, 錯的打×, 每題 8 分, 共 40 分) 請將答案填寫於答案卷上, 並應註明作答之大題及其題號。

1. Geology is the study of the planet earth—the materials of which it is made, the processes that act on these materials, the products formed, and the history of the planet and its life forms since its origin.
2. Geophysics studies the physics of the earth, using the physical principles underlying such phenomena as seismic waves, heat flow, gravity, and magnetism to investigate planetary properties.
3. Geochemistry is concerned with the distribution and amounts of the chemical elements in minerals, ores, rock, soils, water, and the atmosphere, and the study of their atoms and ions.
4. Astrology is the branch of science concerned with objects beyond the earth.
5. Oceanography is the exploration and scientific study of the ocean and its phenomena, and is also called oceanology.

III. 填充題 (請用「一至兩個英文字」填入下列空格, 每空格 3 分, 共 30 分, 拼錯字每空格得 2 分) 請將答案填寫於答案卷上, 並應註明作答之大題及其題號。

- Based on the physiographic provinces of seafloor morphology, the major portion of the East China Sea belongs to (1).
- Most sediments on the seafloor of the East China Sea are (2) which were deposited under a set of environmental conditions that have since changed, but not buried by more recent sediments.
- Along the western coast of Taiwan, the tidal currents flow northward in the southern section and southward in the northern section during (3) tides.
- Over the last two decades, coastal erosion has become serious, especially along the Taiwan western coast; (4) have been positioned in most areas to protect the land.
- The impact of groundwater extraction for mariculture has caused a serious (5) problem along the littoral zone in Taiwan.
- Off southern Taiwan, the west Philippine Sea and the South China Sea are connected by the (6) located between Taiwan and Luzon.
- The predominant rock type of the Peng-hu (澎湖) islands is (7).
- Along the southwestern coast of Taiwan, some water bodies are partly or mostly separated from the open sea by sandbars; they are referred to as (8).
- The seafloor off the Kao-ping (高屏) river mouth exhibits a long, narrow, steep-walled undersea valley, which is called a (9).
- The largest ocean current flowing along the eastern Taiwan coast is known as the (10).