

INSTITUTO MILITAR DE ENGENHARIA

1993/1994 - Militares

INGLÊS

1a. QUESTÃO (Valor: 3,5)

TRADUZA

MATERIALS AND SOCIETY

Materials are all about us: they are engrained in our culture and thinking as well as in our very existence. In fact, materials have been so intimately related to the emergence of civilizations that they have given names to the Stone, Bronze and Iron Ages. Both naturally occurring and manufactured materials have become such an integral part of our lives that we often take them for granted, and yet materials rank with food, living space, energy, and information as basic resources of the human race. Materials are indeed the working substance of our society; they play a crucial role not only in our way of life but also in the well-being and security of nations.

But what are materials? How do we understand, manipulate, and use of them? Materials are, of course, a part of the mater in the universe, but more specifically they are substances whose properties make them useful in structures, machines, devices, or products.

Morris Cohen

From: Elements of Materials Science and Engineering, Lawrence Van Vlack,
Fifth Edition – Addison Wesley Publishing Company - 1985

2a. QUESTÃO (Valor: 3,5)

TRADUZA

EPOCHS, PERIODS AND ERAS

In geology the last 11,000 years are called the Recent epoch, and the Recent epoch together with the Pleistocene epoch make up the Quaternary period. Moreover, the Quaternary together with the Tertiary period make up the Cenozoic era. The Cenozoic is the only era in which periods are broken down into epochs. The other eras are only subdivided into periods. The era immediately preceding the Cenozoic is the Mesozoic, during which the Jurassic period represents the age of the dinosaurs, although these giant reptiles appeared slightly before the Jurassic and became extinct slightly later than the Jurassic in the Triassic and Cretaceous periods, respectively. In the still earlier Paleozoic era, the first sharks and reptiles appeared during the next to the last period, the Carboniferous, while in the last period of this era, the Permian, reptiles flourished. Preceding the Carboniferous period was the Devonian, and before that, from earliest to latest, the Cambrian, Ordovician, and Silurian periods.

From: Analytical Reading and Reasoning, Arthur Whimbey, Innovative Sciences, Inc., 1983.

3a. QUESTÃO (Valor: 3,0)

LEIA O TEXTO

PRELUDE TO THE ANCIENT EGYPTIAN PYRAMIDS

The land of Egypt is the child of the Nile. More than 4,000 miles above its mouth the White Nile rises in the swamps and lakes of equatorial Africa. After having covered half its course, it is joined by the Blue Nile in the Sudan and after another 200 miles the big stream receives its last tributary, the Atbara. In large bends the Nile then forces its way over five cataracts, the most northerly of which is at Assuan, the ancient Syene. From here onwards Egypt begins and the Nile valley becomes a narrow emerald band of vegetation through the surrounding desert until, more than 800 miles downstream, the waters fan out into the Delta.

Ten or twenty thousand years ago the increasing aridity of the Sahara forced the nomadic hunters into the Nile valley and the Delta where they developed agriculture and husbandry. The crops were wheat and barley and they tamed the sheep and a long-horned breed of cattle. The early inhabitants were segregated into tribes, each with its local god, often represented by a totem animal, such as the lion, the crocodile, the baboon, the ibis and many others. Later on, all these gods became the emblems of Egypt's provinces, or nomes, as they were called. In historic times there were forty-two nomes, twenty in the valley and twenty-two in the Delta.

From: The Riddle of the Pyramids, Kurt Mendelssohn, ed. Thames and Hudson, London, 1989.

UTILIZANDO UNICAMENTE AS INFORMAÇÕES CONTIDAS NO TEXTO ANTERIOR, ASSINALE COM UM "X" A ÚNICA OPÇÃO QUE RESPONDE CORRETAMENTE À PERGUNTA FORMULADA.

1. O tema principal do texto versa sobre:
 - () a lenda do nascimento do Egito
 - () um descendente do Nilo
 - () as diferenças entre o Egito antigo e o atual
 - () parte da história do Egito

2. A organização inicial dos habitantes da região do vale do Nilo pode ser assim descrita:
 - () os habitantes eram distribuídos em tribos, cada uma com seu próprio deus
 - () a população era dividida em tribos, segundo as regiões em que predominavam determinados animais selvagens
 - () algumas tribos cuidavam da agricultura enquanto outras ocupavam-se da caça e pesca
 - () a população africana foi dividida em 42 províncias

3. De acordo com o texto, pode-se afirmar que:
 - () o rio Nilo Branco nasce no Egito
 - () o Nilo recebe três afluentes no Sudão
 - () o Nilo Branco é chamado de Nilo Azul, do Sudão até o Egito
 - () o Nilo Branco nasce numa região de pântanos e lagos

4. Eram chamados "nomes":
 - () os animais selvagens da região do Nilo
 - () os deuses locais
 - () as províncias do Egito
 - () os emblemas das províncias

5. Após receber as águas do seu último afluente, o Nilo:

- () chega ao seu delta 200 milhas abaixo
- () serpenteia pelo deserto e sofre cinco quedas d'água, a mais espetacular em Assuan
- () passa por cinco cataratas e entra no Egito
- () avança pelo deserto, passando pelas antigas regiões de Assuan e Syene

6. As atividades de subsistência desenvolvidas pelos caçadores nômades resumiam-se a:

- () agricultura e criação de aves para as tribos
- () cultura de milho, trigo e criação de ovelhas e porcos
- () domesticação do gado e colheitas dos grãos, sem preocupação com a agricultura
- () cultura de trigo e cevada e pecuária rudimentar