

## CSS English Chapter 4 Online Entry Test

Sr	Questions	Answers Choice
1	<p><b>Q-6.</b> Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus the hydrosphere permits organic existence. The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about 9 per cent, whereas most liquids contract on cooling. For this reason, ice floats on water bodies instead of sinking to the bottom. If the ice sank, the hydrosphere would soon be frozen solidly except for a thin layer of surface melt water during the summer season. Thus, all aquatic life would be destroyed and the interchange of warm cold currents, which moderates climate, would be notably absent. Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia. This characteristic enables the oceans to absorb and store vast quantities of heat, thereby often preventing climatic extremes in addition water dissolve more substances than any other liquid. It is this characteristic which helps make oceans a great storehouse for minerals which have been washed down from the continents. In several areas of the world these minerals are being commercially exploited. Solar evaporation of salt is widely practised, potash is extracted from the Dead Sea, and magnesium is produced from sea water along the American Gulf Coast.</p> <p>vi. The author organises the passage by?</p>	<p>A. Comparison and contrast  B. Juxtaposition of true and untrue ideas  C. General statements followed by examples  D. Hypothesis and proof  E. Definition of key terms</p>
2	<p><b>Q-7.</b> Observe the dilemma of the fungus: it is a plant, but it possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophyllous fungus must look elsewhere for an energy supply. It finds it in those other plants which, having received their energy free from the sun, relinquish it at some point in their cycle either to animals (like us humans) or to fungi. In this search for energy the fungus has become the earth's major source of not and decay. Wherever you see mold forming on a piece of bread, or a pile of leaves turning to compost, or a blown-down tree becoming pulp on the ground, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants which contain resins that are toxic to fungi will last indefinitely; specimens of the redwood, for instance, can still be found resting on the forest floor centuries after having been blown down.</p> <p>iv. The author is primarily concerned with?</p>	<p>A. Warning people of the dangers of fungi  B. Writing a humorous essay on fungi  C. Relating how most plants use solar energy  D. Describing the actions of fungi  E. Explaining the long life of some redwoods</p>
3	<p><b>Q-1.</b> One phase of the business cycle is the expansion phase. This phase is a twofold one, including recovery and prosperity. During the recovery period there is ever-growing expansion of existing facilities, and new facilities for production are created. More businesses are created and older ones expanded. Improvements of various kinds are made. There is an ever-increasing optimism about the future of economic growth. Much capital is invested in machinery or "heavy" industry. More labour is employed. More raw materials are required. As one part of the economy develops, other parts are affected. For example a great expansion in automobiles results in an expansion of the steel, glass and rubber industries. Roads are required; thus the cement and machinery industries are stimulated. Demand for labour and materials results in greater prosperity for workers and suppliers of raw materials, including farmers. This increases purchasing</p>	<p>A. Public funds are designated for the construction of new highways designed to stimulate tourism.  B. Industrial firms allocate monies for the purchase of machine tools.  C. The prices of agricultural commodities are increased at the producer level  D. Full employment is achieved at all</p>

power and the volume of goods bought and sold. Thus prosperity is diffused among the various segments of the population. This prosperity period may continue to rise and rise without an apparent end. However, a time comes when this phase reaches a peak and stops spiralling upwards. This is the end of the expansion phase.

- D. Full employment is achieved at all levels of the economy.
- E. As technology advance innovative businesses replace antiquated firms.

i. Which of the following statements is the best example of the optimism mentioned in line 4 of the passage as being part of the expansion phase?

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Q-6. Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus the hydrosphere permits organic existence. The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about 9 per cent, whereas most liquids contract on cooling. For this reason, ice floats on water bodies instead of sinking to the bottom. If the ice sank, the hydrosphere would soon be frozen solidly except for a thin layer of surface melt water during the summer season. Thus, all aquatic life would be destroyed and the interchange of warm cold currents, which moderates climate, would be notably absent. Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia. This characteristic enables the oceans to absorb and store vast quantities of heat, thereby often preventing climatic extremes in addition water dissolve more substances than any other liquid. It is this characteristic which helps make oceans a great storehouse for minerals which have been washed down from the continents. In several areas of the world these minerals are being commercially exploited. Solar evaporation of salt is widely practised, potash is extracted from the Dead Sea, and magnesium is produced from sea water along the American Gulf Coast.

- A. Responsible for all forms of life
- B. Able to modify weather
- C. A source of natural resources
- D. In danger of freezing over
- E. The part of the earth covered by water

iv. According to the passage the hydrosphere is NOT

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Q-4. Both plants and animals of many sorts show remarkable changes in form, structure, growth habits, and even mode of reproduction in becoming adapted to different climatic environment, types of food supply, or mode of living. This divergence in response to evolution is commonly expressed by altering the form and function of some part or parts of the organism, the original identity of which is clearly discernible. For example, the creeping foot of the snail is seen in related marine pteropods to be modified into a flapping organ useful for swimming, and is changed into prehensile arms that bear suckorial disks in the squids and other cephalopods. The limbs of various mammals are modified according to several different modes of life—for swift running (cursorial) as in the horse and antelope, for swinging in trees (arboreal) as in the monkeys, for digging (fossorial) as in the moles and gophers, for flying (volant) as in the bats, for swimming (aquatic) as in the seals, whales, and dolphins, and for other adaptations, the structures or organs that show main change in connection with this adaptive divergence are commonly identified readily as homologous, in spite of great alterations. Thus, the finger and wrist bones of a bat and whale, for instance, have virtually nothing in common except that they are definitely equivalent elements of the mammalian limb.

ii. The author provides information that would answer which of the following question?

- A. I only
- B. II only
- C. I and II only
- D. I and III only
- E. I, II, and III

- I. What factors cause change in organisms?
- II. What is the theory of evolution?
- III. How are horses' legs related to seals' flippers?

Q-2. The history of mammals dates back at least to Triassic time. Development was retarded, however, until the sudden acceleration of evolutionary change that occurred in the oldest Paleocene. This led in Eocene time to increase in average size, larger mental capacity, and special adaptations for different modes of life. In the Oligocene Epoch, there was further improvement, with appearance of some new lines and extinction of others. Miocene and Pliocene time was marked by culmination of several groups and continued approach toward modern characters. The peak of the career of mammals in variety and average large size was attained in the Miocene.

The adaptation of mammals to almost all possible modes of life parallels that of the reptiles in Mesozoic time, and except for greater intelligence, the mammals do not seem to have done much better than corresponding reptilian forms. The bat is doubtless a better flying animal than the pterosaur, but the dolphin horse and the antelope must excel any of the dinosaurs. The tyrannosaur was a more ponderous

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and powerful carnivore than any flesh-eating mammal, but the lion or tiger is probably a more efficient and dangerous beast of prey because of a superior brain. The significant point to observe is that different branches of the mammals gradually fitted themselves for all sorts of life, grazing on the plains and able to run swiftly (horse, deer, bison), living in rivers and swamps (hippopotamus, beaver), dwelling in trees (sloth, monkey) digging underground (mole, rodent), feeding on flesh in the forest (tiger) and on the plain (wolf), swimming in the sea (dolphin, whale, seal) and flying in the air (bat). Man is able by mechanical means to conquer the physical world and to adapt himself to almost any set of conditions.

This adaptation produces gradual changes of form and structure. It is biologically characteristic of the youthful, plastic stage of a group. Early in its career, an animal assemblage seems to possess capacity for change, which, as the unit becomes old and fixed disappears. The generalised types of organisms retain longest the ability to make adjustments when required, and it is from them that new, fecund stocks take origin - certainly not from any specialised end-products. So, in the mammals we witness the birth plastic spread in many directions, increasing specialisation, and in some branches, the extinction which we have learned from observation of the geologic record of life is a characteristic of the evolution of life.

i. Which of the following would be the most appropriate title for the passage?

- A. From Dinosaur to Man
- B. Adaptation and Extinction
- C. The Superiority of Mammals
- D. The Geologic Life Span
- E. Man, Conqueror of the Physical World

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Q-3. For me, scientific knowledge is divided into mathematical sciences, natural sciences dealing with the natural world (physical and biological sciences), and sciences dealing with mankind (psychology, sociology, all the sciences of cultural achievements, every kind of historical knowledge). Apart from these sciences is philosophy, about which we will talk shortly. In the first place, all this is pure or theoretical knowledge sought only for the purpose of understanding in order to fulfil the need to understand that is intrinsic and comsubstantial to man. What distinguishes man from animal is that he knows and needs to know. If man did not know that the world existed, and that the world was of a certain kind, that he was in the world and that he himself was of a certain kind, he wouldn't be man. The technical aspects of applications of knowledge are equally necessary for man and are of the greatest importance, because they also contribute to defining him as man and permit him to pursue a life increasingly more truly human.

But even while enjoying the results of technical progress, he must defend the primacy and autonomy of pure knowledge. Knowledge sought directly for its practical applications will have immediate and foreseeable success, but not the kind of important result whose revolutionary scope is in large part unforeseen, except by the imagination of the Utopians. Let me recall well-known example. If the Greek mathematicians had not applied themselves to the investigation of conic sections, zealously and without the least suspicion that it might someday be useful it would not have been possible centuries later to navigate far from shore. The first men to study the nature of electricity could not imagine that their experiments, carried on because of mere intellectual curiosity, would eventually lead to modern electrical technology without which we can scarcely conceive of contemporary life. Pure knowledge is valuable for its own sake, because the human spirit cannot resign itself to ignorance but in addition it is the foundation for practical results that would not have been reached if this knowledge had not been sought disinterestedly.

i. The author points out that the Greeks who studied conic sections?

- A. Invented modern mathematical applications
- B. Were interested in navigation
- C. Were unaware of the value of their studies
- D. Worked with electricity
- E. Were forced to resign themselves to failure

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**Q-7. Observe the dilemma of the fungus: it is a plant, but it possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophyllous fungus must look elsewhere for an energy supply. It finds it in those other plants which, having received their energy free from the sun, relinquish it at some point in their cycle either to animals (like us humans) or to fungi.**

**In this search for energy the fungus has become the earth's major source of rot and decay. Wherever you see mold forming on a piece of bread, or a pile of leaves turning to compost, or a blown-down tree becoming pulp on the ground, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants which contain resins that are toxic to fungi will last indefinitely; specimens of the redwood, for instance, can still be found resting on the forest floor centuries after having been blown down.**

ii. The passage states all the following about fungi EXCEPT?

- A. They are responsible for the decomposition of much plant life.
- B. They cannot live completely apart from other plants.
- C. They are poisonous to resin-producing plants.
- D. They are vastly different from other plants.
- E. They cannot produce their own store of energy

Q-5. Rocks which have solidified directly from molten materials are called igneous rocks. Igneous rocks are commonly referred to as primary rocks because they are the original source of material found in sedimentaries and metamorphics. Igneous

the original source of material found in sedimentaries and metamorphics. Igneous rocks compose the greater part of the earth's crust, but they are generally covered at the surface by a relatively thin layer of sedimentary or metamorphic rocks. Igneous rocks are distinguished by the following characteristics: (1) they contain no fossils; (2) they have no regular arrangement of layers; and (3) they are nearly always made up of crystals.

Sedimentary rocks are composed largely of minute fragments derived from the disintegration of existing rocks and in some instances from the remains of animal As sediments are transported. Individual fragments are assorted according to size. Distinct layers of such sediments as gravels, sand, and clay build up as they are deposited by water and occasionally wind. These sediments vary in size with the material and the power of the eroding agent. Sedimentary materials are laid down in layers called strata.

- 9 When sediments harden into sedimentary rocks, the names applied to them change to indicate the change in physical state. Thus, small stones and gravel cemented together are known as conglomerates; cemented sand becomes sandstone; and hardened clay becomes shale. In addition to these, Other sedimentary rocks such as limestone frequently result from the deposition of dissolved material. The ingredient parts are normally precipitated by organic substance such as shells of clams or hard skeletons of other marine life. Both igneous and sedimentary rocks may be changed by pressure, heat, solution, or cementing action. When individual grains from existing rocks tend to deform and interlock they are called metamorphic rocks. For example granite, an igneous rock, may be metamorphosed into a gneiss or a schist. Limestone, a sedimentary rock, when subjected to heat and pressure may become marble, a metamorphic rock. Shale under pressure becomes slate.

- A. Shale
- B. Gravel
- C. Sand
- D. Limestone
- E. Schist

ii. All of the following are sedimentary rocks EXCEPT.

Q-3. For me, scientific knowledge is divided into mathematical sciences, natural sciences dealing with the natural world (physical and biological sciences), and sciences dealing with mankind (psychology, sociology, all the sciences of cultural achievements, every kind of historical knowledge). Apart from these sciences is philosophy, about which we will talk shortly. In the first place, all this is pure or theoretical knowledge sought only for the purpose of understanding in order to fulfil the need to understand that is intrinsic and comsubstantial to man. What distinguishes man from animal is that he knows and needs to know. If man did not know that the world existed, and that the world was of a certain kind, that he was in the world and that he himself was of a certain kind, he wouldn't be man. The technical aspects of applications of knowledge are equally necessary for man and are of the greatest importance, because they also contribute to defining him as man and permit him to pursue a life increasingly more truly human.

- 10 But even while enjoying the results of technical progress, he must defend the primacy and autonomy of pure knowledge. Knowledge sought directly for its practical applications will have immediate and foreseeable success, but not the kind of important result whose revolutionary scope is in large part unforeseen, except by the imagination of the Utopians. Let me recall well-known example. If the Greek mathematicians had not applied themselves to the investigation of conic sections, zealously and without the least suspicion that it might someday be useful it would not have been possible centuries later to navigate far from shore. The first men to study the nature of electricity could not imagine that their experiments, carried on because of mere intellectual curiosity, would eventually lead to modern electrical technology without which we can scarcely conceive of contemporary life. Pure knowledge is valuable for its own sake, because the human spirit cannot resign itself to ignorance but in addition it is the foundation for practical results that would not have been reached if this knowledge had not been sought disinterestedly.

- A. Allows the human race to progress technically
- B. Encompasses both the physical and social sciences
- C. Demonstrates human vulnerability
- D. Defines man's essential humanity
- E. Has increased as our knowledge of the world has grown

iii. It can be inferred from the passage that to the author man's need to know is chiefly important in that it?

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- A. Inclusion of concrete examples

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down in layers called strata.

When sediments harden into sedimentary rocks, the names applied to them change to indicate the change in physical state. Thus, small stones and gravel cemented together are known as conglomerates; cemented sand becomes sandstone; and hardened clay becomes shale. In addition to these, other sedimentary rocks such as limestone frequently result from the deposition of dissolved material. The ingredient parts are normally precipitated by organic substance such as shells of clams or hard skeletons of other marine life. Both igneous and sedimentary rocks may be changed by pressure, heat, solution, or cementing action. When individual grains from existing rocks tend to deform and interlock they are called metamorphic rocks. For example granite, an igneous rock, may be metamorphosed into a gneiss or a schist. Limestone, a sedimentary rock, when subjected to heat and pressure may become marble, a metamorphic rock. Shale under pressure becomes slate.

- B. Classification and discussion
- C. Comparison and contrast
- D. Observation and hypothesis
- E. Cause and effect

vi. Which of the following methods is NOT used by the author?

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Q-4. Both plants and animals of many sorts show remarkable changes in form, structure, growth habits, and even mode of reproduction in becoming adapted to different climatic environment, types of food supply, or mode of living. This divergence in response to evolution is commonly expressed by altering the form and function of some part or parts of the organism, the original identity of which is clearly discernible. For example, the creeping foot of the snail is seen in related marine pteropods to be modified into a flapping organ useful for swimming, and is changed into prehensile arms that bear suckorial disks in the squids and other cephalopods. The limbs of various mammals are modified according to several different modes of life—for swift running (cursorial) as in the horse and antelope, for swinging in trees (arboreal) as in the monkeys, for digging (fossorial) as in the moles and gophers, for flying (volant) as in the bats, for swimming (aquatic) as in the seals, whales, and dolphins, and for other adaptations, the structures or organs that show main change in connection with this adaptive divergence are commonly identified readily as homologous, in spite of great alterations. Thus, the finger and wrist bones of a bat and whale, for instance, have virtually nothing in common except that they are definitely equivalent elements of the mammalian limb.

- A. Adaptive Divergence
- B. Evolution
- C. Unusual Structures
- D. Changes in Organs
- E. Our Changing Bodies

i. Which of the following is the most appropriate title for the passage, based on its content?

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Q-2. The history of mammals dates back at least to Triassic time. Development was retarded, however, until the sudden acceleration of evolutionary change that occurred in the oldest Paleocene. This led in Eocene time to increase in average size, larger mental capacity, and special adaptations for different modes of life. In the Oligocene Epoch, there was further improvement, with appearance of some new lines and extinction of others. Miocene and Pliocene time was marked by culmination of several groups and continued approach toward modern characters. The peak of the career of mammals in variety and average large size was attained in the Miocene.

The adaptation of mammals to almost all possible modes of life parallels that of the reptiles in Mesozoic time, and except for greater intelligence, the mammals do not seem to have done much better than corresponding reptilian forms. The bat is doubtless a better flying animal than the pterosaur, but the dolphin horse and the antelope must excel any of the dinosaurs. The tyrannosaur was a more ponderous and powerful carnivore than any flesh-eating mammal, but the lion or tiger is probably a more efficient and dangerous beast of prey because of a superior brain. The significant point to observe is that different branches of the mammals gradually fitted themselves for all sorts of life, grazing on the plains and able to run swiftly (horse, deer, bison), living in rivers and swamps (hippopotamus, beaver), dwelling in trees (sloth, monkey) digging underground (mole, rodent), feeding on flesh in the forest (tiger) and on the plain (wolf), swimming in the sea (dolphin, whale, seal) and flying in the air (bat). Man is able by mechanical means to conquer the physical world and to adapt himself to almost any set of conditions.

This adaptation produces gradual changes of form and structure. It is biologically characteristic of the youthful, plastic stage of a group. Early in its career, an animal assemblage seems to possess capacity for change, which, as the unit becomes old and fixed disappears. The generalised types of organisms retain longest the ability to make adjustments when required, and it is from them that new, fecund stocks take origin - certainly not from any specialised end-products. So, in the mammals we witness the birth plastic spread in many directions, increasing specialisation, and in some branches, the extinction which we have learned from observation of the geologic record of life is a characteristic of the evolution of life.

iii. It can be inferred from the passage that the pterosaur

- A. Resembled the bat
- B. Was a Mesozoic mammal
- C. Was a flying reptile
- D. Lived in the sea
- E. Evolved during the Miocene period

Q-5.Rocks which have solidified directly from molten materials are called igneous rocks.Igneous rocks are commonly referred to as primary rocks because they are the original source of material found in sedimentaries and metamorphics.Igneous rocks compose the greater part of the earth's crust,but they are generally covered at the surface by a relatively thin layer of sedimentary or metamorphic rocks.Igneous rocks are distinguished by the following characteristics:(1) they contain no fossils;(2) they have no regular arrangement of layers;and (3) they are nearly always made up of crystals.

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When sediments harden into sedimentary rocks,the names applied to them change to indicate the change in physical state.Thus,small stones and gravel cemented together are known as conglomerates;cemented sand becomes sandstone;and hardened clay becomes shale.In addition to these,Other sedimentary rocks such as limestone frequently result from the deposition of dissolved material.The ingredient parts are normally precipitated by organic substance such as shells or hard skeletons of other marine life. Both igneous and sedimentary rocks may be changed by pressure,heat,solution,or cementing action.When individual grains from existing rocks tend to deform and interlock they are called metamorphic rocks.For example granite,an igneous rock,may be metamorphosed into a gneiss or a schist.Limestone,a sedimentary rock,when subjected to heat and pressure may become marble,a metamorphic rock.Shale under pressure becomes slate.

- A. Meditative
- B. Objective
- C. Ironc
- D. Concerned
- E. Bombastic

vii.The author's tone in the passage can best be described as

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rocks.Igneous rocks are commonly referred to as primary rocks because they are the original source of material found in sedimentaries and metamorphics.Igneous rocks compose the greater part of the earth's crust,but they are generally covered at the surface by a relatively thin layer of sedimentary or metamorphic rocks.Igneous rocks are distinguished by the following characteristics:(1) they contain no fossils;(2) they have no regular arrangement of layers;and (3) they are nearly always made up of crystals.

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- A. I only
- B. III only
- C. I and II only
- D. II and III only
- E. I,II,and III

v.The passage contains information that would answer which of the following question?

- I.Which elements form igneous rocks?
- II.What produces sufficient pressure to alter a rock?
- III.Why is marble called a metamorphic rock?

Q-1,One phase of the business cycle is the expansion phase,This phase is a twofold one,including recovery and prosperity,During the recovery period there is ever-growing expansion of existing facilities,and new facilities for production are created.more businesses are created and older ones expanded.Improvements of various kinds are made.There is an ever-increasing optimism about the future of economic growth.Much capital is invested in machinery or "heavy" industry.More labour is employed.More raw materials are required.As one part of the economy develops.other parts are affected.For example a great expansion in automobiles results in an expansion of the steel glass and rubber industries.Boats are

- A. Union demands may also have an effect on business cycles.
- B. Some industries are,by their very nature,cyclical having regular phases of expansion and recession.

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results in an expansion of the steel, glass and rubber industries. Roads are required; thus the cement and machinery industries are stimulated. Demand for labour and materials results in greater prosperity for workers and suppliers of raw materials, including farmers. This increases purchasing power and the volume of goods bought and sold. Thus prosperity is diffused among the various segments of the population. This prosperity period may continue to rise and rise without an apparent end. However, a time comes when this phase reaches a peak and stops spiralling upwards. This is the end of the expansion phase.

iii. Which of the following statements would be most likely to begin the paragraph immediately following the passage?

C. Inflation is a factor that must be taken into consideration in any discussion of the expansion phase.

D. The farmer's role during the expansion phase is of vital importance.

E. The other phase of the business cycle is called the recession phase.

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**Q-7. Observe the dilemma of the fungus: it is a plant, but it possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophyllous fungus must look elsewhere for an energy supply. It finds it in those other plants which, having received their energy free from the sun, relinquish it at some point in their cycle either to animals (like us humans) or to fungi.**

**In this search for energy the fungus has become the earth's major source of not and decay. Wherever you see mold forming on a piece of bread, or a pile of leaves turning to compost, or a blown-down tree becoming pulp on the ground, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants which contain resins that are toxic to fungi will last indefinitely; specimens of the redwood, for instance, can still be found**

**resting on the forest floor centuries after having been blown down.**

iii. The author's statements that "you are watching a fungus eating" is best described as?

A. Figurative

B. Ironical

C. Parenthetical

D. Erroneous

E. Contradictory

18

Q-4. Both plants and animals of many sorts show remarkable changes in form, structure, growth habits, and even mode of reproduction in becoming adapted to different climatic environments, types of food supply, or mode of living. This divergence in response to evolution is commonly expressed by altering the form and function of some part or parts of the organism, the original identity of which is clearly discernible. For example, the creeping foot of the snail is seen in related marine pteropods to be modified into a flapping organ useful for swimming, and is changed into prehensile arms that bear suckorial disks in the squids and other cephalopods. The limbs of various mammals are modified according to several different modes of life—for swift running (cursorial) as in the horse and antelope, for swinging in trees (arboreal) as in the monkeys, for digging (fossorial) as in the moles and gophers, for flying (volant) as in the bats, for swimming (aquatic) as in the seals, whales, and dolphins, and for other adaptations, the structures or organs that show main change in connection with this adaptive divergence are commonly identified readily as homologous, in spite of great alterations. Thus, the finger and wrist bones of a bat and whale, for instance, have virtually nothing in common except that they are definitely equivalent elements of the mammalian limb.

iii. Which of the following words could best be substituted for "homologous" in passage without substantially changing the author's meaning?

A. Altered

B. mammalian

C. Corresponding

D. Divergent

E. Tactile

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**Q-6. Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus the hydrosphere permits organic existence.**

**The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about 9 per cent, whereas most liquids contract on cooling. For this reason, ice floats on water bodies instead of sinking to the bottom. If the ice sank, the hydrosphere would soon be frozen solidly except for a thin layer of surface melt water during the summer season. Thus, all aquatic life would be destroyed and the interchange of warm cold currents, which moderates climate, would be notably absent. Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia. This characteristic enables the oceans to absorb and store vast quantities of heat, thereby often preventing climatic extremes in addition water dissolves more substances than any other liquid. It is this characteristic which helps**

A. Dogmatic

B. Dispassionate

C. Speculative

D. Biased

E. Hortatory

make oceans a great storehouse for minerals which have been washed down from the continents. In several areas of the world these minerals are being commercially exploited. Solar evaporation of salt is widely practised, potash is extracted from the Dead Sea, and magnesium is produced from sea water along the American Gulf Coast.

v. The author's tone in the passage can best be described as?

Q-2. The history of mammals dates back at least to Triassic time. Development was retarded, however, until the sudden acceleration of evolutionary change that occurred in the oldest Paleocene. This led in Eocene time to increase in average size, larger mental capacity, and special adaptations for different modes of life. In the Oligocene Epoch, there was further improvement, with appearance of some new lines and extinction of others. Miocene and Pliocene time was marked by culmination of several groups and continued approach toward modern characters. The peak of the career of mammals in variety and average large size was attained in the Miocene.

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This adaptation produces gradual changes of form and structure. It is biologically characteristic of the youthful, plastic stage of a group. Early in its career, an animal assemblage seems to possess capacity for change, which, as the unit becomes old and fixed disappears. The generalised types of organisms retain longest the ability to make adjustments when required, and it is from them that new, fecund stocks take origin - certainly not from any specialised end-products. So, in the mammals we witness the birth plastic spread in many directions, increasing specialisation, and in some branches, the extinction which we have learned from observation of the geologic record of life is a characteristic of the evolution of life.

iv. According to the passage, the greatest number of forms of mammalian life is found in the.

- A. Triassic period
- B. Eocene period
- C. Oligocene period
- D. Pliocene period
- E. Miocene period

Q-5. Rocks which have solidified directly from molten materials are called igneous rocks. Igneous rocks are commonly referred to as primary rocks because they are the original source of material found in sedimentaries and metamorphics. Igneous rocks compose the greater part of the earth's crust, but they are generally covered at the surface by a relatively thin layer of sedimentary or metamorphic rocks. Igneous rocks are distinguished by the following characteristics: (1) they contain no fossils; (2) they have no regular arrangement of layers; and (3) they are nearly always made up of crystals.

Sedimentary rocks are composed largely of minute fragments derived from the disintegration of existing rocks and in some instances from the remains of animal. As sediments are transported. Individual fragments are assorted according to size. Distinct layers of such sediments as gravels, sand, and clay build up as they are deposited by water and occasionally wind. These sediments vary in size with the material and the power of the eroding agent. Sedimentary materials are laid down in layers called strata.

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- A. Technical article for geologists
- B. Teaching manual accompanying an earth science text
- C. Pamphlet promoting conservation of natural resources
- D. Newspaper feature explaining how oil is found
- E. Nonfiction book explaining where to find the results of sedimentation

iii. The passage would be most likely to appear in a.

Q-6. Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus the hydrosphere permits organic existence. The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about

9 per cent, whereas most liquids contract on cooling. For this reason, ice floats on water bodies instead of sinking to the bottom. If the ice sank, the hydrosphere would soon be frozen solidly except for a thin layer of surface melt water during the summer season. Thus, all aquatic life would be destroyed and the interchange of warm cold currents, which moderates climate, would be notably absent.

Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia. This characteristic enables the oceans to absorb and store vast quantities of heat, thereby often preventing climatic extremes in addition water dissolves more substances than any other liquid. It is this characteristic which helps make oceans a great storehouse for minerals which have been washed down from the continents. In several areas of the world these minerals are being commercially exploited. Solar evaporation of salt is widely practised, potash is extracted from the Dead Sea, and magnesium is produced from sea water along the American Gulf Coast.

- A. I only
- B. II only
- C. I and II only
- D. II and III only
- E. I, II, and III

iii. Which of the following characteristics of water does the author mention in the passage?

I. Water expands when it is frozen.

II. Water is a good solvent.

III. Water can absorb heat.

**Q-7. Observe the dilemma of the fungus: it is a plant, but it possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophyllous fungus must look elsewhere for an energy supply. It finds it in those other plants which, having received their energy free from the sun, relinquish it at some point in their cycle either to animals (like us humans) or to fungi.**

**In this search for energy the fungus has become the earth's major source of rot and decay. Wherever you see mold forming on a piece of bread, or a pile of leaves turning to compost, or a blown-down tree becoming pulp on the ground, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants which contain resins that are toxic to fungi will last indefinitely; specimens of the redwood, for instance, can still be found resting on the forest floor centuries after having been blown down.**

- A. Unevolved
- B. Sporadic
- C. Enigmatic
- D. Parasitic
- E. Toxic

i. Which of the following words best describes the fungus as depicted in the passage?

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- A. They do not need oxygen
- B. Ice floats
- C. Water absorbs heat
- D. There are currents in the oceans
- E. Evaporation and condensation create a water cycle

mostly produced,peach is extracted from the Dead Sea,and magnesium is produced from sea water along the American Gulf Coast.

ii.According to the passage,fish can survive in the oceans because

Q-2.The history of mammals dates back at least to Triassic time.Development was retarded,however,until the sudden acceleration of evolutionary change that occurred in the oldest Paleocene.This led in Eocene time to increase in average size,larger mental capacity,and special adaptations for different modes of life.In the Oligocene Epoch,there was further improvement,with appearance of some new lines and extinction of others.Miocene and Pliocene time was marked by culmination of several groups and continued approach toward modern characters.The peak of the career of mammals in variety and average large size was attained in the Miocene.

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v.It can be inferred from the passage that the evidence the author uses in discussing the life of past time periods?

- A. Was developed by Charles Darwin
- B. Was uncovered by the author
- C. Has been negated by more recent evidence
- D. Was never definitely established
- E. Is based on fossil remains

Q-5.Rocks which have solidified directly from molten materials are called igneous rocks.Igneous rocks are commonly referred to as primary rocks because they are the original source of material found in sedimentaries and metamorphics.Igneous rocks compose the greater part of the earth's crust,but they are generally covered at the surface by a relatively thin layer of sedimentary or metamorphic rocks.Igneous rocks are distinguished by the following characteristics:(1) they contain no fossils;(2) they have no regular arrangement of layers;and (3) they are nearly always made up of crystals.

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iv.The relationship between igneous and sedimentary rocks may best be compared to the relationship between.

- A. Leaves and compost
- B. Water and land
- C. DNA and heredity
- D. Nucleus and cell wall
- E. Sand and clay

Q-3. For me, scientific knowledge is divided into mathematical sciences, natural sciences dealing with the natural world (physical and biological sciences), and sciences dealing with mankind (psychology, sociology, all the sciences of cultural achievements, every kind of historical knowledge). Apart from these sciences is philosophy, about which we will talk shortly. In the first place, all this is pure or theoretical knowledge sought only for the purpose of understanding in order to fulfil the need to understand that is intrinsic and substantial to man. What distinguishes man from animal is that he knows and needs to know. If man did not know that the world existed, and that the world was of a certain kind, that he was in the world and that he himself was of a certain kind, he wouldn't be man. The technical aspects of applications of knowledge are equally necessary for man and are of the greatest importance, because they also contribute to defining him as man and permit him to pursue a life increasingly more truly human.

But even while enjoying the results of technical progress, he must defend the primacy and autonomy of pure knowledge. Knowledge sought directly for its practical applications will have immediate and foreseeable success, but not the kind of important result whose revolutionary scope is in large part unforeseen, except by the imagination of the Utopians. Let me recall well-known example. If the Greek mathematicians had not applied themselves to the investigation of conic sections, zealously and without the least suspicion that it might someday be useful it would not have been possible centuries later to navigate far from shore. The first men to study the nature of electricity could not imagine that their experiments, carried on because of mere intellectual curiosity, would eventually lead to modern electrical technology without which we can scarcely conceive of contemporary life. Pure knowledge is valuable for its own sake, because the human spirit cannot resign itself to ignorance but in addition it is the foundation for practical results that would not have been reached if this knowledge had not been sought disinterestedly.

ii. The title below that best express the ideas of this passage is?

- A. Technical progress
- B. A Little Learning Is a Dangerous Thing
- C. Man's Distinguishing Characteristics
- D. Learning for its own sake
- E. The difference between science and Philosophy

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i. The primary purpose of the passage is to

- A. Differentiate between and characterise igneous and sedimentary rocks
- B. Explain the factors that may cause rocks to change in form
- C. Show how the scientific names of rocks reflect the rocks' composition
- D. Define and describe several diverse kinds of rocks
- E. Explain why rocks are basic parts of the earth's structure

Q-6. Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus the hydrosphere permits organic existence. The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about 9 per cent, whereas most liquids contract on

- A. Water has the ability to erode the

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cooling.for this reason,ice floats on water bodies instead of sinking to the bottom.If the ice sank,the hydrosphere would soon be frozen solidly except for a thin layer of surface melt water during the summer season,Thus,all aquatic life would be destroyed and the interchange of warm cold currents,which moderates climate,would be notably absent. Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia.This characteristic enables the oceans to absorb and store vast quantities of heat,thereby often preventing climatic extremes in addition water dissolve more substances than any other liquid.It is this characteristic which helps make oceans a great storehouse for minerals which have been washed down from the continents.In several areas of the world these minerals are being commercially exploited.Solar evaporation of salt is widely practised,potash is extracted from the Dead Sea,and magnesium is produced from sea water along the American Gulf Coast.

vii.Which of the following statements would be most likely to begin the paragraph immediately following the passage?

- land.  
B. Magnesium is widely used in metallurgical processes  
C. Now let us consider the great land masses.  
D. Another remarkable property of ice is its strength  
E. Droughts and flooding are two types of disasters associated with water.

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Q-1,One phase of the business cycle is the expansion phase,This phase is a twofold one,including recovery and prosperity,During the recovery period there is ever-growing expansion of existing facilities,and new facilities for production are created.more businesses are created and older ones expanded.Improvements of various kinds are made.There is an ever-increasing optimism about the future of economic growth.Much capital is invested in machinery or "heavy" industry.More labour is employed.More raw materials are required.As one part of the economy develops.other parts are affected.For example a great expansion in automobiles results in an expansion of the steel,glass and rubber industries.Roads are required;thus the cement and machinery industries are stimulated.Demand for labour and materials results in greater prosperity for workers and suppliers of raw materials,including farmers.this increases purchasing power and the volume of goods bought and sold.Thus prosperity is diffused among the various segments of the population.This prosperity period may continue to rise and rise without an apparent end.However,a time comes when this phase reaches a peak and stops spiralling upwards.This is the end of the expansion phase.

ii. It can be inferred from the passage that the author believes that.

- A. When consumers lose their confidence in the market,a recession follows  
B. Cyclical ends to business expansion are normal  
C. Luxury goods such as jewellery are unaffected by industrial expansion  
D. With sound economic policies,prosperity can become a fixed pattern  
E. The creation of new products is essential for prosperity

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Q-2.The history of mammals dates back at least to Triassic time.Development was retarded,however,until the sudden acceleration of evolutionary change that occurred in the oldest Paleocene.This led in Eocene time to increase in average size,larger mental capacity,and special adaptations for different modes of life.In the Oligocene Epoch,there was further improvement,with appearance of some new lines and extinction of others.Miocene and Pliocene time was marked by culmination of several groups and continued approach toward modern characters.The peak of the career of mammals in variety and average large size was attained in the Miocene.

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vi.With which of the following proverbial expressions about human existence would the author be most likely to agree?

- A. It's a cruel world.  
B. All the world's stage.  
C. A short life.but a merry one.  
D. Footprints in the sands of time.  
E. The more things change the more they remain the same.

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Q-4. Both plants and animals of many sorts show remarkable changes in form, structure, growth habits, and even mode of reproduction in becoming adapted to different climatic environment, types of food supply, or mode of living. This divergence in response to evolution is commonly expressed by altering the form and function of some part or parts of the organism, the original identity of which is clearly discernible. For example, the creeping foot of the snail is seen in related marine pteropods to be modified into a flapping organ useful for swimming, and is changed into prehensile arms that bear suckorial disks in the squids and other cephalopods. The limbs of various mammals are modified according to several different modes of life—for swift running (cursorial) as in the horse and antelope, for swinging in trees (arboreal) as in the monkeys, for digging (fossorial) as in the moles and gophers, for flying (volant) as in the bats, for swimming (aquatic) as in the sales, whales, and dolphins, and for other adaptations, the structures or organs that show main change in connection with this adaptive divergence are commonly identified readily as homologous, in spite of great alterations. Thus, the finger and wrist bones of a bat and whale, for instance, have virtually nothing in common except that they are definitely equivalent elements of the mammalian limb.

- A. Humorous
- B. Objective
- C. Patronising
- D. Esoteric
- E. Archaic

iv. The author's style can best be described as

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- A. Describe the properties and uses of water
- B. Illustrate the importance of conserving water
- C. Compare water with other liquids
- D. Reveal the extent of the earth's ocean masses

i. The author's main purpose in this passage is to

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- A. Paleocene, Miocene, Triassic, Mesozoic
- B. Paleocene, Triassic, Mesozoic, Miocene
- C. Miocene, Paleocene, Triassic, Mesozoic
- D. Mesozoic, Oligocene, Paleocene, Miocene
- E. Mesozoic, Paleocene, Eocene, Miocene

and fixed disappears. The generalised types of organisms retain longest the ability to make adjustments when required, and it is from them that new, fecund stocks take origin - certainly not from any specialised end-products. So, in the mammals we witness the birth plastic spread in many directions, increasing specialisation, and in some branches, the extinction which we have learned from observation of the geologic record of life is a characteristic of the evolution of life. ii. It can be inferred from the passage that the chronological order of the geologic periods is.

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