

كلية العلوم
جامعة المنصورة
التاريخ ٢٠١٥/١٢/٣٠

مقرر / حقوق الإنسان
كود المقرر / ١٠٣
زمن الإمتحان / ساعتان
المستوى الأول (جميع البرامج)

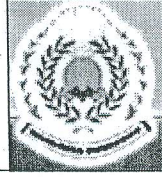
أجب على الأسئلة الآتية:-

السؤال الأول:- ضع علامة صح أو علامة خطأ بدون تعليل

- ١- صدر الإعلان العالمي لحقوق الإنسان في العاشر من ديسمبر عام ١٩٥٨.
- ٢- يعتبر رضاء المجني عليه سبباً لإباحة الفعل في القتل بدافع الرحمة .
- ٣- تعد حرية الرأي هي الحرية الأم بالنسبة لطائفة الحريات المعنوية .
- ٤- يعد اتخاذ الدولة ديناً رسمياً لها عائقاً أمام الحرية الدينية .
- ٥- حق التقاضي يمكن الشخص من اقتضاء حقه عن طريق العدالة الخاصة .

السؤال الثاني:- اكتب في موضوع واحد فقط مما يلي :-

- ١- تكلم عن حق التقاضي مبيناً ماهيته ومصادره والضمانات اللازمة له.
- ٢- تكلم عن حق الإنسان في الحياة في الإسلام .



First question (21 marks)

In the following systems:

1: Tetragonal system 2: Orthorhombic system 3: cubic system

Write on the following:

A: The crystallographic elements

B: The symmetry elements of the holosymmetrical class

C: The crystal forms in the holosymmetrical class.

Second question (9 marks)

Write on the following:

1: crystal aggregates

2: The interfacial angle and its law

3: crystal habit

Third question (21 marks)

Write on the following:

1: The origin of minerals from magma

2: The magnetism, electricity and radioactivity of minerals

3: The chemical classification of minerals and two minerals from each class

Fourth question (9 marks)

Write on the following:

1: Specific gravity of minerals

2: Pseudomorphism of minerals

3: Moh's scale of hardness



Answer the Following Questions

1a) How many grams of O_2 are required to react with 0.3 mol of Al to give Al_2O_3 ? (O = 16, Al- 27) **(5 Marks)**

b) How many ml of 17 M NaOH must be diluted to 500 ml to make a 0.75 M solution ? **(5 Marks)**

c) The composition of acid is 49.3% C, 6.9% H and 43.8% O (by mass), and the M.wt is 146 amu. What is the molecular formula ? **(5 Marks)**

2. Put the mark () for the right sentences and (X) for the wrong with writing it's corrections : **(20 Marks)**

- i) No two electrons in one atom have different set of q.nos
- ii) The isoelectronic species have the same no of protons .
- iii) In the resonating structures, the atoms not remains in fixed positions .
- iv) Most of the known elements are metals.
- v) The % of each element in a compound depend on the amount of compound
- vi) Mendeleev arranged the elements in the order of decreasing atomic no.
- vii) The Limiting reactant consumed completely at first.
- viii) The max. no of electrons in s,p,d and f subshells is $(4l + 1)$
- xi) The hardness of CaO is higher than of SrO
- x) The addition of electron to anion and the release of electron from atom are endothermic processes.

3. Complete the following : **(15 Marks)**

- vi) The for q.nos of the last in a $4d^6$ are
- vii) The electronic config. Of $Z=31$ is, it is roomed in Gp and period
- viii) The ability of anion to deformation α and
- ix) In the Lyman series of H-spectrum, the third line due to the transition of e from the to the energy levels.
- x) The periodic table contains periods; the longest period is and contain elements

4.a) State the following : **(10 Marks)**

Hund's rule – Pauli Exclusion principle

b) Balance the following equations :





Question One:- Complete the following:

(20 Marks)

- The classification of clastic sedimentary rocks; the...(1)...and ..(2)..are made mostly of gravels, the...(3)...are made mostly of sand, and the...(4)... are made mostly of mud.
- The inner Core is composed mainly of...(5)...
- Common examples of Organic –rich sedimentary rocks are ...(6)..., ...(7)...
- The...(8)... Rocks are produced by processes operating mainly at the Earth's surface.
- Rocks formed from the cooling and solidification of magma deep within the crust are termed ..(9)..
- The layering within metamorphic rocks is called ..(10)..
- The texture of the rocks may be ..(11)..when magma erupted at the surface.
- The regional metamorphism known as...(12)...metamorphism. dynamic
- The deep-seated plutonic rocks can be exposed at the surface by some(13)... forces.
- The intrusive rocks have(14)... contacts with the country rocks.
- The....(15)... and ...(16).... are common intrusive felsic igneous rocks.
- Some common mafic igneous rocks include fine grained ...(17)... and coarse grained(18).....
- ...(19)... and ...(20)...are intermediate igneous rocks.

Question Two:- Tick .(√) or (×) and correct:

(20 Marks)

- 1- Slate is a foliated metamorphic rock, originating from shale. ()
- 2- A sthenosphere extends at about 700km.()
- 3- The rock containing the inclusion is older. ()
- 4-Middle and lower Mantle extends at about 3900 km. ()
- 5-Basalt is much more common than gabbro.()
- 6- Marble is generally non foliated metamorphic rock. ()
- 7-Predotite is the most common mafic rock in the Earth's crust. ()
- 8- Where a fault cuts across a sequence of sedimentary rock, the fault is older than the rocks it cuts. ()
- 9-Andesite is a common fine grained extrusive igneous rocks. ()
- 10-Breccias are dominantly composed of rounded gravel and conglomerate are composed of dominantly angular gravel. ()
- 11-Mudrocks are sedimentary rocks composed of at least 50% silt and clay-sized particles. ()
- 12- The geologic Time Scale is divided into a number of units arranged from the largest units to the smaller units as; Eons, Eras, Epochs and Periods. ()
- 13- Calcite and aragonite are Carbonate sedimentary rocks. ()
- 14- The change of Orthoclase to kaolinite is a result of mechanical weathering. ()
- 15- Sulfuric acid produced by weathering of pyrite. ()
- 16-The physical forces that break rock into smaller pieces without altering the rock's mineral composition is considered as chemical weathering. ()

Question Three: Write on:

(20 Marks)

- 1-Four of primary structures in sedimentary rocks. (3 marks)
- 2-Four examples of metamorphic rocks. (3 marks)
- 3-Three of the basic metamorphic textures. (3 marks)
- 4-Three types of Mechanical and chemical weathering. (5 marks)
- 5- The factors influencing on the rate of weathering. (3 marks)
- 6- The types of unconformities. (3 marks)



Answer the following questions

(1-a) Use the dimensional analysis to obtain the constants C_1 and C_2 of the following relationship. Consider x is a distance; t is a time, [15]

$$X = C_1 \sin(2\pi t) + C_2 t^2$$

(1-b) A handful of copper shot is heated to 90°C and then dropped into 80g of water at 10°C . The final temperature of the mixture is 18°C . $C_w = 1 \text{ Cal/g}^\circ\text{C}$, $C_s = 0.093 \text{ Cal/g}^\circ\text{C}$. What is the mass of the shot? [15]

(2-a) A 80 Kg mass is hung on a steel wire having 18 m long and 3mm diameter. What is the elongation of the wire, knowing Young's modulus for steel is

$$21 \times 10^{10} \text{ N/m}^2. \quad [15]$$

(2-b) Derive the equation that studies the traveling of fluid from place to another (Bernoulli's equation). [15]

3- Give the scientific significant [20]:

- 1- The quantity of heat required to raise the temperature of the body one degree.
- 2- The heat per unit mass required to change the substance from the solid phase to liquid phase.
- 3- The heat per unit mass required to change the substance from the liquid phase to vapor phase.
- 4- The increase in volume when the temperature increased.
- 5- The increase in area when the temperature increased.

With my best wishes
Dr. Elkenany Brens Elkenany

Mansoura University
Faculty of Science
Botany Department
El-Mansoura - Egypt



جامعة المنصورة
كلية العلوم
قسم النبات
المنصورة - مصر

Final Theoretical Examination in Botany
First Semester: January 2016

Educational Year: 1st level

Program (Branch): Geology of Petrol & Mining

Subject: Botany

Course(s): Systematic Botany (B111)

Time: 2 hours

Full Mark: 60

Date: 26 / 1 / 2016

Answer all of the following questions

- (Q₁) Discuss briefly the modern system proposed for the classification of plant kingdom giving the main characters of each group. (15 marks)
- (Q₂) Write an account on each of the following :
- a- Nutrition in bacteria
- b- The main characters of cyanobacteria (15 marks)
- (Q₃) Explain the bases of classification of thallophytes giving example for each group of fungi and algae. (15 marks)
- (Q₄) Show the general characters of Bryophyta and Pteridophyta and the differences between both sub-divisions with examples. (15 marks)

Examiners;

Prof. Mohammad A. Abbas & Prof. Heshmat S. Aldesuquy



Question One: Reading Comprehension: (30 Marks)

Read the following passage and then answer the questions that follow:

- (1) The most common type of volcanic eruption occurs when magma is released from a volcanic vent. Eruptions can be effusive, where lava flows like a thick, sticky liquid, or explosive, where fragmented lava explodes out of a vent. In explosive eruptions, the fragmented rock may be accompanied by ash and gases; in effusive eruptions, degassing is common but ash is usually not.
- (2) Volcanologists classify eruptions into several different types. Some are named for particular volcanoes where the type of eruption is common; others concern the resulting shape of the eruptive products or the place where the eruptions occur. Here are some of the most common types of eruptions:
- (3) In a Hawaiian eruption, fluid basaltic lava is thrown into the air in jets from a vent or line of vents at the summit or on the flank of a volcano. The jets can last for hours or even days, a phenomenon known as fire fountaining. The spatter created by bits of hot lava falling out of the fountain can melt together and form lava flows, or build hills called spatter cones. Lava flows may also come from vents at the same time as fountaining occurs, or during periods where fountaining has paused. Because these flows are very fluid, they can travel miles from their source before they cool and harden.
- (4) Strombolian eruptions are distinct bursts of fluid lava from the mouth of a magma-filled summit conduit. The explosions usually occur every few minutes at regular or irregular intervals. The explosions of lava, which can reach heights of hundreds of meters, are caused by the bursting of large bubbles of gas, which travel upward in the magma-filled conduit until they reach the open air.
- (5) Strombolian eruptions are often associated with small lava lakes, which can build up in the conduits of volcanoes. They are one of the least violent of the explosive eruptions, although they can still be very dangerous if bombs or lava flows reach inhabited areas. These eruptions are named for the volcano that makes up the Italian island of Stromboli, which has several erupting summit vents. These eruptions are particularly spectacular at night, when the lava glows brightly.
- (6) A Vulcanian eruption is a short, violent, relatively small explosion of viscous magma. This type of eruption results from the fragmentation and explosion of a plug of lava in a volcanic conduit, or from the rupture of a lava dome. Vulcanian eruptions create powerful explosions in which material can travel faster than 350 meters per second and rise several kilometers into the air. They produce tephra, ash clouds, and pyroclastic density currents (clouds of hot ash, gas and rock that flow almost like fluids).
- (7) Vulcanian eruptions may be repetitive and go on for days, months, or years or they may precede even larger explosive eruptions. They are named for the Italian island of Vulcano, where a small volcano that experienced this type of explosive eruption was thought to be the vent above the forge of the Roman smith god Vulcan.

- (8) The largest and most violent of all the types of volcanic eruptions are Plinian eruptions. They are caused by the fragmentation of gassy magma, and are usually associated with very viscous magmas. They release enormous amounts of energy and create eruption columns of gas and ash that can rise up to 50 km (35 miles) high at speeds of hundreds of meters per second. Ash from an eruption column can drift or be blown hundreds or thousands of miles away from the volcano. The eruption columns are usually shaped like a mushroom or an Italian pine tree; Pliny the Younger, a Roman historian, made the comparison while viewing the 79 AD eruption of Mount Vesuvius, and Plinian eruptions are named for him.
- (9) Plinian eruptions are extremely destructive, and can even obliterate the entire top of a mountain, as occurred at Mount St. Helens in 1980. They can produce falls of ash, scoria and lava bombs miles from the volcano, and pyroclastic density currents that raze forests, strip soil from bedrock and obliterate anything in their paths. These eruptions are often climactic, and a volcano with a magma chamber emptied by a large Plinian eruption may subsequently enter a period of inactivity.

(A) Answer the following questions:

- 1- When does the most common type of volcanic eruption occur?
- 2- What are the different types of volcanic eruption?
- 3- How does the geologist classify eruption?
- 4- What is fire fountaining?
- 5- What is the least violent explosive eruption? Why?
- 6- What are the productions of Vulcanian eruption?
- 7- What do you know about Plinian eruption?

(B) Decide if the following statements are true (T) or false (F) according to the information in the passage and correct the false one(s):

- 1- Eruptions can be effusive, where magma flows like a thick sticky liquid.
- 2- The flows can travel miles from their source after they cool and harden.
- 3- The explosions of lava are caused by the bursting of large bubbles of gasoline.
- 4- The Vulcanian eruptions are named for the Italian island of Vesuvius.
- 5- The entire top of Mount St. Helen was obliterated in 1980.

(C) Find the antonyms of the following words in the passage:

- 1- infrequent ----- paragraph (1)
- 2- identical ----- paragraph (4)
- 3- big ----- paragraph (6)



(D) What are the underlined words in the passage refer to:

- 1- they ----- paragraph (3)
- 2- they ----- paragraph (4)
- 3- These ----- paragraph (5)

Question Two: Grammar and Structure: (30 Marks)

(A) Some of these sentences need a/an. Correct the sentences which are wrong.

If the sentence is already correct, put "Right":

- 1- Jim goes everywhere by bike. He hasn't got car. -----
- 2- Ann was listening to music when I arrived. -----
- 3- We went to very nice restaurant last weekend. -----
- 4- I clean my teeth with toothpaste. -----
- 5- Can you tell me if there's bank near here? -----

(B) Put in a/ an or somewhere necessary. If no word is necessary, leave the space empty (-):

- 1- I've seen ----- good films recently.
- 2- What's wrong with you? Have you got ----- headache?
- 3- I know a lot of people. Most of them are ----- students.
- 4- Would you like to be ----- actor?
- 5- Jane is ----- teacher. Her parents were ----- teachers too.
- 6- When we got to the city center, ----- shops were still open but most of them were closed.
- 7- ----- birds, for example the penguin, cannot fly.
- 8- You need ----- visa to visit ----- countries, but not all of them.

(C) Put in much, many, few or little:

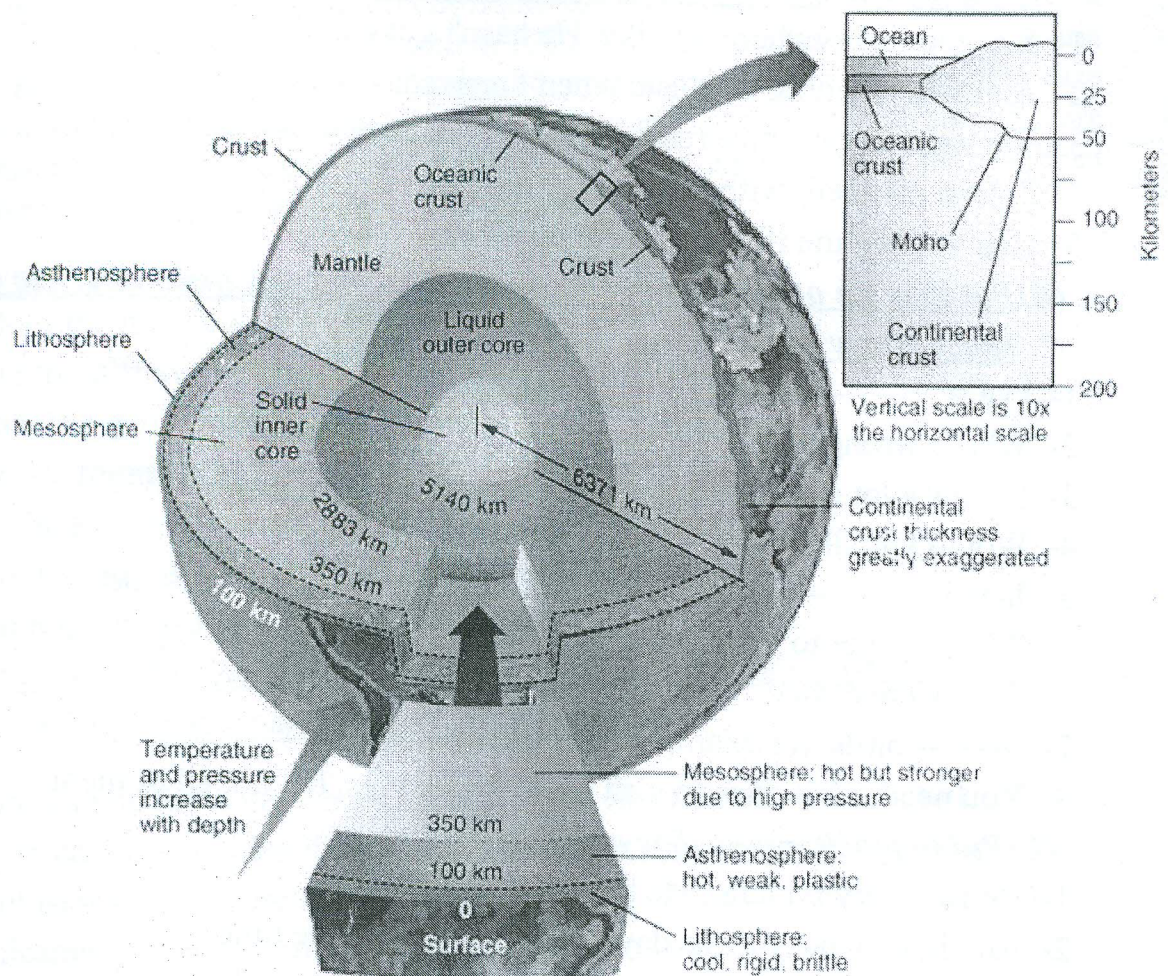
- 1- He isn't very popular. He has ----- friends.
- 2- Ann is very busy these days. She has ----- free time.
- 3- Did you take ----- photographs when you were on holiday?
- 4- I'm not very busy today. I haven't got ----- to do.
- 5- The museum was very crowded. There were too ----- people

(D) Decide if the following words are countable (C), uncountable (U) or both:

1- music	2- biscuit	3- blood	4- decision	5- queue
6- people	7- electricity	8- luck	9- time	10- chaos

Question Three: Writing: (30 Marks)

Below shows a cutaway diagram of Earth's internal structure. According to your studies and the information in the diagram, write down two paragraphs on the layers of the Earth, mentioning its content and the outer and inner layers of the core. Do not forget to write the most important minerals of every part. Mention your topic sentences and give a title to your paragraphs.



Copyright 1999 John Wiley and Sons, Inc. All rights reserved.

Best of Luck



أولاً: الجيولوجيا الطبيعية

(١٥ درجة)

السؤال الأول: أجب عن ١٥ فقط من الأسئلة التالية:

- ١- لماذا لا يعد الخشب معدناً؟
- ٢- فى أى اتجاه تتحرك قاعة الامتحان هذه مقارنة بقاعة مماثلة فى المملكة العربية السعودية؟
- ٣- عرف مستوى القاعدة العام واذكر ظواهر الترسيب بفعل الأنهار؟
- ٤- ارسم مع البيانات دورة الصخور؟
- ٥- وضح دور الأكسدة والأحماض والمحاليل فى التجوية الكيميائية.
- ٦- لأذكر مراحل نشأة وتطور الجبال؟
- ٧- ما اسم خاصية المعادن المتحدة فى مكوناتها الكيميائية والمختلفة فى تركيبها الذرى مع ذكر مثال؟
- ٨- عرف وارسم رسماً توضيحاً لرباعى الأوجه السليكاتى؟
- ٩- أذكر الصفات الثانوية التى لا تتصف بها معظم المعادن؟
- ١٠- بالرسم وضح دورة المياه فى الطبيعة؟
- ١١- ماهى عوامل الدمار بفعل الزلازل؟
- ١٢- فرق بين قوة الزلزال وسعته؟
- ١٣- أذكر أنواع التحول فى تكوين الصخور المتحولة؟
- ١٤- أذكر مع التعريف أنواع الموجات الزلزالية؟
- ١٥- أذكر أنواع خزائن الماء الجوفى مع الرسم؟
- ١٦- أذكر أنواع التجوية الفيزيائية موضحاً بالرسم؟
- ١٧- ما سبب إهتزاز التربة وما سبب وما سبب نمائها (ربائها)؟
- ١٨- صنف الصخور الرسوبية؟
- ١٩- أذكر أهم أشكال المتداخلات النارية موضحاً بالرسومات؟

(١٥ درجة)

السؤال الثانى: أكتب نبذة مختصرة عن خمسة فقط مما يأتى (ثلاث درجات لكل)

- ١- صلابة المعادن وتشققاتها وبريقها.
- ٢- شواهد فرضية الزحف القارى ومفهوم نظرية الألواح التكتونية.
- ٣- التنبؤ بالزلازل والكوارث الناتجة عن الزلازل.
- ٤- العوامل المتحكم فى الهبوط الكتلى وأنواع الهبوط الكتلى.
- ٥- تقدير مقدار الجذر القارى بالكيلومترات لمنطقة جبلية ترتفع ٥ كيلومترات فوق مستوى سطح البحر، مع العلم بأن كثافة القشرة القارية ٢,٨ جرام للسنتيمتر المكعب و كثافة الوشاح ٣,٣ جرام للسنتيمتر المكعب.
- ٦- تضاريس البراكين والكوارث التى تحدثها البراكين والملاحظات التى تنذر بحدوث البراكين.
- ٧- تفسير لغز إصرار معظم الأنهار على شق مجاريها فى قمم سلاسل الجبال.

ملحوظة : الامتحان فى صفتين

ثانيا: الجيولوجيا التاريخية

(١٥ درجة)

السؤال الثالث: أكمل العبارات الآتية:

- ظهرت الأسماك اللافكية (الإوستراكوديرم) فى نهاية العصر... (١)....
- يعتبر... (٢).... وهى قبيلة حيوانية لافقارية منقرضة يقتصر وجودها على العصر الكمبرى فقط.
- وصلت زنايق البحر والبرعميات من الجلدشوكيات المثبتة الى قمة إنتشارها فى حقبة الحياة القديمة المتأخر وخاصة فى العصر... (٣)....
- من أهم الحفريات التى وجدت فى العصر الكمبرى الرأسقدميات ممثلة بجنس... (٤)....
- كانت المسرجيات أكثر المجموعات الحيوانية اللافقارية إنتشارا فى بحار العصر الديفونى مثل جنس... (٥)....
- تكونت الحركه الهيرسينيه فى نهاية حقبة الحياة... (٦).....
- يعتبر جنس *Dictyonema* من أهم وأخر أجناس الجرابتوليتات فى العصر... (٧)....
- من النباتات التى لعبت دورا مهما فى تكوين طبقات الفحم فى العصر الكربونى أجناس... (٨).... ذات الحراشيف المربعة أو السداسية.
- بدأت الفورامينفرا فى الإنتشار منذ العصر الكربونى المبكر ومنها مجموعة... (٩).... التى إنتشرت خلال الكربونى المتأخر والبرمى.
- تعتبر الجرابتوليتات من أهم حفريات العصر الأردوفيشى ومنها جنسى... (١٠)..... ،... (١١)....
- يمكن تمييز طبقات الحجر الرملى الأحمر القديم والتى تنتمى الى العصر... (١٢).... حيث يعلوها طبقات الفحم.
- تعتبر المسرجيات التى عاشت فى حقبة الحياة المتوسطة أكثر رقيا وأكثر تعقيدا فى تركيبها الداخلى ومنها جنسى... (١٤).... ،... (١٥).....

السؤال الرابع: ضع علامة (✓) أمام العبارة الصحيحة و (X) أمام العبارة الخاطئة مع تصحيح الخطأ

(١٥ درجة)

إن وجد:

- ١- ينقسم العصر الجوراسى الى ثلاثة أقسام رئيسية وهى Lias, Dogger & Malm () .
- ٢- تعتبر الحركة الكاليدونية من الحركات الأرضية العنيفة قرب نهاية حقبة الحياة القديمة. ()
- ٣- يطلق على العصر النيوجين عصر سيادة النيموليت. ()
- ٤- ظهرت الفورامينفرا إلقاءية لأول مره فى نهاية العصر الجوراسى وهى من قبيلة الأوليات. ()
- ٥- يشمل حقبة الحياة القديمة المتأخر ثلاثة عصور جيولوجية. ()
- ٦- فى العصر الترياسى سادت الامونيتات ذات خط الدرز الأمونيتى. ()
- ٧- يطلق على حقبة الحياة المتوسطة مصطلح حقبة سيادة اللافقاريات. ()
- ٨- تم إكتشاف رواسب العصر الترياسى فى مصر بمنطقة هضبة عريف الناقة بشمال سيناء. ()
- ٩- تعرف الطبقات الحاملة لعظام الطيور بتكاوين الريتك فى نهاية العصر الجوراسى. ()
- ١٠- ظهرت أقدم البرمائيات لأول مرة فى العصر الكربونى المتأخر. ()
- ١١- أطلق على العصر البرمى عصر سيادة الأسماك حيث ظهرت خمسة طوائف منها. ()
- ١٢- تكونت رواسب الحجر الرملى الأحمر الجديد نتيجة لعواقب الحركة الهيرسينية. ()
- ١٣- ظهرت الثدييات الأولية فى نهاية العصر الترياسى وأوائل العصر الجوراسى. ()
- ١٤- تم إكتشاف أقدم حفرية للزواحف البدائية فى نهاية العصر الديفونى. ()
- ١٥- يطلق على زمن البليستوسين بالعصر الجليدى. ()

لجنة الإمتحان والتصحيح*:

أ.د. صلاح نصر عياد*

أ.د. حسنى حمدان الدسوقي حمامة*