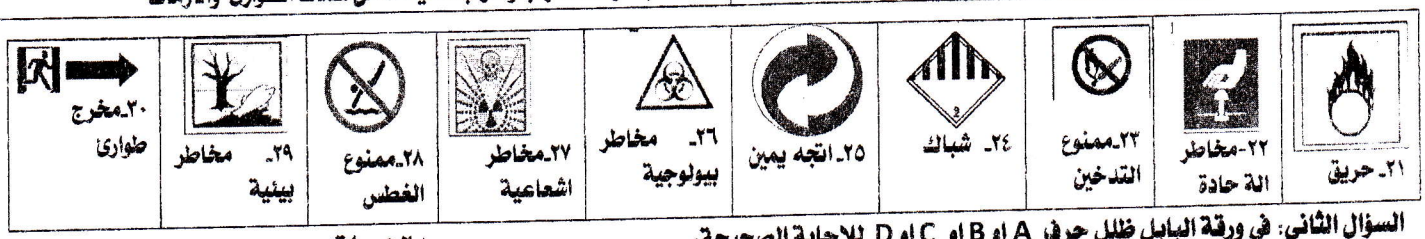
امتحان نهاية الفصل الدراسي لجميع المستويات المقرر: أخلاقيات المهنة والسلامة المهنية رقم المقرر ورمزه: F300	جامعة أسيوط كلية العلوم جامعة أسيوط	الزمن: ساعتان ٣ يونيـــة ٢٠٢٤ الاجابة في ورقة البابل

السؤال الاول: في ورقة البابل ظلل (T) للعبارة الصحيحة أو ظلل (F) للعبارة الخاطئة لما يأتي: (٣٠ درجة)

١- الميثاق الأخلاقي: مجموعة من القيم التي تسعى المؤسسة للالتزام بها اثناء العمل.	١١- يؤدي النهوض بالملكية الفكرية الي دفع عجلة التنمية الاقتصادية
٢- من مبادئ واخلاقيات مهنه التعليم الثقة والاحترام المتبادل	١٢- الخبرة والسلامة من أخلاقيات البحث العلمي
٣- اعـــرف اكثر عن علامات السلامة المهنية فهي لغة عالميـــة	١٣- أن تضيء شمعة صغيرة خير لك من أن تلعن الظلام.
٤- التخلص من مخلفات المعامل يكون بالحرق الآمن ودفن الرماد في مدفن آمن	١٤- أحرص على التدريب فهو نشاط منظم لتحسين الأداء الوظيفي
٥- التقرير هو عرض كتابي او شفوي مركز لموضوع معين يقدمه فرد او مجموعه	١٥- الالتزام بالأخلاقيات يقوم السلوك، والاهتمام بالسلامة يحمي الحياة.
٦- Code of Ethics تعني اخلاقيات المهنة والسلامة المهنية	١٦- الدفاع عن شرف المهنة ليس من مبررات إفشاء الأسرار المختبرية
٧- احرص على الجودة في عملك فالجودة لها سقف	١٧- اللون الازرق في العلامات الارشادية يعني ممنوع
٨- يعد سرقة علمية استخدم افكار من موقع على الانترنت والاشارة اليه	١٨- تعرف الكوارث بأنها حوادث غير مفاجئة لقوى الطبيعة او الانسان
٩- معرفة علامات السلامة المهنية من المهارات المهنية المكتسبة للمقرر	١٩- عند حدوث الزلزال يجب تدريب العاملين
١٠- ضرورة استخدام معدات الوقاية والسلامة الشخصية بعد العمل.	٢٠- المفاجأة و الاضطراب والارتباك ليست من سمات الطوارئ والازمات



٢١- حريق | ٢٢- مخاطر الة حادة | ٢٣- ممنوع التدخين | ٢٤- شباك | ٢٥- اتجه يمين | ٢٦- مخاطر بيولوجية | ٢٧- مخاطر اشعاعية | ٢٨- ممنوع الغطس | ٢٩- مخاطر بيئية | ٣٠- مخرج طوارئ

السؤال الثاني: في ورقة البابل ظلل حرف A او B او C او D للإجابة الصحيحة: (٢٠ درجات)

٣١- مقرر اخلاقيات المهنة Scientific Ethics يتناول اخلاقيات مهنة (A- العلميين – B الاطباء – C المهندسين – D كل ما سبق)

٣٢- من اساسيات تجهيز مختبرات الكيمياء (A- وجود شفاطات هواء - B- وجود كراسي - C- وجود سلالم - D- كل ما سبق)

٣٣- .....هو كمية المادة التي تؤدي لوفاة نصف مستخدميها اذا تم تناولها دفعة واحدة (A- LD50 - B- LOL - C- LEL - D- LC50)

٣٤- من الآداب العامة لمزاولة مهنه المختبرات الطبية (A الخبرة - B الزهو - C الدعاية الشخصية - D كل ما سبق)

٣٥- مجموعه من الوظائف المتشابهة التي يمكن أن يقوم بها فرد واحد عند اللزوم (A- العمل - B- المهنة - C- الوظيفة – D كل ما سبق)

٣٦- من الأساليب التي يمكن اللجوء اليها في إدارة الأزمة (A المناورة والالتفاف B- الضغوط الاقتصادية C الدبلوماسية D- كل ما سبق)

٣٧- من طرق علاج الشائعات (A- المنطقية في التعامل - B- نشر الحقائق - C- التوعية - D كل ما سبق)

٣٨- من الأهداف العامة التي تسعى السلامة والصحة المهنية لتحقيقها (A- حماية الممتلكات B- حماية الافراد - C – العمل بأمان - D – كل ما سبق)

٣٩- MSDS لأي مادة أو جهاز هامة لسلامة (A- الجهاز - B- المستخدم - C- المادة - D- كل ما سبق)

٤٠- من عوامل ادارة الازمة (A اتخاذ القرار المناسب في الوقت المناسب B- ضبط النفس C- التدريب D كل ماسبق)

٤١- التبليغ فورا في حالة اكتشاف تحاليل ايجابية لمرض (A الجرب – B- شلل الأطفال - C- الكوليرا – D - كل ما سبق)

٤٢- عدد الدرجات الوظيفية في الجامعات المصرية (A- ٤ - B- ٥ – C- ٦ – D- ٧)

٤٣- يجب ان تحتوى شنطة الاسعافات الأولية على (A- ملينات - B- مقلصات - C- قطن طبي وشاش - D- كل ما سبق)

٤٤- الرعاف هو (A- صدمة عصبية B- رعشة الجسم - C- نزيف دموي من الانف – D كل ما سبق)

٤٥- من الخطوات الرئيسية عند تنفيذ عملية مواجهة الكوارث (A- الانذار والتحذير – B الاخلاء - C- الايواء - D- كل ماسبق)

٤٦- من نفايات المعامل (A اطباق مزارع بكتيرية - B نفايات كيمائية - C- بقايا احياء بريه - D كل ما سبق)

٤٧- من مجالات الاخلاقيات البيولوجية (A- تأجير الارحام B- القرصنة البيولوجية – C- سرقة الجينات – D كل ما سبق)

٤٨- من انواع الشائعات (A- الشائعة البطيئة – B - الشائعة السريعة - C- الشائعة الاستطلاعية - D- كل ما سبق)

٤٩- Plagiarism يعني (A الانتحال - B الاقتباس – C البحث – D كل ما سبق)

٥٠- من يعد ميثاق اخلاقيات المهنة ؟ (A- فريق عمل - B- رئيس المؤسسة C الطلاب – D- كل ما سبق)

انتهت الأسئلة

مع تمنياتي بالتفوق

أ.د. ناصر الشيمي

Assiut University
Faculty of science
Geology Department

Date: June, 2024
Time allowed: 2 hours

Second semester final exam in metamorphic rocks (G336)

Students: 3rd year geology

Choose the correct answer A, B, C or D (two marks for each): ..... and Comment (50 Marks)

1. One of regional metamorphic texture is:
   A- decussate texture B- mosaic texture C- slaty cleavage D- porphyroclastic texture
   .....
   .....
2. Slate are a metamorphic rocks usually have:
   A- same parent rocks B- same mineral composition
   C- same colour D- same degree of metamorphism
   .....
   .....
3. The feldspars in metamorphic rocks are usually represent by:
   A- labradorite B- perthite and albite C- andesine D- anorthite and perthite
   .....
   .....
4. The different between porphyroblast and porphyroclast texture:
   A- size of crystals B- shape of crystals
   C- agent of metamorphism D- type of crystals
   .....
   .....
5. Blueschist and eclogite rocks are commonly associated with certain tectonic setting:
   A- transformed fault boundary B- divergence plate
   C- burial metamorphism D- subduction zone
   .....
   .....
6. Zoisite is a characterized mineral of:
   A- low-grade B- very low-grade C- medium grade D- high grade metamorphism
   .....
   .....
7. When staurolite and oligoclase are present in rocks of medium grade, where oligoclase and hornblende are also present in medium grade rocks
   A- different in pressure B- different in temperature
   C- due to different in parent rocks D- different in both temperature and pressure
   .....
   .....

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   A- different in pressure B- different in temperature
   C- due to different in parent rocks D- different in both temperature and pressure
   .....
   .....

8. Migmatite forms under extreme temperature and pressure conditions during:
   A- prograde metamorphism B- retrograde metamorphism
   C- burial metamorphism D- regional metamorphism

.....
.....

9. At depth 5-6 km. the intrusion of syenitic magma rising the temperature of country rocks (till of 0.15 D) up to temperature of:
   A- high-grade B- low-grade C- medium-grade D- very low-grade

.....
.....

10. The different between protomylonite and ultramylonite:
   A- degree of cataclastic B- mineral composition
   C- recrytallized rate D- proportion of matrix

.....
.....

11. A rock that has undergone cataclastic metamorphism would most likely display which of the following?
   A- preserved sedimentary layering B- pulverized rock fragments
   C- new minerals D- large olivine crystals

.....
.....

12. Which of the following statements about metamorphism of a shale is false?
   A- with increasing metamorphism, the clay minerals breakdown to form micas
   B- with increasing metamorphism, the grain size of the minerals gets smaller
   C- with increasing metamorphism, foliation develops
   D- with increasing metamorphism, the amount of water decreases

.....
.....

13. Which of the following metamorphic rocks is not paired with its true parent rock?
   A- greenstone - basalt B- quartzite - quartz arenite
   C- schist – shale D- hornfels – dolomite

.....
.....

14. Which list of metamorphic facies is in order from lowest to highest grade?
   A- amphibolite, zeolite, greenschist, granulite
   B- zeolite, greenschist, amphibolite, granulite
   C- greenschist, granulite, amphibolite, zeolite
   D- granulite, amphibolite, greenschist, zeolite

.....
.....

15. Sedimentary and metamorphic rocks can both be found on Earth's surface. Unlike sedimentary rocks, however, most metamorphic rocks:
A- form on or near Earth's surface
B- cannot be broken down to form sediment
C- contain minerals that are stable at Earth's surface
D- reach Earth's surface only through uplift of deeper rocks

.....

.....

16. At distance ½D of basic intrusion, the temperature attends to:
A- 410+Tc B- 420+Tc C- 430+Tc D- 440+Tc

.....

.....

17. Within a 50 mile traverse you walk from shale into slate into phyllite. You are walking in the direction of:
A-increasing metamorphic grade
B- decreasing metamorphic grade
C- increasing degree of contact metamorphism
D- increasing degree of cataclastic metamorphism

.....

.....

18. Andradite present in:
A- regionally metamorphic sediments
B- dynamic metamorphic sediments
C- thermally metamorphosed calcareous sediment
D- metasomatic calcareous sediment

.....

.....

19. The index metamorphic mineral need:
A- specific lithology B- specific type of metamorphism
C- specific degree of metamorphism D- all of these

.....

.....

20. Amphibolites facies is named after index mineral:
A- hornblenbe B-hypersthene C-andalusite D-forsterite

.....

.....

21. Talc-carbonate rocks are product of:
A-regional B-thermal C- metasomatic metamorphism D- dynamic

.....

.....

22. Factors govern the width of contact metamorphic aureole at particular level of erosion
A- temperature of intrusion
B- thickness of intrusion
C- type of lithology
D- all of these

.....

.....

23. What are the different between mylonite formed from shale and mylonite formed from basalt?
A- grain size
B- texture
C- mineral composition
D- degree of cataclases

.....

.....

24. In high grade metamorphic rocks, the original parent rock source is identified by:
A- chemical study
B- field study
C- physical study
D- microscopic study

.....

.....

25. The different between orthogneiss and paragneiss:
A- grain size
B- texture
C- degree of metamorphism
D- parent rocks

.....

.....

.....

امتحان الشفوي عقب امتحان النظري مباشرة (مكتب أ.د/ حسين عزيز محمد حجازي)
تمنياتى بالتوفيق والنجاح

كلية العلوم
جامعة أسيوط

كلية العلـــوم - قسم الجيولوجيا

جامعة أسيوط

امتحان طلاب المستوى الثالث (ساعات معتمدة)

مقرر (٣٤٠ ج) ميكانيكا الصخور وجيولوجيا تركيبية

الزمن : ٣ ساعات

مايو ٢٠٢٤

Part1: Rock Mechanics (18 Marks)

I) Discuss briefly the factors controlling the behavior of rock (5 Marks)

II) Define the following items (8 Marks)

1- Angular Strain
2- Transpression
3- Ductile substances
4- Elastic strain

III) Label the correct sentence with true (T) and the incorrect one with false (F) (5 Marks)

1- Shear stress can be either compressional or tensional.	( )
2- Measurement of strain increments is more difficult than the finite strain.	( )
3- Gravity is an example of surface forces.	( )
4- With increasing confining pressure, the volume of the body decreases and the dilation is positive.	( )
5- The principal planes of stress have no components of normal stress acting on them.	( )

Good Luck.....

Dr. Hassan Abbas

PART II : Structural Geology (32 marks)

ANSWER THE FOLLOWING QUESTIONS:

I. A) Rewrite the complete sentence using the following words: ***(5 marks)***

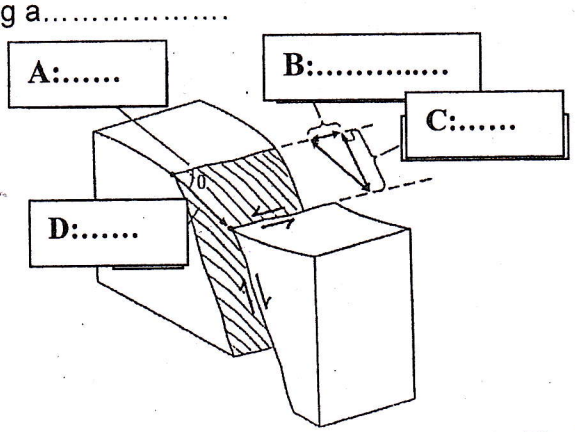
strata - diapir - structural dome - evaporite - intrudes

A salt dome is a type of..... formed when a thick bed of .....minerals found at depth ..... vertically into surrounding rock ....., forming a.....

B) 1) What is the type of the fault?

2) show the different fault-slip components in the blank rectangles

(5 marks)



باقى الاسئله على الصفحه التاليه

II. Choose the correct words to complete the following phrases and then rewrite in your answer paper: *(One mark each)*

1) An imaginary plane that is tangential to the hinge zones of a series of small folds is called: .....

Axial surface - Enveloping surface - Bedding surface

2) On a listric fault the hanging-wall block rotates around an axis that is .....

a) *parallel to the fault surface*
b) *perpendicular to the fault surface*
c) *oblique to the fault surface*

3) .....is a term used to indicate the direction of movement and rotation that occurred during deformation

Vergence - Simple shear - Rake - Enveloping surface

4) In similar folds .....

a- maintain constant layer thickness across the folded surface.
b- the layer thickness parallel to the axial surface remains constant.
c- inter-limb angles are equal.

5) In faulting, the horizontal component of dip separation is called.....

Throw - Heave - dip slip

6) A non- cylindrical fold is characterized by .....

a curved hinge line - straight hinge line - refolded hinge line

7) High point of the hinge line in a noncylindrical fold is called .....

Depression - Culmination - Amplitude

8) Kink folds are small folds that are characterized by .....

a) irregular and isolated fold structures
b) straight limbs and sharp hinges
c)with only one tilted limb

9) *Large-scale recumbent folds often associated with thrust faulting; they are called*

Thrust sheets - nappes - Duplex

10) ..... is a fault rock consisting of loose or loosely bound angular rock fragments often in a gouge matrix.

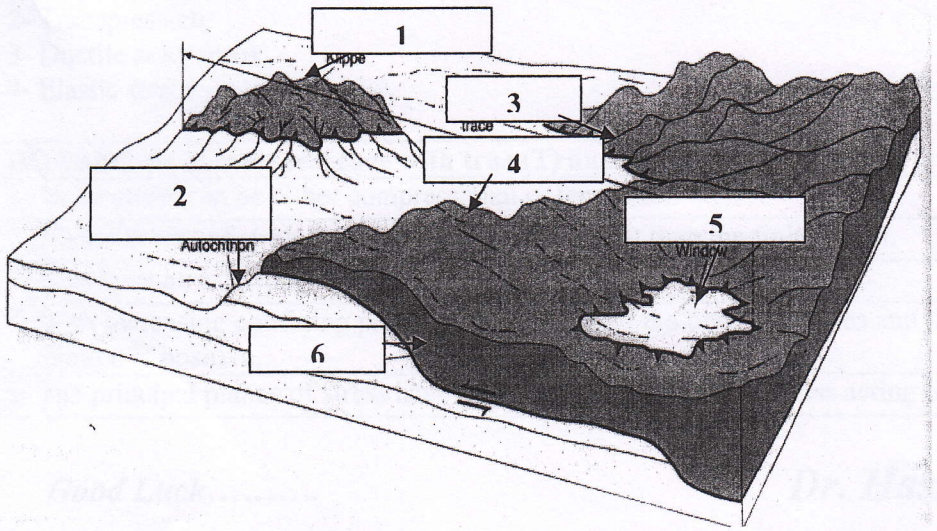
Mylonite - Fault breccias - Pseudotachylite

باقى الأسئلة على الصفحة التالية

ANSWER ONLY TWO OF THE FOLLOWING QUESTIONS:

III. Write on Anderson's theory to explain the relation of stress to faulting. *(6 marks)*

IV. Write the proper name of each structural feature 1, 2 ,3, 4, 5 & 6. *(6 marks)*



1)..... 2)..... 3).....

4)..... 5)..... 6).....

V. Write short notes on : *(6 marks)*

a - Field criteria of faults.

b- Listric faults.

c. Parasitic folds .

Good Luck !

Prof. Dr. Moustafa Youssef

Prof. Dr. Gamal Zidan Abdelaal

Assiut University
Faculty of Science
Department of Geology

Date: May 2024
Time allowed: 2 hours

Final Exam

Electrical Prospection (G 358), Total 50 Marks

==========

A) Mark the following statements with True (V) or False (X): (25 marks, one mark each)

No	Statement	TRUE (V)	FALSE (X)
1	Induced polarization method is extensively used for the exploration of disseminated metal-based minerals		
2	The induced polarization method sometimes called the overvoltage method		
3	DC resistivity method depends on the storage of current whereas the induced polarization method depends on the flow of current		
4	The presence of metallic minerals in the subsurface will have no effect on the voltage decay during induced polarization measurements		
5	Membrane polarization results from variations in the mobility of ions contained within pore fluids		
6	Surface area is the most important factor controlling the IP effect		
7	The IP effect increases with the increasing in surface charge density at mineral-fluid interface		
8	Chargeability is defined as the ability of the subsurface to flow charges		
9	Dipole-dipole array is best suited for IP measurements to minimize the electromagnetic coupling effect		
10	IP method can be used to map lithologic variations in the subsurface		
11	The GPR method is best suited for the archaeological investigation		
12	The frequency of the GPR pulse energy ranges typically from 10 MHz to several thousand MHz		
13	The propagation of EM waves in GPR depends only on the dielectric properties of the subsurface		
14	The dielectric permittivity is defined as the ability of material to store EM energy in the form of induced charge polarization		
15	In GPR the attenuation of EM energy is primarily controlled by the electrical conductivity of the subsurface		
16	The depth to target in GPR can be determined if the propagation velocity of the electromagnetic energy (Vm) through the material is known		
17	The depth in GPR increases with the increasing of the subsurface electrical conductivity		
18	In GPR, the lower the frequency, the higher depth of penetration and higher resolution		

19	**In GPR, the vertical resolution is a measure of the ability to recognize individual, closely spaced reflectors**		
20	**In GPR, the larger the Fresnel zone, the lower the horizontal resolution.**		
21	**The electromagnetic (EM) techniques can be classified as time domain or frequency domain systems**		
22	**The main disadvantage of the EM methods is that they require direct contact with the ground**		
23	**In EM method, a secondary EM field is produced if a subsurface resistive anomaly is present**		
24	**The skin depth in EM method is the depth at which the amplitude of a plane wave has decreased to 1/e relative to its initial amplitude**		
25	VLF method is very effective in locating subsurface zones of high electrical conductivity		

B) Choose the correct answer of the following: - (25 marks, one mark each)

26) The induced polarization method is classified as:

a) surface method b) active method
c) electrical method d) all of the above

27) The IP method is a primary tool to explore:

a) porphyry cuppers deposits
b) bedded lead-zinc deposits
c) sulphide related gold deposits
d) all of the above

28) The membrane polarization is most pronounced in rocks containing:

a) silicate minerals b) iron minerals
c) carbonate minerals d) clay minerals

29) The IP effect is controlled by:

a) ionic mobility b) surface area
c) surface charge density d) all of the above

30) In the IP method, the increase in pore fluid chemistry will result in:

a) general decrease in IP magnitude
b) general increase in IP magnitude
c) decrease and then increase in IP magnitude
d) increase and then decrease in IP magnitude

31) IP measurements can be performed in the:

a) time domain b) space domain
c) frequency domain d) a and c

32) The unit of chargeability for IP measurements is:

a) m/sec b) ohm.m
c) siemens/m d) mSec

33) The IP phenomenon develops when the induced current:
a) switched on
b) switched off
c) a and b
d) none of the above

34) The IP method can be used to map:
a) disseminated metallic minerals
b) lithology
c) salt-water intrusion
d) all of the above

35) In the IP method, the subsurface earth materials act as:
a) capacitor
b) conductor
c) insulator
d) none of the above

36) Which of the following is controlling the propagation of EM waves in GPR survey:
a) dielectric permittivity of the subsurface
b) electrical conductivity of the subsurface
c) magnetic permeability of the subsurface
d) all of the above

37) Which of the following parameters has major effect in the attenuation of EM waves in GPR survey:
a) dielectric permittivity of the subsurface
b) electrical conductivity of the subsurface
c) magnetic permeability of the subsurface
d) all of the above

38) Which of the following physical factors control the propagation of EM waves in GPR survey:
a) lithology
b) porosity
c) water content
d) all of the above

39) The GPR system where the antenna is containing both the transmitter and receiver is called:
a) monostatic
b) bistatic
c) nonstatic
c) all of the above

40) The propagation velocity of EM waves in GPR survey can be estimated from:
a) dielectric permittivity of the subsurface
b) electrical conductivity of the subsurface
c) density of the subsurface
d) magnetic permeability of the subsurface

41) The selection of antenna in GPR survey depends on:
a) depth of penetration
b) quality of penetration
c) resolution of penetration
d) all of the above

42) In GPR survey, high frequency antenna will result in:
a) greater penetration depth and lower resolution
b) lower penetration depth and higher resolution
c) lower penetration depth and lower resolution
d) greater penetration depth and higher resolution

19	In GPR, the vertical resolution is a measure of the ability to recognize individual, closely spaced reflectors		
20	In GPR, the larger the Fresnel zone, the lower the horizontal resolution.		
21	The electromagnetic (EM) techniques can be classified as time domain or frequency domain systems		
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a) silicate minerals
b) iron minerals
c) carbonate minerals
d) clay minerals

29) The IP effect is controlled by:

a) ionic mobility
b) surface area
c) surface charge density
d) all of the above

30) In the IP method, the increase in pore fluid chemistry will result in:

a) general decrease in IP magnitude
b) general increase in IP magnitude
c) decrease and then increase in IP magnitude
d) increase and then decrease in IP magnitude

31) IP measurements can be performed in the:

a) time domain
b) space domain
c) frequency domain
d) a and c

32) The unit of chargeability for IP measurements is:

a) m/sec
b) ohm.m
c) siemens/m
d) mSec

Prof. Dr. Gamal Zidan Abdelaal

43) If the target in GPR is much smaller than the footprint size then:

a) the target will not be imaged
b) the target will be highly imaged
c) part of the target will be imaged
d) all of the above

44) Which of the following modes can be used to acquire GPR survey:

a) sounding model
b) profiling mode
c) sounding profiling mode
d) common midpoint mode (CMP)

45) Which of the following methods can be used to estimate depth from GPR records:

a) from relative dielectric permittivity
b) shoot to target of known depth
c) hyperbola fitting
d) all of the above

46) Electromagnetic methods usually use low frequency EM waves where:

a) conduction currents predominates
b) displacement currents predominates
c) a and b
d) none of the above

47) The advantage of electromagnetic method is:

a) rapid
b) accurate
c) no direct contact with the ground
d) all of the above

48) The EM systems can be classified as:

a) time vs frequency domains
b) active vs passive
c) a and b
d) none of the above

49) VLF detects electrical conductors by utilizing radio signal in the range of:

a) 15 to 30 Hz
b) 15 to 30 KHz
c) 15 to 30 MHz
d) 15 to 30 GHz

50) Which of the following method can be used to map unexploded ordnance:

a) IP method
b) GPR method
c) EM method
d) all of the above

==========**Best wishes** ==========

بسم الله الرحمن الرحيم

جامعة أسيوط
كلية العلوم - قسم الجيولوجيا

امتحان الفرقة الثالثة بكلية العلوم شعبة الجيولوجيا

المادة: الحفريات الدقيقة والجيولوجيا التاريخية (315ج)
(315G) (Micropaleontology and Historical Geology)

الفصل الدراسى الثانى 2024م | الدرجة: 50 درجة | الزمن: ثلاث ساعات

أجب عن الأسئلة التالية

I- Micropaleontology

السؤال الأول: (10 درجات)

1- Compare between the Radiolaria and benthonic foraminifera in: Systematic position - environmental habitat - shell walls – shell shape - mode of life
2- Discuss the effect of salinity and alkalinity in the distribution of foraminifera.
3- Discriminate by drawing between the different types of conodonts.
4- Mention the main differences between the fresh water and marine Ostaracoda shells.

السؤال الثانى :(10 درجات)

1- **Choose the correct answer: (3 Marks)**

i- ..... and .... are examples for the rock forming microfossils.
a- Nummulites, Fusulina b- Fusulina, Mililida
c- Numulites,Globigerinida d- all of them

ii- ..... and .... are examples for the flora microfossils.
a- Diatums, Pollen b- Diatums, Spores
c- Nannoplankton,Fungi d- all of them

iii- Dissolved oxygen in the sea water depends on ..... and .....
a- ocean circulation, organic matter
b- ocean circulation, inorganic matter
c- inorganic matter, organic matter
d- inorganic matter, sea floor

iv- The wall structure of the earliest foraminifera is .....
a- agglutinated b- calcareous hyaline
c- calcareous porcellaneous d- siliceous

v- Stagnant water marks by .....condition.
a- oxic b- dysoxic b- anoxic d- suboxic

vi- Foraminiferal genera live in ..... water environments.
a- mixed b- fresh c- marine d- all of them

2- Define <u>ONLY TWO</u> of the following concepts: (2 Marks)

i- Photic zone ii- Benthonic foraminiferal habitats
iii- Carbonate compensation depth

3- Mark the correct and the wrong statements, and correct the wrong: (5 marks; 1 mark each)

i- For classifying fossil dinoflagellates, number and arrangement of plates are very important criteria.

ii- Fossil prasinophytes are exclusively marine and generally much larger than acritarchs.

iii- Treatment of hard indurated clay samples using sodium hexametaphosphate [(NaPO3)6] provides more palynologically-productive residue than the acid treatment.

iv- Artificial "non-biological" classifications of spores and pollen grains are based on morphological criteria.

v- Chitinozoa have a particular value to Cenozoic biostratigraphy.

<u>السؤال الثالث: (10 درجات)</u>

1- Choose the correct answer: (5 marks; 1 mark each)

i- Criteria used in classification of spore/pollen grains are:
a- type of aperture b- grain shape c- grain sculpture d- grain size e- all of them

ii- For the palynological extraction technique, which of the following is considered as an optional step:
a- carbonates removal b- silicates removal c- oxidation d- all of them

iii- In an idealized life cycle of dinoflagellate, the stage of combined sexual and asexual reproductions is represented by:
a- motile diploid stage b- motile haploid stage c- motile diploid stage d- all of them

vi- For palynological processing of organic-rich samples (e.g., coal, carbonaceous shale), the proper weight to be analyzed is:
a- 5-10 g b- 25-30 g c- 35-50 g d- all of them

v- In prasinophytes, the excysment opening is referred to as:
a- Operculum b- Cyclopyle c- Archeopyle d- all of them

2- Write briefly on ONLY TWO of the following: (5 marks; 2.5 marks each)

i- Safety precautions in palynology lab

ii- Dinoflagellate life cycle with drawings.

iii- Definition, Taxonomy, morphology, and ecology chitinozoa.

II- Historical Geology

السؤال الأول: (10 درجات)

1- Give reasons for ONLY THREE of the following: (3 Marks)

i- The formation of Himalayas Mountains.

ii- The accumulation of tellites sediments in South Africa during the early Paleozoic.

iii- The separation of South America and Africa plates.

iv- The closure of Iapetus Ocean.

2- Write the derivation of ONLY FOUR of the following: (2 Marks)

i- Miocene ii- Holocene iii- Cambrian iv-Triassic v- Carboniferous

3- Compare between ONLY TWO of the following: (3 Marks)

i- The causes of the formation of the Ural and Sierra Nevadan Mountains.

ii- The climate in the Paleozoic and Mesozoic eras.

iii- The Ediacaran and Burgess fauna.

4- Define and explain the following concepts: (2 Marks)

i- Messinian Salinity Crisis ii- Uniformitarianism

السؤال الثاني: (10 درجات)

1- Choose the correct answer: (5 Marks)

i- The collective term used to describe any and all processes responsible for mountain building is:

a- orogenesis b- collision c- subduction d- isostacy

ii- Which of the following periods is older than all the others?

a- Ordovician b- Devonian c- Jurassic d- Silurian

iii- Which of the following geologic time divisions is a shorter duration of time than all the others?

a- epochs b- eras c- periods d- ages

iv- Which of the following provides the most accurate way of determining the age of a sedimentary rock layer?

a- index fossil b- fossil succession
c- fossil assemblage E. fossilized algae

v- Which of the following applies to the standard geologic time scale?

a- it was developed through radiometric dating
b- it is based on superposition and faunal succession
c- it is divided into periods of equal length
d- it is divided into periods named for type of rock

vi- Which phase covers over 80% of earth history?

a- Mesozoic b- Paleozoic c- Cenozoic d- Precambrian

vii- An unconformity is a

a- sedimentary unit b- period of deposition
c- buried erosion surface d- type of fault

viii- The oldest geological evidence of life on Earth is

a- 545 million years old b- 3.8 billion years old,
c- 6,000 years old d- 8 billion years old

ix- What is the half-life of a radioactive element?

a- The time required for one-half of a given quantity of the element to decay to its daughter element.
b- The time required for all of the radioactive element to decay to its daughter element.
c- Half of the time required for a given quantity of the element to decay to its daughter element.
d- The time required for the radioactive element to decay half of the time.

x- Geologically, which came first?

a- The appearance of fish b- Dinosaur extinction
c- Red Sea Rift d- Rocky Mountains

2- Tabulate the rock forming fossils during the Paleozoic Era. (2.5 Marks)
3- Write an essay on the types of unconformities. (2.5 Marks)

تمت الأسئلة مع أطيب الأمنيات بالتوفيق, ا.د. ناجح عبدالرحمن عبيدالله , ا.د.عمرو سعيد ضيف

بسم الله الرحمن الرحيم

University of Assiut
Faculty of Science
Department of Geology

3rd Level Examination for Geology, Geophysics and Geochemistry students
In Field Geology (306G)

Time: Two Hours **50 Marks** **May, 2024**

ملحوظة هامة: الأمتحان يتكون من صفحتين

Answer the following question:

First Question: choose the correct answer: (10 Marks, one Mark for each)

1- In folds, rocks that bend downwards are called ..... and rocks that bent upwards are called .....
a- synclines; monoclines b- synclines; anticlines
c- anticlines; synclines d- anticlines; monoclines

2- Which of the following sedimentary structures is common in the sand dunes:
a- ripple marks b- cross-bedding c- graded bedding d- all of these

3- A rock that is formed at the earth's surface is?
a- Laccolith b- Dike d- Sill d- Flow

4- Geological processes operating at the present time are the same processes that have operated in the past" is a statement of:
a- Faunal Succession b- Uniformitarianism c- Evolution d- Correlation

5- Rain prints can occur in.....
a- Igneous rocks b- Sedimentary rocks
c- Metamorphic rocks d- all of these

6- Which one of the following is a secondary biologic sedimentary structure?
a- boring b- flame structure c- burrow d- styllolite

7- Which of the following does not provide evidence of shallow water environment?
a- Lamination b- Rain prints c- Ripple marks d- Mud cracks

8- The process whereby rocks are changed to sediment is called.....
a- Compaction b- weathering c- solidification d- lithification

9- Structural cross-section illustrates .....

a- the various positions of the rock formations as they actually look underground are represented.

b- the horizontal view of several stratigraphic sections.

c- what the rocks are doing and where they are going?

c- all of these

10- ..... of chemical sedimentary structure.

a- stylolites b- mud cracks c- none of these d- both of these

Second Question (10 Marks)

1- Write on ***only three*** of the following concepts: (5 Marks)

a- Bioturbation. b- Flute mark. c- Load casts d- mud cracks

2- Define the following concepts:

a- Stratigraphic cross section b- Ripple marks (5 Marks)

Third Question (10 Marks)

1- From the figure at right answer the following questions: (5 Marks)

a- Define the sedimentary structure.

b- Draw the figure in your paper describing the important indicator of this sedimentary structure.

2- Compare between the following pairs: (5 Marks)

a- Crater - Calderas b- Batholiths - Diaper

b- Stocks - Bosses d- Fracture cleavage - Slip cleavage

Fourth Question (10 Marks)

- Write short notes on the different types of Volcanocs.

Fifth Question (10 Marks)

- Mention the main stages of crenulation cleavage to form.

---------- *GOOD LUCK* ----------

Prof.Dr. A. A. Khoudier

Prof. Dr. N. A. Obaidalla

Assiut University	Computer Networks
Third Level (MC354)	Time: 2 hours

Question: Answer the following (MCQ) questions: (50 Marks)

1-Digital Subscriber Line (DSL) uses existing ..... lines to connect machines to the Internet.
A. Telephone B. Internet C. TV D. Water

2-A / An ..... defines the format and the order of messages exchanged between two or more communicating entities, as well as the actions taken on the transmission and/or receipt of a message or other event.
A.protocol B. modem C. Internet D. end system.

3-The ..... is an infrastructure that provides services to applications and a programming interface to distributed applications.
A. Internet B. modem C. router D. protocol

4-..... is the actual rate at which bits are being sent from sender to receiver measured in bits/time unit.
A.Bandwidth B. Throughput C. Data rate D. Bottleneck

5. Moving arriving data packets from router's input link to appropriate router output link is known as .....
A. routing B. switching C. forwarding D. B and C

6-The functionalities of the presentation layer include .....
A.Data compression B. Data encryption C. Data description D. All of the mentioned

7-In the OSI model, as a data packet moves from the lower to the upper layers, headers are..
A.Added B. Removed C. Rearranged D. Randomized

8-The time required to examine the packet's header and determine where to direct the packet is part of the .....
A. queuing delay B. transmission delay C. propagation delay D. processing delay

9-Which connection is necessary for a computer to join the internet?
A.internet society B. internet service provider C. different computer D. internet architecture board

10-The ..... is the amount of time required to push all of the packet's bits into the link calculated by L/R, where L is the length of the packet and R is the transmission rate of the link.
A. queuing delay B. transmission delay C. propagation delay D. processing delay

11-The ..... is the time required to propagate from the beginning of the link to another router calculated by d/s, where d is the length of the physical link and s is the propagation speed.
A.queuing delay B. transmission delay C. propagation delay D. processing delay

12-The ..... is the delay the packet experiences waiting to be transmitted at the output link and is affected by the congestion level of the router.
A.queuing delay B. transmission delay C. propagation delay D. processing delay

13-Which of this is not a network edge device?
A. Switch B. PC C. Smartphones D. Servers

14-The ..... is where network applications and their protocols reside.
A. application layer. B. transport layer. C. link layer. D. network layer.

15. TCP and UDP are ..... protocols.
A. physical layer. B. link layer. C. transport layer. D. network layer.

16-The ..... routes datagrams from source to destination.
A. link layer. B. application layer. C. physical layer. D. network layer.

17-The ..... moves the individual bits of a frame from one node to the next through communication links.
A. physical layer. B. link layer. C. netwo.'- layer. D. application layer

18-Ethernet, 802.11 and PPP are ..... protocols.
A. application layer. B. transport layer. C. network layer. D. link layer.

19. The ..... provides synchronization, checkpointing and data exchange recovery during communication between applications.
A. application layer. B. presentation layer. C. session layer. D. link layer.

20-In the data link layer, what is the primary function of the framing process?
A. To encapsulate data with header information for addressing and error detection.
B. To compress data for more efficient transmission.
C. To route data packets across different networks.
D. To establish and manage connections between applications.

21-What is port numbers for HTTP protocols?
A. 80. B. 200. C. 25. D. 403

22-What is the difference between connection-oriented and connectionless services in the data link layer?
A. Connection-oriented services establish a connection before data transfer, while connectionless services transmit data without any pre-established connection.
B. Connection-oriented services are faster, while connectionless services offer more reliable data transfer.
C. Connection-oriented services are used in LANs, while connectionless services are used in WANs.
D. Connection-oriented services require less overhead, while connectionless services have additional header information.

23-What is the primary function of the Address Resolution Protocol (ARP) in the data link layer?
A. To map logical IP addresses to physical MAC addresses of network devices.
B. To manage network congestion and flow control.
C. To translate domain names into corresponding IP addresses.
D. To establish and tear down connections for communication sessions.

24-What is the key difference between a Point-to-Point (PPP) and an Ethernet link?
A. Ethernet is typically used in LANs, while PPP is used in WANs.
B. PPP supports full-duplex communication, while Ethernet is half-duplex.
C. Ethernet operates at higher speeds compared to PPP.
D. PPP requires more complex cabling compared to Ethernet.

25-What is port numbers for HTTPS protocols?
A. 200. B. 25. C. 403. D. 80.

26- What is port numbers for SMTP protocols?
A. 200. B. 25. C. 403. D. 80.

27-What are the main advantages of using a switched network compared to a sharedmedia network?
A. Switched networks are less expensive to implement and require simpler cabling.
B. Switched networks offer higher bandwidth and reduced collisions for individual devices.
C. Switched networks are easier to manage and troubleshoot compared to sharedmedia networks.
D. Switched networks are inherently more secure due to isolated data paths.

28-Briefly describe the concept of Virtual LANs (VLANs).
A. A method for segmenting a physical network into logical subnetworks based on security or administrative purposes.
B. A technique to combine multiple physical networks into a single logical network.
C. A way to prioritize network traffic for different types of data.
D. A method for encrypting data packets for secure communication.

29-What is the primary function of the Internet Protocol (IP) in the network layer?
A. To encapsulate data with header information for addressing and error detection.
B. To route data packets across interconnected networks based on their destination addresses.
C. To establish and manage connections between applications.
D. To provide reliable data transfer with error checking and retransmission.

30-What is the difference between datagrams and virtual circuits in network layer services?
A. Datagrams are used in LANs, while virtual circuits are used in WANs.
B. Datagrams provide a connectionless service, while virtual circuits offer connectionoriented communication with guaranteed delivery.
C. Datagrams are more reliable than virtual circuits due to error correction mechanisms.
D. Datagrams require more complex routing protocols compared to virtual circuits.

31- What is the function of the Internet Control Message Protocol in the network layer?
A. To exchange control messages for network diagnostics and error reporting.
B. To route data packets based on their destination IP addresses.
C. To provide reliable data transfer with error checking and retransmission.
D. To translate domain names into corresponding IP addresses.

32-What is the purpose of port numbers in the transport layer?
A. To differentiate between different applications on a single device.
B. To identify the source and destination devices on the network.
C. To route data packets across different networks based on their destination addresses.
D. To provide error detection and correction for reliable data transfer.

33-What is response status codes for request succeeded, requested object later in this message?
A.200. B. 301. C. 400. D. 505.

34-What is the role of the Domain Name System (DNS) in the application layer?
A. To translate domain names into corresponding IP addresses for user-friendly access.
B. To manage network congestion and flow control.
C. To establish and manage sessions between applications.
D. To encrypt data packets for secure communication.

35-What is response status codes for requested object moved, new location specified later in this message (in Location: field)?
A. 301. B. 404. C. 400. D. 505.

36-What are some common techniques used for congestion control in networks?
A. Increasing the bandwidth of network media.
B. Employing traffic shaping to prioritize critical data.
C. Implementing queueing mechanisms to manage data flow.
D. All the above

37-What is the function of the File Transfer Protocol (FTP) in the application layer?
A. To send and receive email messages.
B. To exchange control messages for network diagnostics and error reporting.
C. To browse the web and access information on remote servers.
D. To transfer files between devices on a network.

38-How does the Simple Mail Transfer Protocol (SMTP) differ from the Post Office Protocol (POP) in the application layer?
A. SMTP is used for sending emails, while POP is used for retrieving emails from a server.
B. SMTP requires authentication for secure email access, while POP does not.
C. SMTP operates on a different port number compared to POP.
D. All the above

39-What is the purpose of the Hypertext Transfer Protocol (HTTP) in the application layer?
A. To exchange control messages for network diagnostics and error reporting.
B. To transfer files between devices on a network.
C. To send and receive email messages.
D. To provide a protocol for accessing and interacting with web resources.

40-What are the main benefits of using a layered network architecture approach?
A.Provides a less secure communication environment
B. Simplifies network design by combining all functionalities into a single layer.
C. Reduces the complexity of network protocols and standards.
D.Enables modularity, allowing independent development and modification of specific layers.

41-if named host changes IP address, may not be known Internet-wide until all ..... expire!?
A. TTLs. B. TLD. C. UDP. D. TCP.

42-What is response status codes for request msg not understood by server?
A.404. B. 301. C. 400. D. 505.

43-What is the significance of firewalls in network security?
A. Firewalls provide secure remote access capabilities for authorized users

B. Firewalls encrypt data packets for secure communication.
C. Firewalls detect and prevent malware and malicious software from entering the network.
D.Firewalls filter incoming and outgoing network traffic based on predefined security policies.

44-What is the purpose of IP spoofing?
A)Packet interception B)Denial of Service C)Botnet D) Injection of false source address

45-The number of layers in ISO OSI reference model is...
A) 5 B) 7 C) 6 D) 10

46-What does SMTP stand for?
a) Simple Messaging Transferal Protocol
b) Simple Mail Transfer Protocol
c) Simplified Mail Transfer Protocol
d) Simple Mailman Trail Protocol

47-E-mail uses which Application layer protocol?
a)SMTP b) HTTP c) FTP d) SIP

48-Always-on host.
a)Client b) Server c) a and b d) None of the above

49-Identifier includes...
A.IP address B.Port numbers C. Socket D. Both A and B

50- Socket... messages.
A.Send B.Receive C. Both A and B d) None of the above

Assiut University
Faculty of Science
Department of Geology

جامعة أسيوط
كلية العلوم
قسم الجيولوجيا

2023/2024 Second Semester, Final Examination
On: Earthquake Seismology and Seismic Prospection (G-350)

5 June 2024	(Total Marks: 50)	Time: 2 hours

Answer ONLY the required questions, illustrating your answer by suitable sketches wherever possible:

First Question: Write on ONLY FOUR of the following: **(16 marks)**

a) The seismic activity in Egypt, including notable historical earthquakes.
b) Why do some people die in some earthquakes more than others?
c) Concept and types of focal mechanism solutions.
d) Main components of seismic data acquisition system.
e) Hydrocarbon indicators derived from seismic reflection data.
f) Limitations of seismic refraction survey.

Second Question: Compare between ONLY THREE from the following: **(9 marks)**

a) Convergent vs. divergent plate boundaries
b) P-wave vs. S-wave shadow zones
c) Earthquake intensity vs. magnitude
d) Critically refracted head waves vs. reflected waves
e) Normal vs. dip moveout

Third Question: Choose the correct answer: **(20 marks)**

1. **Earthquake A has a Richter magnitude of 7.0 as compared with earthquake B's 6. The amount of ground motion is one measure of earthquake intensity.**
   a) A is 10X more intense than B
   b) A is 1000 more intense than B
   c) B is 0.01X as intense than A
   d) A is 100 more intense than B

2. **Which of the following sequences correctly lists the different seismic wave arrivals from first to last?**
   a) P-waves ... S-waves .... Surface waves
   b) Surface waves ... P-waves .... S-waves
   c) P-waves ... Surface waves ... S-waves
   d) S-waves ... P-waves .... Surface waves

3. **Which of the following describes the buildup and release of stress during an earthquake?**
   a) the Modified Mercalli Scale
   b) the elastic rebound theory
   c) the principle of superposition
   d) the travel time difference

4. **We record ground shaking with an instrument called a _____, and the instrument makes a recording on a device called a _____ mostly these days with digital computers. The recording itself is called a _____.**
   a) seismometer...seismograph...seismogram
   b) seismograph...seismogram...seismometer
   c) seismogram...seismometer...seismograph
   d) seismometer...seismogram...seismograph

5. **The boundary between the crust and the mantle is mostly chemical. This boundary is referred to as the _____**
   a) Gutenberg discontinuity
   b) Lehman discontinuity
   c) Mohorovičić discontinuity
   d) None of them

6. **A 7.2 earthquake releases about _____ more energy than a 6.2 earthquake.**
   a) 23 times
   b) 10 times
   c) 32 times
   d) 2 times

7. **Which of the following statements best describes the state of earthquake prediction?**
   a) scientists can accurately predict the time and location of almost all earthquakes
   b) scientists can accurately predict the time and location of about 50% of all earthquakes
   c) scientists can accurately predict when an earthquake will occur, but not where
   d) scientists can characterize the seismic risk of an area, but can not yet accurately predict most earthquakes

8. **Which of the following statements is false?**
   a) Most earthquakes occur at plate boundaries
   b) The time and location of most major earthquakes can be predicted several days in advance
   c) Earthquakes can be caused by normal, reverse, and strike-slip faulting
   d) P-waves travel faster than both S-waves and Surface waves

9. **There are three types of boundaries: _____ where plates move apart from each other, _____ where plates move toward each other, and _____ where plates slide alongside each other.**
   a) divergent…convergent…transform
   b) transform…divergent…convergent
   c) convergent…transform…divergent
   d) divergent..transform...convergent

10. **Long-term forecasting of earthquakes is based mainly on the knowledge of when and where earthquakes have occurred in the past. It may include:**
   a) paleoseismological evidence
   b) development of seismic hazard maps
   c) identification of seismic gaps
   d) all of them

11. **An example of how local soil conditions can greatly influence local intensity is given by catastrophic damage of _____.**
   a) 1981 (M 5.3) Aswan earthquake
   b) 1995 (M 6.9) Kobe (Japan) earthquake
   c) 1985 (M 8.1) Mexico City earthquake
   d) 2004 (M 9.1) Sumatra earthquake

12. **Although _____ was the strongest one in Egypt, it was _____ that left the deepest imprint on everyone.**
   a) the 1995 (M 7.2) Gulf of Aqaba earthquake … the 1992 (M 5.9) Cairo event
   b) the 1995 (M 5.9) Gulf of Aqaba earthquake … the 1992 (M 7.2) Cairo event
   c) the 1969 (M 6.9) Shedwan earthquake … the 1992 (M 5.9) Gulf of Aqaba event
   d) The 1981 (M 5.3) Aswan earthquake … the 1995 (M 6.9) Shedwan event

13. **A certain limiting value of stress is known as:**
   a) Reflection strength
   b) Refraction strength
   c) Seismic strength
   d) Yield strength

14. **The main requirements of the seismic source are:**
   a) The source waveform must be repeatable
   b) Energy must be safe and practical
   c) Sufficient energy only at the location
   d) Use as much energy as possible

15. **The response caught from the ground is measured by a sensor in seismic land surveys called:**
   a) Barometer
   b) Voltmeter
   c) Geophone
   d) Hydrophone

16. **All of the following are land seismic sources except _____**
   a) weight dropped from a truck
   b) nuclear explosion tests
   c) vibroseis
   d) airguns

17. **In the _____, the detectors are laid out in a line that does not pass through the shot point.**
   a) longitudinal profile
   b) non-longitudinal profile
   c) arc profile
   d) none of them

18. **The reflection coefficient (R) is a numerical measure of the effect of an interface on wave propagation, and is calculated as the ratio of the:**
    a) Amplitude A1 of the incident ray to the amplitude A0 of the reflected ray
    b) Amplitude A1 of the reflected ray to the amplitude A0 of the incident ray
    c) Amplitude A0 of the incident ray to the amplitude A1 of the reflected ray
    d) Amplitude A0 of the reflected ray to the amplitude A0 of the incident ray

19. **_____ is a measure of the ability of a material to withstand changes in length when under lengthwise tension or compression.**
    a) Young's modulus
    b) Shear modulus
    c) Bulk modulus
    d) Poisson's ratio

20. **The _____ is the ratio of the amplitude A2 of the transmitted ray to the amplitude A0 of the incident ray.**
    a) reflection coefficient (R)
    b) acoustic impedance (z)
    c) transmission coefficient (T)
    d) Poisson's ratio

Fourth Question: True or False: **(5 marks)**

1. Since there are an equal number of receivers on each side of the seismic spread it is an off-end spread. ( )
2. The subducting plates generate powerful earthquakes (sometimes very deep earthquakes up to 700 km) and usually create a line of volcanoes along the overriding plate boundary. ( )
3. Fold or multiplicity is the number of times that the same midpoint is sampled by different shots and different receivers. ( )
4. Seismic Refraction Tomography (SRT) uses P- or S-wave travel times to map vertical and lateral changes in the subsurface. ( )
5. Vertical slices may be taken through the seismic data volume to display the pattern of reflections intersected by any time plane. Such a representation of the 3-D data is known as a time slice or seiscrop. ( )

== Good Luck,,, ==

Assoc. Prof. Rashad Sawires

Faculty of Science
Assiut university

Botany and Microbiology Department
Final term exam. (2024-2025), Ecology of algae (374 B)
Time allowed: 2hours

Answer the following questions

Question no (1): Write (Yes) or (No) in the front of each sentences from the following and correct the wrong one. (26 marks) .

1	Estuaries among the most productive natural habitats in the world.
2	The algae which float on the surface of the water are called phytoplankton.
3	Carrageenan extracted from phaeophyta Chondrus crispus has innumerable uses, and a component of toothpaste.
4	Algae may be used as an indicator of climate change
5	Microcystis is known to inhibit several species of bacteria and effective against other algae.
6	Terrestrial algae can fix atmospheric nitrogen.
7	Exotoxins and endotoxins produced by blue-green algae can bring about death of farm animals like sheep, horses, cattle.
8	Algae are chlorophyll bearing autotrophic thallophytes with a cell wall made of carbohydrate
9	PBCV-1 virus infect eukaryotic unicellular-like green algae.
10	Tychoplanktophytes are a group of algae live on rock surface.
11	Photosynthesis in the algae occurs in visible range of the spectrum (400-700nm).
12	The photic zone is the depth of the water in a lake or ocean that is exposed to sufficient sunlight for assimilation of food.
13	Feldmannia virus (FsV) infect brown algae.
14	Algae can be used as a source of active compound used in pharmaceutical compond production.
15	Epizoic algae be employed in the reclamation of alkaline user land.

16	Phytoplankton algae are growing on the surface of aquatic plant and other bigger algae.
17	The red and orange snow generally caused by the spore stages of the epiphytic algae.
18	Green sea slugs has an parasitic relationship with various algal group
19	Fungal piece in the relationship with algae called mycobiont.
20	Both temperature and carbonate content increase when vigorous photosynthesis occurs in waters.
21	Silicon is irrepressible element of all microorganism and play an important role in all biological processs.
22	light transmitted directly to the aquatic environment influences the distribution of algae in the lake.
23	*Paramecium bursaria* is a protozoan that has a mutualistic endosymbiotic relationship with chlorella.
24	Diatoms tolerance a large range of PFD as a requirements for growth and photosynthesis.
25	Magnisum effect algal growth and its amount of organic matter production.
26	Blue greens like *Nostoc, Anabaena* can be employed in the reclamation of alkaline user land.

Question no (2): Discuss in detail Three only from the following (24 marks)

1. **Harmful aspects of algae.**
2. **Effect of PH and temperature on algal productivity.**
3. **Symbiosis relationship between algae and invertebrate animals.**
4. **Classify algae according to their possible habitats.**

Best wishes and Good luck

Prof. Dr /Awatief F. Hifney

Principles of Petrology (G324) for 3^{d} level student
May-2024

PART II SEDIMENTARY ROCKS
(Total 17 mark)
(Illustrate your answer by diagrams)

1-Write about *THREE* questions *ONLY* of the following: *(3 mark for each question)*

a- Cross Bedding , Mud Cracks and Ripples Marks. What is their significance?

b- Different methods of measuring particle size of clastic sediments.

c- Petrographic classification of limestone.

d- The difference between Roundness and Sphericity of grain.

2- Complete the Following *(2 mark for each question)*

a- Matrix is fine ..... material which fills the ..... among the particles, whereas, Cement is post- depositional ..... in the ..... among the grains and matrix.

b- The different methods of graphic representation of grain size of clastic sediments include ..... , ... and .....on both .....and ..... .

c- Colloform textures produced from ..... system by direct precipitation in the ..... as ....

d- The minor or micro relief features of the quartz grains are termed .....,such as ..... , ... and.....

.....

---------- *GOOD LUCK* ----------

Pro. Dr. Ahmed R. El Younsy
May-2024

Assiut University *Faculty of Science* *Geology Department*		*Second Semester Exam.* *2023 - 2024* *Time: 2 hours*

Subject: Sedimentary Environments and Sedimentary Basins (G335)

Answer the following questions: **(50 Marks)**

1. *How does a stream transport its sediment load? What processes are at work?* *(5 Marks)*
2. *Important information's are gained from the interpretation of ancient sedimentary environments, mention these.* *(3 Marks)*
3. *Describe the properties of an idealized deltaic facies model, illustrating the difference between delta platform and prodelta sediments.* *(6 Marks)*
4. *Abu Gharadiq and Shushan basins are the most famous productive sedimentary basins in Egypt, mention their location, thickness of their sediments, and age of the source rocks.* *(6 Marks)*
5. *Write on the stages of rifting, illustrating your answer with drawings.* *(5 Marks)*
6. *Which of the following is true and which is false, correct the false ones:* *(13 Marks)*

a. ( ) *Geometry of sedimentary rocks doesn't help in environmental interpretation.*

b. ( ) *Facies model of both fluviatile and deltaic sediments are similar.*

c. ( ) *The thickness of sedimentary basin sediments is controlled by the depositional system.*

d. ( ) *Meandering rivers may form in high gradient areas.*

e. ( ) *Trench basins are related to plate divergence.*

f. ( ) *Cosmogenous materials are well documented in the marine sediments of Egypt.*

g. ( ) *Komombo and Beni Suef sedimentary basins have the same age.*

h. ( ) *The sedimentary basins of Africa are largely of two types, intracratonic basins and failed rifts.*

i. ( ) *Delta forms only where rivers enter seas.*

j. ( ) *Wind is one of the main processes affecting the marine environment.*

k. ( ) *Nile Delta Basin is dominated by siliciclastic - carbonate sediments.*

l. ( ) *Flood plain and bed load fluviatile sediments are used for the same industrial purposes.*

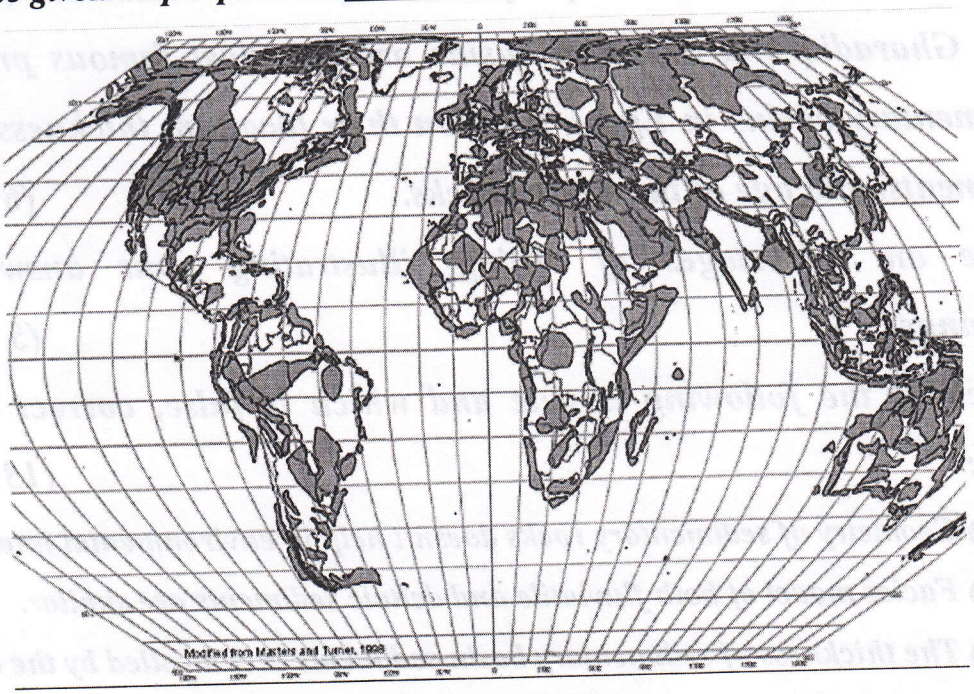
m. ( ) *Sediment basins don't illustrate any evolution with time.*

7. Choose the correct answer A, B, C or D: **(12 Marks)**

a. *The process by which the ground surface is lowered by wind erosion is called_____*

Ⓐ *Deflation* Ⓑ *Inflation* Ⓒ *Ablation* Ⓓ *None of these*

b. *The given map represents _____*



Ⓐ *Global distribution of fluviatile sediments*

Ⓑ *Global distribution of sedimentary basins*

Ⓒ *Global distribution of modern aeolian sediments*

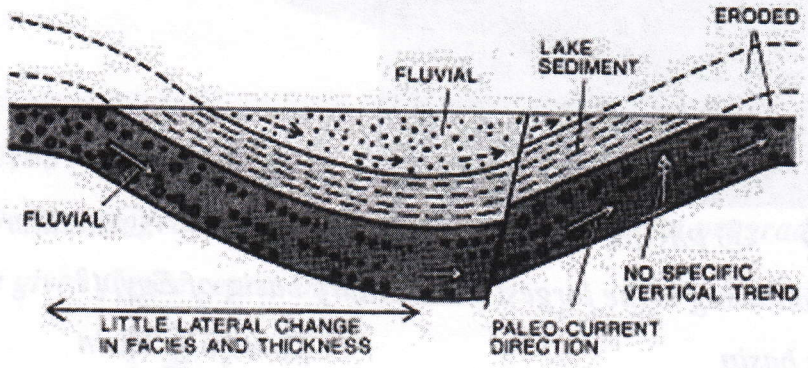
Ⓓ *Global distribution of deltaic sediments*

c. *Volcanogenous sediments are more frequent in*_____

Ⓐ *Continental environments* Ⓑ *Transitional environments*

Ⓒ *Deep marine environments* Ⓓ *Both A and B*

d. *The given figure represents* _____



Ⓐ *Post-depositional sedimentary basin* Ⓑ *Syn-depositional sedimentary basin*

Ⓒ *Pre-depositional sedimentary basin* Ⓓ *Both A and B*

e. *Which of the following statements is false?*

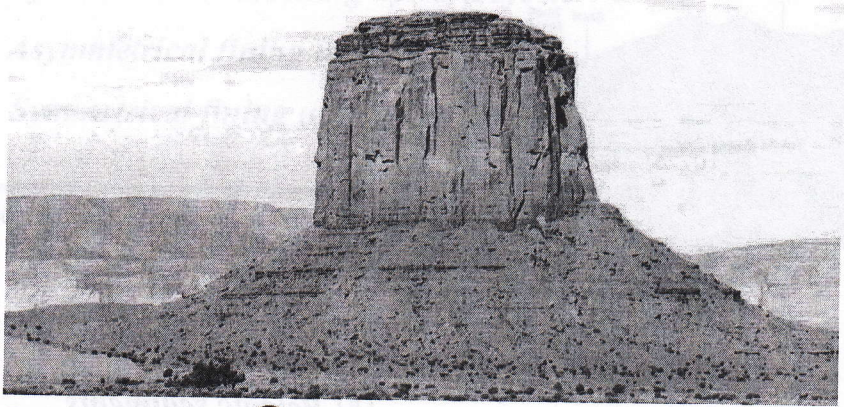
Ⓐ *Tsunamis can be generated by landslides*

Ⓑ *Tsunamis can be generated by volcanic eruptions*

Ⓒ *Tsunamis can be generated due to the gravitational attraction between the Earth and the moon*

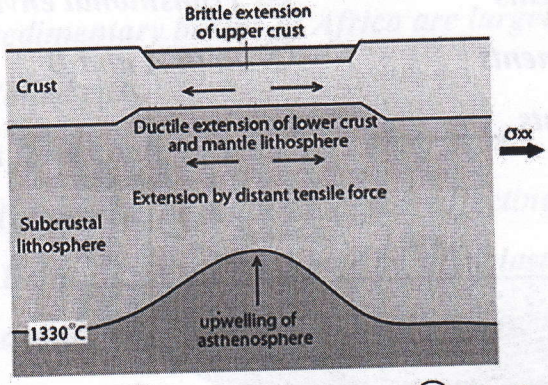
Ⓓ *Tsunamis can be generated by meteorite impacts*

f. *The given photo which is exclusively composed of sandstone represents one of the most common landforms, in which environment can you expect to find it?*



Ⓐ *Beach system* Ⓑ *Fluviatile system* Ⓒ *Desert system* Ⓓ *Deltaic system*

g. *The given figure represents*_____



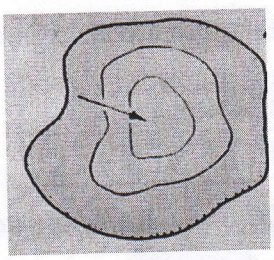
Ⓐ *Active rifting* Ⓑ *Passive rifting* Ⓒ *Both A and B* Ⓓ *Neither A nor B*

h. *Which of the following is the largest sedimentary basin of Egypt?*

Ⓐ *Gulf of Suez basin* Ⓑ *Komombo basin*

Ⓒ *Beni Suef basin* Ⓓ *Nile Delta basin*

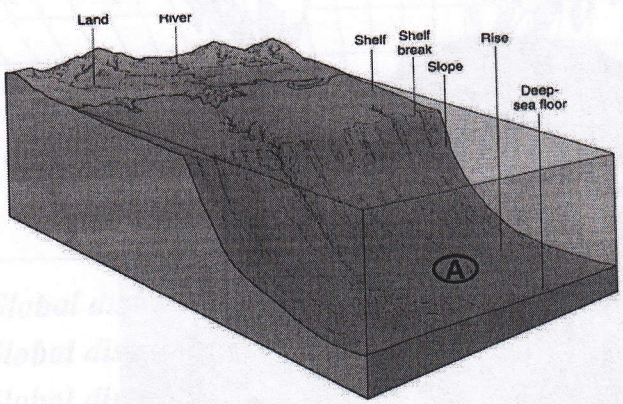
i. *The given figure represents* _____*basin*



Ⓐ *Sub circular* Ⓑ *Equidimensional*

Ⓒ *Embayment* Ⓓ *Structurally closed and elongated*

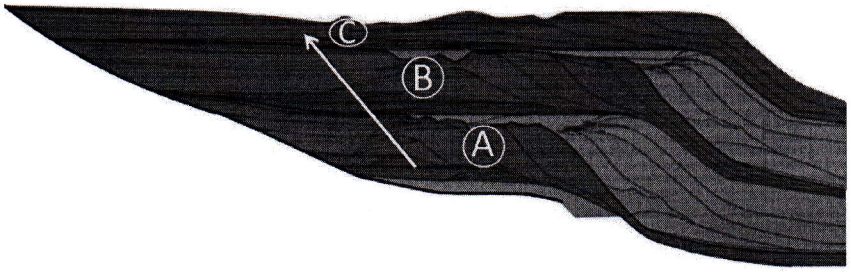
j. *Letter* Ⓐ *in the given diagram denotes* _____



Ⓐ *Neritic sediments* Ⓑ *Pelagic sediments*

Ⓒ *Lagoon sediments* Ⓓ *Both A and B*

k. *The given figure represents* _____



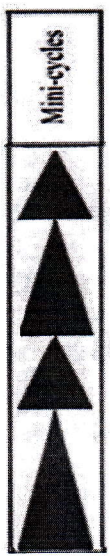
Ⓐ *Delta retrogradation*

Ⓑ *Delta progradation*

Ⓒ *Delta retrogradation-progradation*

Ⓓ *Delta progradation-retrogradation*

l. *The given figure represents* _____



Ⓐ *Asymmetrical coarsening upward cycles*

Ⓑ *Symmetrical coarsening upward cycles*

Ⓒ *Asymmetrical fining upward cycles*

Ⓓ *Symmetrical fining upward cycles*

Good luck *Ezzat A. Ahmed*