

Motivation of Students

OFFICIAL TELEGRAM CHANNEL

Bahir Dar University
College of Science
Mathematics for Natural Sciences(Math 1011)

Name: _____
ID: _____
Department: _____
Section: _____

Mid Exam (30%), Form: B

Date: 09/08/21 **Time Allowed:** $1\frac{1}{2}$hrs

Part I. Multiple Choice Questions (6%)

Instruction: Encircle the correct answer from the given alternatives.(1 pt each.)

1. Which of the following is **Not True**?
   (a) $(\forall x \in \mathbb{N})(\exists y \in \mathbb{Z})(x \leq y)$
   (b) $(\exists x \in \mathbb{N})(\forall y \in \mathbb{Z})(x \leq y)$
   (c) $(\exists x \in \mathbb{Z})(\forall y \in \mathbb{R})(x \leq y^2)$
   (d) $(\forall y \in \mathbb{R})(\exists x \in \mathbb{Z})(x \leq y^2)$
   (e) None.
2. Let A be any set. Which one of the following is **Not True**?
   (a) $A \subseteq A$
   (b) $A \in \mathcal{P}(A)$
   (c) $\emptyset \in \mathcal{P}(A)$
   (d) $A \subseteq \mathcal{P}(A)$
   (e) None.
3. If $\text{GCF}(x, 286) = 22$ and $\text{LCM}(x, 286) = 6006$, then what is the value of x?
   (a) 128
   (b) 230
   (c) 471
   (d) 462
   (e) None.
4. Which of the following is **True**?
   (a) The sum of rational number and irrational number is irrational.
   (b) The product of two irrational numbers is rational number.
   (c) The product of two irrational numbers is irrational.
   (d) The sum of two irrational numbers is irrational
   (e) None
5. Let z_1 and z_2 be complex numbers. Which of the following is **True**?
   (a) $\overline{z_1 z_2} = \bar{z}_1 \bar{z}_2$
   (b) $|z_1 + z_2| \leq |z_1| + |\overline{z_2}|$
   (c) $|z_1 - z_2| \leq |z_1| - |z_2|$
   (d) $|z_1|^2 = \overline{z_1 z_1}$
   (e) None.

Top students

6. Which of the following is a **proposition**?

   (a) x is divisible by 2.

   (b) Thank you!

   (c) For any real number x, $x^2 \geq 0$.

   (d) $x + 1 = 5$

   (e) None.

Part II. Short Answer Questions (12%)

Instruction: Write the most simplified answer on the space provided.(1.5 pts each)

7. Let p : Abebe attends class regularly and q : Abebe pass the exam. Write the symbolic form of the sentence "**Abebe attends class regularly but he fail the exam.**" _____

8. Suppose the truth values of p, q and r are T, F and T respectively. Then, the truth value of $(\neg p \vee q) \Rightarrow [q \Leftrightarrow (p \wedge r)]$ is ____.

9. Given set $A = \left\{\frac{4+3n}{1+n}\right\}$ for $n \in \mathbb{N}$.

   (a) lub of A = ____

   (b) glb of A = ____

10. The fraction form of $0.3\overline{13}$ is _____

11. Let $z = -\sqrt{3} - i$. Then

    (a) $\text{Arg}(z)$ = _____.

    (b) z^{60} = _____ (in rectangular form)

12. Let U = {1, 2, 3, 4, 5, 6, 7} be the universal set and let A = {1, 2, 3, 4, 5} and B = {2, 3, 6, 7}. Then A△(A − B) = _____.

Part III. Workout Problems (12%)

Show all the necessary steps clearly on the space provided.

13. Using Principle of Mathematical Induction, show that $n^2 - n$ is divisible by 3, for $n \geq 2$. (4 pts.)

Top students

14. By using truth table determine whether the compound proposition

$$(p \Rightarrow q) \wedge (q \Rightarrow r)$$

is a tautology, a contradiction or neither. **(4 pts.)**

Top students

15. Find cubic roots of $-2 + \sqrt{12}i$. (4 pts.)

Top students

6. Which of the following is a **proposition**?

   (a) x is divisible by 2.

   (b) Thank you!

   (c) For any real number x, $x^2 \geq 0$.

   (d) $x + 1 = 5$

   (e) None.

Part II. Short Answer Questions (12%)

Instruction: Write the most simplified answer on the space provided.(1.5 pts each)

7. Let p : Abebe attends class regularly and q : Abebe pass the exam. Write the symbolic form of the sentence "**Abebe attends class regularly but he fail the exam.**" _____

8. Suppose the truth values of p, q and r are T, F and T respectively. Then, the truth value of $(\neg p \vee q) \Rightarrow [q \Leftrightarrow (p \wedge r)]$ is ____.

9. Given set $A = \left\{\frac{4+3n}{1+n}\right\}$ for $n \in \mathbb{N}$.

   (a) lub of A = ____

   (b) glb of A = ____

10. The fraction form of $0.3\overline{13}$ is _____

11. Let $z = -\sqrt{3} - i$. Then

    (a) $\text{Arg}(z)$ = _____.

    (b) z^{60} = _____ (in rectangular form)

12. Let U = {1, 2, 3, 4, 5, 6, 7} be the universal set and let A = {1, 2, 3, 4, 5} and B = {2, 3, 6, 7}. Then A△(A − B) = _____.

Part III. Workout Problems (12%)

Show all the necessary steps clearly on the space provided.

13. Using Principle of Mathematical Induction, show that $n^2 - n$ is divisible by 3, for $n \geq 2$. (4 pts.)

Top students

14. By using truth table determine whether the compound proposition

$$(p \Rightarrow q) \wedge (q \Rightarrow r)$$

is a tautology, a contradiction or neither. **(4 pts.)**

Top students

15. Find cubic roots of $-2 + \sqrt{12}i$. (4 pts.)

Top students

12. The wettest and the largest lowlands in Ethiopia respectively, are

A. Baro and Ghenale
B. Tekeze and Ghibe
C. Baro and Wabishebelle
D. Ghenale and AbayDinder

13. The lowest point and the highest elevation of Ethiopia are respectively located in

A. Chew Bahir and Tigray Plateau
B. Lakes region and Arsi -Bale Massif
C. Tekeze Lowland and Central Highland
D. AfarTriangle and North Central Massif

14. The only active platinum mine area in Ethiopia is located in

A. Yubdo
B. Adola.
C. Wadla
D. Chercher

15. Unlike Ethiopian lowlands, highlands of Ethiopia are known for

A. Extensive rain fed farming
B. High prevalence of tropical disease
C. Nomadic way of life
D. Low population density

16. Among the Ethiopian highlands which one is the true plateau?

A. South Western highlands
B. Tigray Plateau
C. Hararghe Plateau
D. Shewan Plateau

17. One of the following highlands has an important coffee producing area in Ethiopia?

A. Sidama highlands
B. Shewan Plateau
C. Tigray plateau
D. Arsi-Bale highlands

18. All of the following areas host most mineral resources of Ethiopia except

A. the Northern greenstone belt
B. the Western and South-western-greenstone belt
C. the Central greenstone belt
D. the Southern greenstone belt

19. Which statement is incorrect about Ethiopian Rift valley system?

A. It is a tectonically formed structural depression.
B. The lowest point in Ethiopia is part of the chew Bahir rift of the system
C. Afar Triangle is the largest and widest part of the Rift valley system.
D. The main Ethiopian rift is the most elevated part of the system

20. The rocks in Ethiopia with the greatest potential for oil and gas deposit are

A. Precambrian rocks
B. Mesozoic rocks
C. Crystalline Basement Complex rocks
D. Volcanic rocks

21. Which lowland of Ethiopia is considered as western lowland; but structurally belongs to the Rift valley

A. Abay Dinder Lowland
B. Baro Lowland
C. Tekeze Lowland
D. Ghibe Lowland

Top students

Bahir Dar University
Faculty of Social Science
Department of Geography and Environmental Studies
Mid-Term Examination for freshman program
For theCourse- Geographyof Ethiopia and the Horn (GeES_1011)
Weight: 30% Academic Year: 2021
Time allowed: 50 minutes

General Instruction of the Examination

- *Please **switch off your mobile phones** and put it on the floor.*
- *Please **do not write** any answer **on the question paper***
- ***Do not detach** the question paper from the answer sheet*
- *Check your question paper consists of **four parts**, 27 **questions** and 4 **pages** including answer sheet.*
- *Read the **instructions carefully** and do it accordingly.*

PART-ONE- ***Write TRUE if the statement is Correct and FALSE if the Statement is Incorrect*** ***(1p teach)***

1. South west highlands are the wettest and the home of diversified linguistic and ethnic groups in Ethiopia.
2. The western high lands are the largest physiographic Region in Ethiopia.
3. Dead Sea, Red Sea and Gulf of Aden troughs are the result of Mesozoic era's geological process.
4. The marshy and the smallest part of the Ethiopian rift valley region is Chew Bahir rift
5. The topography of Ethiopia is largely determined by the geological processes of the Paleozoic era.

PART –TWO . ***Match column "A", with column "B"*** and write your answer on the answer sheet only. (1pt for each question)

Column "A"	Column "B"
6. Glacio-fluvial deposits	A. Sea invaded and sea-covered places
7. Aeolian deposits	B. Windblown deposits
8. Lacustrine deposits	C. Deposits on the banks of rivers
9. Fluvial deposits	D. Occurred on high mountains
10. Coastal and marine deposits	E. Former lakebeds, and swampy depressions

PART-THREE- ***Choose the correct answer from the given alternatives and write your choice on the answer sheet only. (1pt for each question)***

11. Which known feature in Ethiopia is wrongly matched with its respective location?
    A. Yeju Wadladelta → North Central Massif
    B. Fogera and Dembia Plains → Central Highlands
    C. Debre Damo Monastery → Tigray Plateau
    D. Sof Omar Cave→ Arsi -Bale Masif

Top students

Part II. Multiple Choices Item (30pts)

Instruction: Choose the best answer and write the letter of your choice on the answer sheet only.

(1.5pt for each question)

11. The Awash River is the most utilized in Ethiopia for irrigation purposes. This is mainly due to its:

A. Unfluctuating volume of water
B. Drains rift valley region
C. Surrounding terrain
D. Great number of tributaries

12. Which agro-ecological zone of Ethiopia has the least share of the country's landmass?

A. Cold to moist
B. Hot arid
C. Warm semiarid
D. Cool to humid

13. One of the following is not the characteristics of majorities of Ethiopian Rivers

A. They are transboundary
B. Volume of water fluctuates seasonally
C. They have rapids and falls along their courses
D. Since they flow over steep slope, they have smooth profile

14. What distinguishes the Rift Valley Lakes from the highland lakes?

A. The fluctuation of their volume of water
B .Their significance for transportation
C .Their richness in chemicals that produce soda ash
D Their location along transport lines

15. Identify the reasons why Wabishebelle River fails to reach Indian Ocean.

A. The intermittent nature of its tributaries
B. More water is used for irrigation in Somali plain area
C. It is largely used for generation of hydro electrical power in Ethiopia
D. It is drained by few numbers of tributaries

16. Among the following, one doesn't characterize Ethiopian climate

A. It experiences high average annual temperature
B. Unlike altitude, latitude has significant influence on its climate condition
C. Temperature decrease from the peripheries towards the central part of the country
D. Tropical climate predominate the peripheral lowlands

17. One of the following statements is incorrect about Inter Tropical Convergence Zone (ITCZ)?

A. It is not uniform in the magnitude of low pressure.
B. Follows the position of overhead sun
C. Causes variability and seasonal distribution of rain fall in Ethiopia
D .Shifts towards north of Equator in January

Top Students

Dar University

ulty of Social Science

epartment of Geography and Environmental Studies

Final examination for freshman program

For the Course- Geography of Ethiopia and the Horn (GeES.1011)

Academic Year: 2021 **Time allowed: 1:10 hours**

Weight: 50%

General Instruction of the Examination

- *Please* ***do not write*** *any answer on the question paper*
- ***Do not detach*** *the question paper from the answer sheet*
- *Check your question paper consists of five parts, 33questions and 6 pages including answer sheet.*
- *Read the instructions carefully and do it accordingly.*

Part I. True/False Item (5pts)

Instruction: Write TRUE if the statement is correct and write FALSE if the statement is incorrect and put your answer on the answer sheet only. (1pt for each Question)

1. Because of altitudinal effect, the amount of insolation and temperature decreases as one moves pole ward from equator.
2. *Awash* and *Nekemte* are located on the same latitude (9°N) thereby experiences similar amount of annual average temperature.
3. When there is absence of rainfall in Addis Ababa for three consecutive weeks, it is a sign of climate change.
4. Acrisols have very low resilience to degradation.
5. Oceans are the most abundant and easily available freshwaters.

Part II: Matching Item (5pts)

Instruction: Match column "A", in column "B" and write your answer on the answer sheet only. ***(1.pt for each question)***

Column "A"	**Column "B"**
6. Xerophytic plants	A. Woodland savannahs
7. Baphia and Ficus sur (Sholla)	B. Afro-alpine & sub-afro-alpine vegetation
8. Acacia and Mixed deciduous trees	C. High land Forest
9. Hagenia Abyssinia (Kosso) and Podocarpus falcatus (zigba),	D. Gallery Forests
10. Lobelia rhynchopetalum (giberra) and Erica arborea (Asta)	E. Aquatic vegetation
	G. Steppe and Semi desert vegetation

Top students

18. Which one of the following is not true about rainfall distribution of Ethiopia?

A. The Atlantic contributes a lot for summer rainfall

B. Rainfall in Ethiopia is seasonal, varying in amount over space and time

C. Most of Ethiopia comes under the influence of North East Trade winds in the summer season

D. Spring is the major rainfall season in the southeastern highlands

19. Of the following, which one is not the natural cause of climate change?

A. Volcanic eruption

B. Earth's Orbital change

C. Expansion of industries

D. Solar output

20. Which one of the following is not physical property of a soil?

A. Space for water and air

B. Size of soil particles

C. Arrangement of soil particles

D. Acidity and alkalify of the soil

21. Which one is incorrect about Nitosols?

A. The presence of high rainfall expose it for soil leaching

B. It has reddish-brown color due to high concentration of iron oxides

C. Strongly weathered soil in tropics

D. Leaching makes it rich in soluble minerals like potassium, calcium

22. Black soil that is hard to plough during the rainy season is

A. Fluvisols B. Vertisols C. Nithosols D . Xerosols

23. All of the following contribute for the underutilization of Ethiopia's water resource poten

A. Erosion and the resulting sedimentation

B. Seasonal flow fluctuation

C. Absence of rapids and falls

D. Invasive species

24. All are reasons for the decreases in the air temperature with increase in altitude in the tr except:

A. The troposphere is directly heated by the radiation emitted from the earth

B. The low density of the air near the ground

C. The high density of the air near the ground

D. The high concentration of water vapor and dust in lower atmosphere.

25. All are true about the relationship of altitude and temperature except:

A. Under normal condition temperature decrease with the increasing altitude

B. Temperature changes adiabatically, as the result of addition or withdraws of heat in the air mass

C. Vertical displacement of air is the major cause of adiabatic temperature change

D. Environmental laps rate is change of temperature in calm atmospheric condition with the rate of $6.5^{o}C$

Top students

Students

Top

26. One is correct about Rift Valley drainage system

A. Afar denakil drainage system is part of Rift Valley drainage system

B. Lake Afrera and Asale are the only main surface water of Rift Valley drainage system

C. it has uniform drainage pattern

D. Awash River is an inland drainage that empties to Lake Abe.

27. Which geographical area of Ethiopia receives rain from the North easterly winds is:

A. Central Highland

B. Afar lowland

C. Southeastern highland

D. Southeastern lowland

28. Identify the incorrect statement

A. in Ethiopia the highest temperature is recorded in the months of winter season

B. in Ethiopia, September23rd marks the onset of autumn season.

C. in Ethiopia winter season occur when the sun overhead directly above tropic of Capricorn

D. September23rd and March 20st days and nights are equal throughout the world

29. Identify the wrong combination?

A. Walia Ibex ➔ .Semein highlands

B. Nyala ➔ Bale Mountains.

C. Semein Fox ➔Bale and Semein Highlands

D. Chelad baboon ➔ Abiyata-Shalla national park.

30. Among the following which one explains the change in Ethiopia's climate?

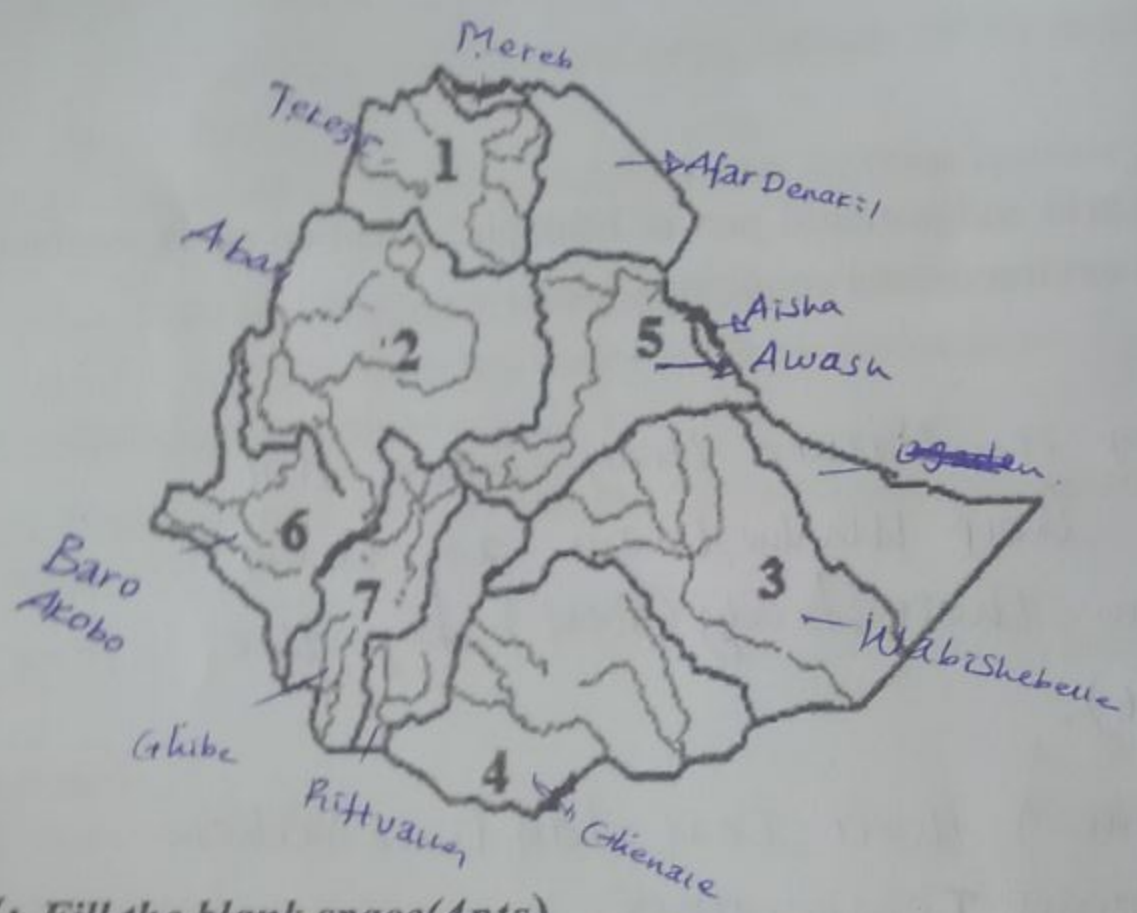
A. The infrequent occurrence of flood and drought

B. The high predictability of rainfall

C. The increase in the number of hot days and nights

D. The decrease in the variability of rainfall

1.pt. each					
1. False	6. G	11. B	16. A	21. D	26. D
2. False	7. D	12. B	17. D	22. B	27. B
3. False	8. A	13. D	18. C	23. C	28. A
4. False	9. C	14. C	19. C	24. B	29. D
5 False	10. B	15. A	20. D	25. B	30. A



Part IV: ***Fill the blank space*** **(4pts)**

31. By referring the above Drainage map of Ethiopia write the name of the major river basin. (4pt)

A). Number 2---Abay D.B---

B). Number 3---Wabishebelle D.B

C). Number 5---Awash D.B

D). Number 7---Ghibe (Omo) I.B.B

Top students

Part II. Multiple Choices Item (30pts)

Instruction: Choose the best answer and write the letter of your choice on the answer sheet only.

(1.5pt for each question)

11. The Awash River is the most utilized in Ethiopia for irrigation purposes. This is mainly due to its:

A. Unfluctuating volume of water
B. Drains rift valley region
C. Surrounding terrain
D. Great number of tributaries

12. Which agro-ecological zone of Ethiopia has the least share of the country's landmass?

A. Cold to moist
B. Hot arid
C. Warm semiarid
D. Cool to humid

13. One of the following is not the characteristics of majorities of Ethiopian Rivers

A. They are transboundary
B. Volume of water fluctuates seasonally
C. They have rapids and falls along their courses
D. Since they flow over steep slope, they have smooth profile

14. What distinguishes the Rift Valley Lakes from the highland lakes?

A. The fluctuation of their volume of water
B .Their significance for transportation
C .Their richness in chemicals that produce soda ash
D Their location along transport lines

15. Identify the reasons why Wabishebelle River fails to reach Indian Ocean.

A. The intermittent nature of its tributaries
B. More water is used for irrigation in Somali plain area
C. It is largely used for generation of hydro electrical power in Ethiopia
D. It is drained by few numbers of tributaries

16. Among the following, one doesn't characterize Ethiopian climate

A. It experiences high average annual temperature
B. Unlike altitude, latitude has significant influence on its climate condition
C. Temperature decrease from the peripheries towards the central part of the country
D. Tropical climate predominate the peripheral lowlands

17. One of the following statements is incorrect about Inter Tropical Convergence Zone (ITCZ)?

A. It is not uniform in the magnitude of low pressure.
B. Follows the position of overhead sun
C. Causes variability and seasonal distribution of rain fall in Ethiopia
D .Shifts towards north of Equator in January

Top Students

Dar University

ulty of Social Science

epartment of Geography and Environmental Studies

Final examination for freshman program

For the Course- Geography of Ethiopia and the Horn (GeES.1011)

Academic Year: 2021 **Time allowed: 1:10 hours**

Weight: 50%

General Instruction of the Examination

- *Please* ***do not write*** *any answer on the question paper*
- ***Do not detach*** *the question paper from the answer sheet*
- *Check your question paper consists of five parts, 33questions and 6 pages including answer sheet.*
- *Read the instructions carefully and do it accordingly.*

Part I. True/False Item (5pts)

Instruction: Write TRUE if the statement is correct and write FALSE if the statement is incorrect and put your answer on the answer sheet only. (1pt for each Question)

1. Because of altitudinal effect, the amount of insolation and temperature decreases as one moves pole ward from equator.
2. *Awash* and *Nekemte* are located on the same latitude (9°N) thereby experiences similar amount of annual average temperature.
3. When there is absence of rainfall in Addis Ababa for three consecutive weeks, it is a sign of climate change.
4. Acrisols have very low resilience to degradation.
5. Oceans are the most abundant and easily available freshwaters.

Part II: Matching Item (5pts)

Instruction: Match column "A", in column "B" and write your answer on the answer sheet only. ***(1.pt for each question)***

Column "A"	**Column "B"**
6. Xerophytic plants	A. Woodland savannahs
7. Baphia and Ficus sur (Sholla)	B. Afro-alpine & sub-afro-alpine vegetation
8. Acacia and Mixed deciduous trees	C. High land Forest
9. Hagenia Abyssinia (Kosso) and Podocarpus falcatus (zigba),	D. Gallery Forests
10. Lobelia rhynchopetalum (giberra) and Erica arborea (Asta)	E. Aquatic vegetation
	G. Steppe and Semi desert vegetation

Top students

18. Which one of the following is not true about rainfall distribution of Ethiopia?

A. The Atlantic contributes a lot for summer rainfall

B. Rainfall in Ethiopia is seasonal, varying in amount over space and time

C. Most of Ethiopia comes under the influence of North East Trade winds in the summer season

D. Spring is the major rainfall season in the southeastern highlands

19. Of the following, which one is not the natural cause of climate change?

A. Volcanic eruption

B. Earth's Orbital change

C. Expansion of industries

D. Solar output

20. Which one of the following is not physical property of a soil?

A. Space for water and air

B. Size of soil particles

C. Arrangement of soil particles

D. Acidity and alkalify of the soil

21. Which one is incorrect about Nitosols?

A. The presence of high rainfall expose it for soil leaching

B. It has reddish-brown color due to high concentration of iron oxides

C. Strongly weathered soil in tropics

D. Leaching makes it rich in soluble minerals like potassium, calcium

22. Black soil that is hard to plough during the rainy season is

A. Fluvisols B. Vertisols C. Nithosols D . Xerosols

23. All of the following contribute for the underutilization of Ethiopia's water resource poten

A. Erosion and the resulting sedimentation

B. Seasonal flow fluctuation

C. Absence of rapids and falls

D. Invasive species

24. All are reasons for the decreases in the air temperature with increase in altitude in the tr except:

A. The troposphere is directly heated by the radiation emitted from the earth

B. The low density of the air near the ground

C. The high density of the air near the ground

D. The high concentration of water vapor and dust in lower atmosphere.

25. All are true about the relationship of altitude and temperature except:

A. Under normal condition temperature decrease with the increasing altitude

B. Temperature changes adiabatically, as the result of addition or withdraws of heat in the air mass

C. Vertical displacement of air is the major cause of adiabatic temperature change

D. Environmental laps rate is change of temperature in calm atmospheric condition with the rate of $6.5^{o}C$

Top students

Students

Top

26. One is correct about Rift Valley drainage system

A. Afar denakil drainage system is part of Rift Valley drainage system

B. Lake Afrera and Asale are the only main surface water of Rift Valley drainage system

C. it has uniform drainage pattern

D. Awash River is an inland drainage that empties to Lake Abe.

27. Which geographical area of Ethiopia receives rain from the North easterly winds is:

A. Central Highland

B. Afar lowland

C. Southeastern highland

D. Southeastern lowland

28. Identify the incorrect statement

A. in Ethiopia the highest temperature is recorded in the months of winter season

B. in Ethiopia, September23rd marks the onset of autumn season.

C. in Ethiopia winter season occur when the sun overhead directly above tropic of Capricorn

D. September23rd and March 20st days and nights are equal throughout the world

29. Identify the wrong combination?

A. Walia Ibex ➔ .Semein highlands

B. Nyala ➔ Bale Mountains.

C. Semein Fox ➔Bale and Semein Highlands

D. Chelad baboon ➔ Abiyata-Shalla national park.

30. Among the following which one explains the change in Ethiopia's climate?

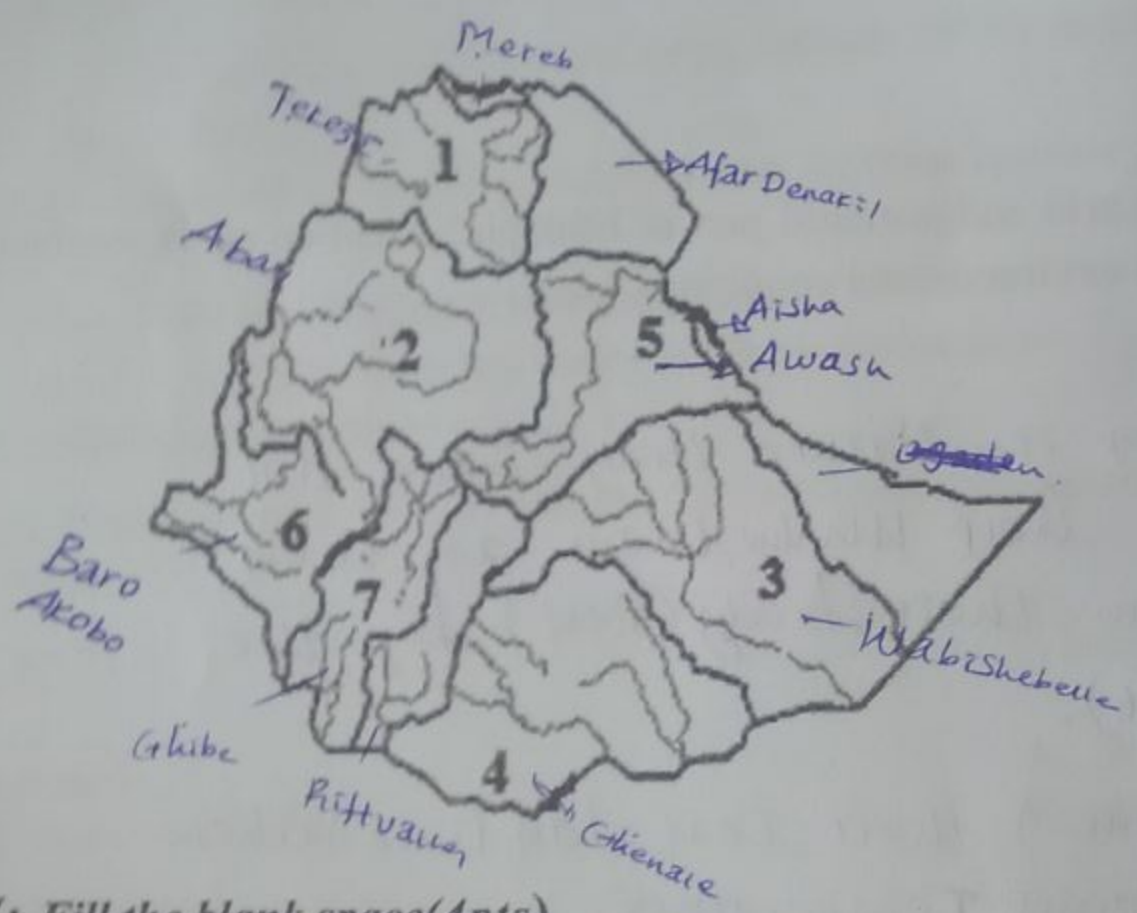
A. The infrequent occurrence of flood and drought

B. The high predictability of rainfall

C. The increase in the number of hot days and nights

D. The decrease in the variability of rainfall

1.pt. each					
1. False	6. G	11. B	16. A	21. D	26. D
2. False	7. D	12. B	17. D	22. B	27. B
3. False	8. A	13. D	18. C	23. C	28. A
4. False	9. C	14. C	19. C	24. B	29. D
5 False	10. B	15. A	20. D	25. B	30. A



Part IV: ***Fill the blank space*** **(4pts)**

31. By referring the above Drainage map of Ethiopia write the name of the major river basin. (4pt)

A). Number 2---Abay D.B---

B). Number 3---Wabishebelle D.B

C). Number 5---Awash D.B

D). Number 7---Ghibe (Omo) I.B.B

Top students

Bahir Dar University
College of Science
Mathematics for Natural Sciences(Math 1011)

Name: _____
ID: _____
Department: _____
Section: _____

Mid Exam (30%), Form: B

Date: 09/08/21 **Time Allowed:** $1\frac{1}{2}$hrs

Part I. Multiple Choice Questions (6%)

Instruction: Encircle the correct answer from the given alternatives.(1 pt each.)

1. Which of the following is **Not True**?
   (a) $(\forall x \in \mathbb{N})(\exists y \in \mathbb{Z})(x \leq y)$
   (b) $(\exists x \in \mathbb{N})(\forall y \in \mathbb{Z})(x \leq y)$
   (c) $(\exists x \in \mathbb{Z})(\forall y \in \mathbb{R})(x \leq y^2)$
   (d) $(\forall y \in \mathbb{R})(\exists x \in \mathbb{Z})(x \leq y^2)$
   (e) None.
2. Let A be any set. Which one of the following is **Not True**?
   (a) $A \subseteq A$
   (b) $A \in \mathcal{P}(A)$
   (c) $\emptyset \in \mathcal{P}(A)$
   (d) $A \subseteq \mathcal{P}(A)$
   (e) None.
3. If $\text{GCF}(x, 286) = 22$ and $\text{LCM}(x, 286) = 6006$, then what is the value of x?
   (a) 128
   (b) 230
   (c) 471
   (d) 462
   (e) None.
4. Which of the following is **True**?
   (a) The sum of rational number and irrational number is irrational.
   (b) The product of two irrational numbers is rational number.
   (c) The product of two irrational numbers is irrational.
   (d) The sum of two irrational numbers is irrational
   (e) None
5. Let z_1 and z_2 be complex numbers. Which of the following is **True**?
   (a) $\overline{z_1 z_2} = \bar{z}_1 \bar{z}_2$
   (b) $|z_1 + z_2| \leq |z_1| + |\overline{z_2}|$
   (c) $|z_1 - z_2| \leq |z_1| - |z_2|$
   (d) $|z_1|^2 = \overline{z_1 z_1}$
   (e) None.

Top students

6. Which of the following is a **proposition**?

   (a) x is divisible by 2.

   (b) Thank you!

   (c) For any real number x, $x^2 \geq 0$.

   (d) $x + 1 = 5$

   (e) None.

Part II. Short Answer Questions (12%)

Instruction: Write the most simplified answer on the space provided.(1.5 pts each)

7. Let p : Abebe attends class regularly and q : Abebe pass the exam. Write the symbolic form of the sentence "**Abebe attends class regularly but he fail the exam.**" _____

8. Suppose the truth values of p, q and r are T, F and T respectively. Then, the truth value of $(\neg p \vee q) \Rightarrow [q \Leftrightarrow (p \wedge r)]$ is ____.

9. Given set $A = \left\{\frac{4+3n}{1+n}\right\}$ for $n \in \mathbb{N}$.

   (a) lub of A = ____

   (b) glb of A = ____

10. The fraction form of $0.3\overline{13}$ is _____

11. Let $z = -\sqrt{3} - i$. Then

    (a) $\text{Arg}(z)$ = _____.

    (b) z^{60} = _____ (in rectangular form)

12. Let U = {1, 2, 3, 4, 5, 6, 7} be the universal set and let A = {1, 2, 3, 4, 5} and B = {2, 3, 6, 7}. Then A△(A − B) = _____.

Part III. Workout Problems (12%)

Show all the necessary steps clearly on the space provided.

13. Using Principle of Mathematical Induction, show that $n^2 - n$ is divisible by 3, for $n \geq 2$. (4 pts.)

Top students

14. By using truth table determine whether the compound proposition

$$(p \Rightarrow q) \wedge (q \Rightarrow r)$$

is a tautology, a contradiction or neither. **(4 pts.)**

Top students

15. Find cubic roots of $-2 + \sqrt{12}i$. (4 pts.)

Top students

Science College, Physics Department Exam
Mid Exam for General Physics (Phys. 1011)
Target group: 1st Year regular Students

Date: 10/12/2013 E.C.
Time given: 1.30 hrs
Weight: 30%

Full Name: _____ ID: _____ Section: _____

Instructor's Name: _____

For Instructors' Use

Part I (24%)	Part II (6%)	Total (30%)

Useful Constant: $g = 10m/s^2$, $\sin 37^\circ = 0.6$ and $\cos 37^\circ = 0.8$

CALCULATOR AND MOBILE IS NOT ALLOWED AT ALL

Part I: Multiple Choices (24%)

Instruction: **Choose the best answer and write your choice in Capital letter on the space provided for each question.**

_____1. A car from rest and uniformly accelerates to a final speed of 20.0 m/s in a time of 15.0 seconds. How far does the car travel during the time?

A. 150.0m B. 600.0m C. 400.0m D. 300.0m

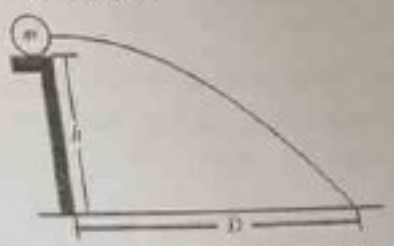
_____2. Consider three vectors, $\vec{A} = 3\hat{i} - 3\hat{j}$, $\vec{B} = -\hat{i} - 4\hat{j}$ and $\vec{C} = -5\hat{i} - 5\hat{j}$. If $r\vec{A} - k\vec{B} + \vec{C} = 0$, the value of the scalars r and k respectively are _____.

A. 2 and 3 B. 2 and 4 C. 1 and 2 D. 2 and 2

_____3. A 20g bullet is fired into a stationary block of wood having mass 8 kg. The bullet imbeds into the block. The speed of the bullet-plus-wood combination immediately after the collision is 1 m/s. What was the original speed of the bullet?

A. 402m/s B. 401m/s C. 400m/s D. 399m/s

_____4. As shown in the figure below, a ball on a table of height h is thrown horizontally and the ball is rolled off the table traveling at a speed v, neglecting air resistance. How far (D) from the bottom of the table the ball falls?



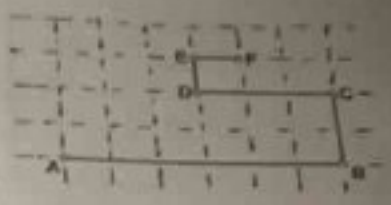
A. $v\sqrt{h/g}$ B. $hv/2g$ C. $v\sqrt{2h/g}$ D. $2h$

_____5. A block of mass m is pulled along a horizontal floor with a rope that is maintained at an angle θ above the horizontal. The coefficient of friction between the block and the floor is μ. What force is required to maintain the motion of the block at constant speed?

A. μmg B. $\mu mg \tan\theta$ C. $\dfrac{\mu mg}{\cos\theta}$ D. $\dfrac{\mu mg}{\cos\theta + \mu\sin\theta}$

Top students

_____6. Starting from point A, an object moves along the grid through points A, B, C, D, E, and stops at F as shown below. The side of square tiles measures 0.1 km. The distance covered by the moving object and the magnitude of the displacement of the object respectively are



A. 0.7 km and $\frac{\sqrt{13}}{10}$ km B. 1.3 km and 0.5km

C. 0.5 km and 1.3 km D. $\frac{\sqrt{13}}{10}$ km and 0.7 km

_____7. Which one is not true about projectile motion of an object?

A. The horizontal component of its velocity changes with time.

B. The only force that acts on the object is gravity.

C. The acceleration at maximum height is non zero.

D. Vertical velocity at maximum height is zero.

_____8. You press your physics textbook flat against a vertical wall with your hand. What is the direction of the normal force on the book?

A. downward B. upward C. out from the wall D. into the wall

_____9. The length and the width of a metal plate are 8.71 cm by 3.2 cm. The area of the metal plate with the appropriate significant figures is_____.

A. 28 cm^2 B. 27.87 cm^2 C. 27.9 cm^2 D. 27.872 cm^2

_____10. An object is thrown vertically upward at 35 m/s. The velocity of the object 5s later is:

A. 15 m/s up B. 15 m/s down C. 85 m/s down D. 85 m/s up

_____11. A 400-kg piano slides 2m down a 37° incline and is kept non accelerating by a man who is pushing back on it parallel to the incline as shown. If the coefficient of friction is 0.5 the work done on the piano by the man is_____.



A. 1600J B. 4800J C. - 4800J D. -1600J

_____12. Three particles of m_1 = 1kg, m_2 = 2kg and m_3 = 3kg are located at coordinates (1m, 4m,4m), (-2m, 4m,1m), and (-1m, 2m, 2m) respectively. What is the position of their center of mass?

A. (-1m, 3m, 2m) B. (1.5m, 1m, 1.5m) C. (2m, 3m,4m) D. (-1.5m, 1m, 4m)

Part II- Short Answer.

Write the precise answer on the space provided on the question paper. (2pts each)

1. When we release a block at the top of an inclined plane of slope angle θ the block slides down with a constant velocity. The block is then projected up the same plane with an initial velocity v_0 at the bottom. In terms of velocity v_0, g and θ the expression for the distance moved by the block up the inclined is _____.
2. If we have two vectors $\vec{A} = 3\hat{i} - 4\hat{j} + 4\hat{k}$ and $\vec{B} = 2\hat{i} - 3\hat{j} + \hat{k}$. A unit vector in the direction of $2\vec{B} - \vec{A}$ is _____.
3. If the linear momentum of a particle is doubled, its kinetic energy will be changed by a factor of _____.

Top students



Bahir Dar University
College of Science
Mathematics for Natural Sciences(Math 1011)

Name: _____
ID: _____
Department: _____
Section: _____

Mid Exam (30%), Form: B

Date: 09/08/21 **Time Allowed:** $1\frac{1}{2}$hrs

Part I. Multiple Choice Questions (6%)

Instruction: Encircle the correct answer from the given alternatives.(1 pt each.)

1. Which of the following is **Not True**?
   (a) $(\forall x \in \mathbb{N})(\exists y \in \mathbb{Z})(x \leq y)$
   (b) $(\exists x \in \mathbb{N})(\forall y \in \mathbb{Z})(x \leq y)$
   (c) $(\exists x \in \mathbb{Z})(\forall y \in \mathbb{R})(x \leq y^2)$
   (d) $(\forall y \in \mathbb{R})(\exists x \in \mathbb{Z})(x \leq y^2)$
   (e) None.
2. Let A be any set. Which one of the following is **Not True**?
   (a) $A \subseteq A$
   (b) $A \in \mathcal{P}(A)$
   (c) $\emptyset \in \mathcal{P}(A)$
   (d) $A \subseteq \mathcal{P}(A)$
   (e) None.
3. If $\text{GCF}(x, 286) = 22$ and $\text{LCM}(x, 286) = 6006$, then what is the value of x?
   (a) 128
   (b) 230
   (c) 471
   (d) 462
   (e) None.
4. Which of the following is **True**?
   (a) The sum of rational number and irrational number is irrational.
   (b) The product of two irrational numbers is rational number.
   (c) The product of two irrational numbers is irrational.
   (d) The sum of two irrational numbers is irrational
   (e) None
5. Let z_1 and z_2 be complex numbers. Which of the following is **True**?
   (a) $\overline{z_1 z_2} = \bar{z}_1 \bar{z}_2$
   (b) $|z_1 + z_2| \leq |z_1| + |\overline{z_2}|$
   (c) $|z_1 - z_2| \leq |z_1| - |z_2|$
   (d) $|z_1|^2 = \overline{z_1 z_1}$
   (e) None.

Top students

6. Which of the following is a **proposition**?

   (a) x is divisible by 2.

   (b) Thank you!

   (c) For any real number x, $x^2 \geq 0$.

   (d) $x + 1 = 5$

   (e) None.

Part II. Short Answer Questions (12%)

Instruction: Write the most simplified answer on the space provided.(1.5 pts each)

7. Let p : Abebe attends class regularly and q : Abebe pass the exam. Write the symbolic form of the sentence "**Abebe attends class regularly but he fail the exam.**" _____

8. Suppose the truth values of p, q and r are T, F and T respectively. Then, the truth value of $(\neg p \vee q) \Rightarrow [q \Leftrightarrow (p \wedge r)]$ is ____.

9. Given set $A = \left\{\frac{4+3n}{1+n}\right\}$ for $n \in \mathbb{N}$.

   (a) lub of A = ____

   (b) glb of A = ____

10. The fraction form of $0.3\overline{13}$ is _____

11. Let $z = -\sqrt{3} - i$. Then

    (a) $\text{Arg}(z)$ = _____.

    (b) z^{60} = _____ (in rectangular form)

12. Let U = {1, 2, 3, 4, 5, 6, 7} be the universal set and let A = {1, 2, 3, 4, 5} and B = {2, 3, 6, 7}. Then A△(A − B) = _____.

Part III. Workout Problems (12%)

Show all the necessary steps clearly on the space provided.

13. Using Principle of Mathematical Induction, show that $n^2 - n$ is divisible by 3, for $n \geq 2$. (4 pts.)

Top students

14. By using truth table determine whether the compound proposition

$$(p \Rightarrow q) \wedge (q \Rightarrow r)$$

is a tautology, a contradiction or neither. **(4 pts.)**

Top students

15. Find cubic roots of $-2 + \sqrt{12}i$. (4 pts.)

Top students

Bahir Dar University
Faculty of Social Science
Department of Geography and Environmental Studies
Mid-Term Examination for freshman program
For theCourse- Geographyof Ethiopia and the Horn (GeES_1011)
Weight: 30% Academic Year: 2021
Time allowed: 50 minutes

General Instruction of the Examination

- *Please **switch off your mobile phones** and put it on the floor.*
- *Please **do not write** any answer **on the question paper***
- ***Do not detach** the question paper from the answer sheet*
- *Check your question paper consists of **four parts**, 27 **questions** and 4 **pages** including answer sheet.*
- *Read the **instructions carefully** and do it accordingly.*

PART-ONE- ***Write TRUE if the statement is Correct and FALSE if the Statement is Incorrect*** ***(1p teach)***

1. South west highlands are the wettest and the home of diversified linguistic and ethnic groups in Ethiopia.
2. The western high lands are the largest physiographic Region in Ethiopia.
3. Dead Sea, Red Sea and Gulf of Aden troughs are the result of Mesozoic era's geological process.
4. The marshy and the smallest part of the Ethiopian rift valley region is Chew Bahir rift
5. The topography of Ethiopia is largely determined by the geological processes of the Paleozoic era.

PART –TWO . ***Match column "A", with column "B"*** and write your answer on the answer sheet only. (1pt for each question)

Column "A"	Column "B"
6. Glacio-fluvial deposits	A. Sea invaded and sea-covered places
7. Aeolian deposits	B. Windblown deposits
8. Lacustrine deposits	C. Deposits on the banks of rivers
9. Fluvial deposits	D. Occurred on high mountains
10. Coastal and marine deposits	E. Former lakebeds, and swampy depressions

PART-THREE- ***Choose the correct answer from the given alternatives and write your choice on the answer sheet only. (1pt for each question)***

11. Which known feature in Ethiopia is wrongly matched with its respective location?
    A. Yeju Wadladelta → North Central Massif
    B. Fogera and Dembia Plains → Central Highlands
    C. Debre Damo Monastery → Tigray Plateau
    D. Sof Omar Cave→ Arsi -Bale Masif

Top students

12. The wettest and the largest lowlands in Ethiopia respectively, are

A. Baro and Ghenale
B. Tekeze and Ghibe
C. Baro and Wabishebelle
D. Ghenale and AbayDinder

13. The lowest point and the highest elevation of Ethiopia are respectively located in

A. Chew Bahir and Tigray Plateau
B. Lakes region and Arsi -Bale Massif
C. Tekeze Lowland and Central Highland
D. AfarTriangle and North Central Massif

14. The only active platinum mine area in Ethiopia is located in

A. Yubdo
B. Adola.
C. Wadla
D. Chercher

15. Unlike Ethiopian lowlands, highlands of Ethiopia are known for

A. Extensive rain fed farming
B. High prevalence of tropical disease
C. Nomadic way of life
D. Low population density

16. Among the Ethiopian highlands which one is the true plateau?

A. South Western highlands
B. Tigray Plateau
C. Hararghe Plateau
D. Shewan Plateau

17. One of the following highlands has an important coffee producing area in Ethiopia?

A. Sidama highlands
B. Shewan Plateau
C. Tigray plateau
D. Arsi-Bale highlands

18. All of the following areas host most mineral resources of Ethiopia except

A. the Northern greenstone belt
B. the Western and South-western-greenstone belt
C. the Central greenstone belt
D. the Southern greenstone belt

19. Which statement is incorrect about Ethiopian Rift valley system?

A. It is a tectonically formed structural depression.
B. The lowest point in Ethiopia is part of the chew Bahir rift of the system
C. Afar Triangle is the largest and widest part of the Rift valley system.
D. The main Ethiopian rift is the most elevated part of the system

20. The rocks in Ethiopia with the greatest potential for oil and gas deposit are

A. Precambrian rocks
B. Mesozoic rocks
C. Crystalline Basement Complex rocks
D. Volcanic rocks

21. Which lowland of Ethiopia is considered as western lowland; but structurally belongs to the Rift valley

A. Abay Dinder Lowland
B. Baro Lowland
C. Tekeze Lowland
D. Ghibe Lowland

Top students

Bahir Dar University
Faculty of Social Science
Department of Geography and Environmental Studies
Mid-Term Examination for freshman program
For theCourse- Geographyof Ethiopia and the Horn (GeES_1011)
Weight: 30% Academic Year: 2021
Time allowed: 50 minutes

General Instruction of the Examination

- *Please **switch off your mobile phones** and put it on the floor.*
- *Please **do not write** any answer **on the question paper***
- ***Do not detach** the question paper from the answer sheet*
- *Check your question paper consists of **four parts**, 27 **questions** and 4 **pages** including answer sheet.*
- *Read the **instructions carefully** and do it accordingly.*

PART-ONE- ***Write TRUE if the statement is Correct and FALSE if the Statement is Incorrect*** ***(1p teach)***

1. South west highlands are the wettest and the home of diversified linguistic and ethnic groups in Ethiopia.
2. The western high lands are the largest physiographic Region in Ethiopia.
3. Dead Sea, Red Sea and Gulf of Aden troughs are the result of Mesozoic era's geological process.
4. The marshy and the smallest part of the Ethiopian rift valley region is Chew Bahir rift
5. The topography of Ethiopia is largely determined by the geological processes of the Paleozoic era.

PART –TWO . ***Match column "A", with column "B"*** and write your answer on the answer sheet only. (1pt for each question)

Column "A"	Column "B"
6. Glacio-fluvial deposits	A. Sea invaded and sea-covered places
7. Aeolian deposits	B. Windblown deposits
8. Lacustrine deposits	C. Deposits on the banks of rivers
9. Fluvial deposits	D. Occurred on high mountains
10. Coastal and marine deposits	E. Former lakebeds, and swampy depressions

PART-THREE- ***Choose the correct answer from the given alternatives and write your choice on the answer sheet only. (1pt for each question)***

11. Which known feature in Ethiopia is wrongly matched with its respective location?
    A. Yeju Wadladelta → North Central Massif
    B. Fogera and Dembia Plains → Central Highlands
    C. Debre Damo Monastery → Tigray Plateau
    D. Sof Omar Cave→ Arsi -Bale Masif

Top students

Part II. Multiple Choices Item (30pts)

Instruction: Choose the best answer and write the letter of your choice on the answer sheet only.

(1.5pt for each question)

11. The Awash River is the most utilized in Ethiopia for irrigation purposes. This is mainly due to its:

A. Unfluctuating volume of water
B. Drains rift valley region
C. Surrounding terrain
D. Great number of tributaries

12. Which agro-ecological zone of Ethiopia has the least share of the country's landmass?

A. Cold to moist
B. Hot arid
C. Warm semiarid
D. Cool to humid

13. One of the following is not the characteristics of majorities of Ethiopian Rivers

A. They are transboundary
B. Volume of water fluctuates seasonally
C. They have rapids and falls along their courses
D. Since they flow over steep slope, they have smooth profile

14. What distinguishes the Rift Valley Lakes from the highland lakes?

A. The fluctuation of their volume of water
B .Their significance for transportation
C .Their richness in chemicals that produce soda ash
D Their location along transport lines

15. Identify the reasons why Wabishebelle River fails to reach Indian Ocean.

A. The intermittent nature of its tributaries
B. More water is used for irrigation in Somali plain area
C. It is largely used for generation of hydro electrical power in Ethiopia
D. It is drained by few numbers of tributaries

16. Among the following, one doesn't characterize Ethiopian climate

A. It experiences high average annual temperature
B. Unlike altitude, latitude has significant influence on its climate condition
C. Temperature decrease from the peripheries towards the central part of the country
D. Tropical climate predominate the peripheral lowlands

17. One of the following statements is incorrect about Inter Tropical Convergence Zone (ITCZ)?

A. It is not uniform in the magnitude of low pressure.
B. Follows the position of overhead sun
C. Causes variability and seasonal distribution of rain fall in Ethiopia
D .Shifts towards north of Equator in January

Top Students

Dar University

ulty of Social Science

epartment of Geography and Environmental Studies

Final examination for freshman program

For the Course- Geography of Ethiopia and the Horn (GeES.1011)

Academic Year: 2021 **Time allowed: 1:10 hours**

Weight: 50%

General Instruction of the Examination

- *Please* ***do not write*** *any answer on the question paper*
- ***Do not detach*** *the question paper from the answer sheet*
- *Check your question paper consists of five parts, 33questions and 6 pages including answer sheet.*
- *Read the instructions carefully and do it accordingly.*

Part I. True/False Item (5pts)

Instruction: Write TRUE if the statement is correct and write FALSE if the statement is incorrect and put your answer on the answer sheet only. (1pt for each Question)

1. Because of altitudinal effect, the amount of insolation and temperature decreases as one moves pole ward from equator.
2. *Awash* and *Nekemte* are located on the same latitude (9°N) thereby experiences similar amount of annual average temperature.
3. When there is absence of rainfall in Addis Ababa for three consecutive weeks, it is a sign of climate change.
4. Acrisols have very low resilience to degradation.
5. Oceans are the most abundant and easily available freshwaters.

Part II: Matching Item (5pts)

Instruction: Match column "A", in column "B" and write your answer on the answer sheet only. ***(1.pt for each question)***

Column "A"	**Column "B"**
6. Xerophytic plants	A. Woodland savannahs
7. Baphia and Ficus sur (Sholla)	B. Afro-alpine & sub-afro-alpine vegetation
8. Acacia and Mixed deciduous trees	C. High land Forest
9. Hagenia Abyssinia (Kosso) and Podocarpus falcatus (zigba),	D. Gallery Forests
10. Lobelia rhynchopetalum (giberra) and Erica arborea (Asta)	E. Aquatic vegetation
	G. Steppe and Semi desert vegetation

Top students

18. Which one of the following is not true about rainfall distribution of Ethiopia?

A. The Atlantic contributes a lot for summer rainfall

B. Rainfall in Ethiopia is seasonal, varying in amount over space and time

C. Most of Ethiopia comes under the influence of North East Trade winds in the summer season

D. Spring is the major rainfall season in the southeastern highlands

19. Of the following, which one is not the natural cause of climate change?

A. Volcanic eruption

B. Earth's Orbital change

C. Expansion of industries

D. Solar output

20. Which one of the following is not physical property of a soil?

A. Space for water and air

B. Size of soil particles

C. Arrangement of soil particles

D. Acidity and alkalify of the soil

21. Which one is incorrect about Nitosols?

A. The presence of high rainfall expose it for soil leaching

B. It has reddish-brown color due to high concentration of iron oxides

C. Strongly weathered soil in tropics

D. Leaching makes it rich in soluble minerals like potassium, calcium

22. Black soil that is hard to plough during the rainy season is

A. Fluvisols B. Vertisols C. Nithosols D . Xerosols

23. All of the following contribute for the underutilization of Ethiopia's water resource poten

A. Erosion and the resulting sedimentation

B. Seasonal flow fluctuation

C. Absence of rapids and falls

D. Invasive species

24. All are reasons for the decreases in the air temperature with increase in altitude in the tr except:

A. The troposphere is directly heated by the radiation emitted from the earth

B. The low density of the air near the ground

C. The high density of the air near the ground

D. The high concentration of water vapor and dust in lower atmosphere.

25. All are true about the relationship of altitude and temperature except:

A. Under normal condition temperature decrease with the increasing altitude

B. Temperature changes adiabatically, as the result of addition or withdraws of heat in the air mass

C. Vertical displacement of air is the major cause of adiabatic temperature change

D. Environmental laps rate is change of temperature in calm atmospheric condition with the rate of $6.5^{o}C$

Top students

Students

Top

26. One is correct about Rift Valley drainage system

A. Afar denakil drainage system is part of Rift Valley drainage system

B. Lake Afrera and Asale are the only main surface water of Rift Valley drainage system

C. it has uniform drainage pattern

D. Awash River is an inland drainage that empties to Lake Abe.

27. Which geographical area of Ethiopia receives rain from the North easterly winds is:

A. Central Highland

B. Afar lowland

C. Southeastern highland

D. Southeastern lowland

28. Identify the incorrect statement

A. in Ethiopia the highest temperature is recorded in the months of winter season

B. in Ethiopia, September23rd marks the onset of autumn season.

C. in Ethiopia winter season occur when the sun overhead directly above tropic of Capricorn

D. September23rd and March 20st days and nights are equal throughout the world

29. Identify the wrong combination?

A. Walia Ibex ➔ .Semein highlands

B. Nyala ➔ Bale Mountains.

C. Semein Fox ➔Bale and Semein Highlands

D. Chelad baboon ➔ Abiyata-Shalla national park.

30. Among the following which one explains the change in Ethiopia's climate?

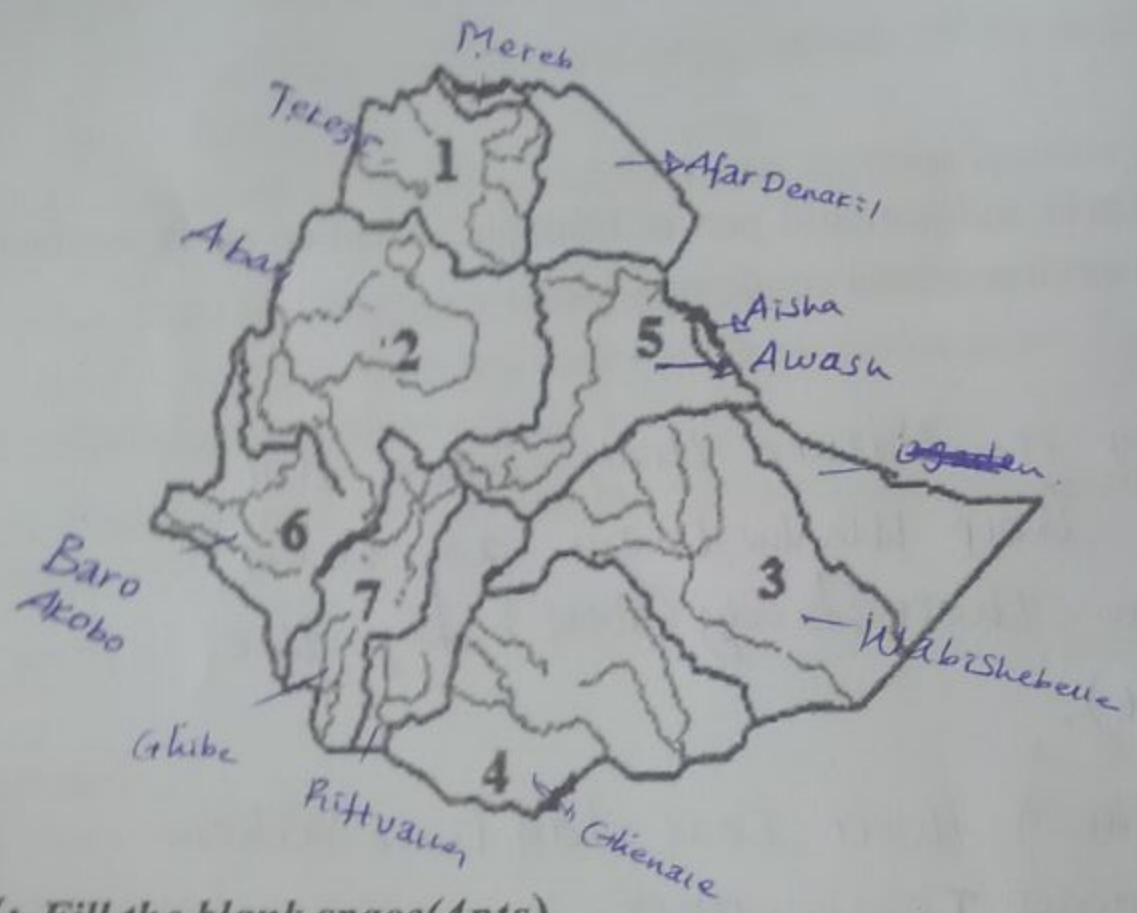
A. The infrequent occurrence of flood and drought

B. The high predictability of rainfall

C. The increase in the number of hot days and nights

D. The decrease in the variability of rainfall

1.pt. each					
1. False	6. G	11. B	16. A	21. D	26. D
2. False	7. D	12. B	17. D	22. B	27. B
3. False	8. A	13. D	18. C	23. C	28. A
4. False	9. C	14. C	19. C	24. B	29. D
5 False	10. B	15. A	20. D	25. B	30. A



Part IV: ***Fill the blank space*** **(4pts)**

31. By referring the above Drainage map of Ethiopia write the name of the major river basin. (4pt)

A). Number 2---Abay D.B---

B). Number 3---Wabishebelle D.B

C). Number 5---Awash D.B

D). Number 7---Ghibe (Omo) I.B.B

Top students

4 Books, articles, and television broadcasts investigating the Bermuda Triangle emphasize that, in the case of most of the disappearances, the weather was favorable, the disappearances occurred in daylight after a sudden break in radio contact, and the vessels vanished without a trace. However, skeptics point out that many supposed mysteries result from careless or biased consideration of data. For example, some losses attributed to the Bermuda Triangle actually occurred outside the area of the triangle in stormy weather conditions or in darkness, and **some** can be traced to known mechanical problems or inadequate equipment.

5 Scientific evaluations of the Bermuda Triangle have concluded that the number of disappearances in the region is not abnormal and that most of the disappearances have logical explanations. Paranormal associations with the Bermuda Triangle persist in the public mind, however.

INSTRUCTION 2: Say whether the following statements are **True** or **False** based on the information given in the passage. (1 point each)

___1. The Bermuda Triangle covers the area between the island of Bermuda, the coast of Southern California, and Puerto Rico.

___2. The unpleasant reputation of the Triangle is connected to the disappearance of some ships in the mid-19th century.

___3. As a result of the conclusions of scientific evaluations of the Triangle, mystical associations with the Bermuda Triangle significantly faded.

INSTRUCTION 3: Choose the **correct answer** for each of the following questions and write the letter of your choice on the spaces provided. (1 Point each)

4. The Bermuda Triangle is regarded in Columbus' report as a dangerous place because…
   A. they saw some sunken ship.
   B. their ship was drawn into the center of the place by an unknown force.
   C. they considered floating gulfweeds was eerie.
   D. they read the reports of other sailors who escaped from disaster.

5. The incident that has strengthened the fear that people have for the triangle is…
   A. the disappearance of the USS Cyclops.
   B. the missing of a training squadron
   C. some scientific evaluations.
   D. the investigation of some books, articles, and television broadcasts.

Top students

6. Most people suspected that the mystery of the Triangle was real because...
   A. most of the disappearances occurred in daylight and favorable weather conditions.
   B. the people who reported the accidents were honorable ones.
   C. scientific evaluations concluded that the disappearances are not abnormal.
   D. All are correct.

7. Which one of the following is not a reason why people don't believe in the Bermuda Triangle mystery?
   A. Some of the incidents supposed to occur in the place actually occurred outside the triangle.
   B. Some accidents are traced to known mechanical problems of inadequate equipment.
   C. The number of disappearances in the region is not abnormal compared to other places.
   D. None of the above is the answer.

8. Which one of the following could be the best possible title for the passage?
   A. How Ships and Airplanes Vanish in the Bermuda Triangle
   B. The Mystery of Bermuda Triangle
   C. Scientific Evaluation of the Bermuda Triangle
   D. Vanishing into the Sea of Bermuda Triangle

INSTRUCTION 4: What do the words in bold type **refer** to in the text? (1 point each)

9. ..."it"... (Paragraph 2 line 4) refers to _____
10. ..."it"... (Paragraph 3 line 3) refers to _____
11. ..."some"... (Paragraph 4 line 6) refers to _____

INSTRUCTION 5: Match the words presented under column A with words of their **contextual meaning** given under column B. (1 Point each)

A	B
12. maritime (paragraph 1 line 2)	A. disappear
13. eerie (paragraph 2 line 3)	B. virtuous
14. vanish (paragraph 2 line 6)	C. far away
15. aboard (paragraph 3 line 7)	D. sea
	E. destroyed
	F. on the ship
	G. strange
	H. navy force

Top students

INSTRUCTION 7: In the following transcript a journalist is interviewing a politician. Complete the blank spaces with either the **present perfect** or **simple past** form of the verbs in the brackets. (1 Point each)

INTERVIEWER: Sir, you want people to vote for you again. Our listeners want to know why.

POLITICIAN: I think our achievements are clear.

I: Well, not always. For example, under your government unemployment (20) _____ (go up) by ten percent.

P: Yes, but you have to look at the international context. The price of oil (21) _____ (increase) over thirty dollars last year and there (22) _____ (be) a world ... this year.

I: But now the price of oil (23) _____ (fell) again.

P: Yes, the future looks very good. Since we came to power we (24) _____ (cut) taxes two times, however the previous government (25) _____ (raise) them.

I: What about your record in Education?

P: Standards were terrible under the last government. When we (26) _____ (introduce) the new education law, the results improved very quickly.

I: Thank you, sir. Now, the news....

INSTRUCTION 8: Read the email below and complete the gaps with the correct form of the verb in the brackets in each of the **conditional sentences**. (1 Point each)

Hi Eldana,

That's good news about this good looking guy, but do you really want to go?

If I (27) _____ (be) you, I wouldn't accept the invitation. It's just too risky. If you (28) _____ (go) to a night club with strangers, anything can happen. You simply don't do things like that. What would you do if you (29) _____ (want) to go back to campus and he and his friends felt like dancing all the night? How are you going to get to the campus on your own? Take it from me. I always regret that my life (30) _____ (not/be) messed up if I hadn't gone out that night. I think it is always better to be safe than sorry. Sorry if I sound like your mum -:)

Take care,

Top students

INSTRUCTION 6: In the posts below, which appeared in an online forum, Adey was looking for a piece of Advice and Daniel was the first person to comment. Read what Adey posted, and complete Daniel's **advice** with the correct form of the words in brackets. (1 Point each)

Posted by: Adey_143
Level: Bronze user
Time: 12:33

I got divorced two years ago, after five years of marriage. I was devastated, and I thought I could never trust anyone again. Then a year ago I met a wonderful man. He came across as a really decent person, honest and reliable. I fell head over heels in love. But a month ago he suddenly stopped calling, without any explanations. I didn't hear from him until last week. He said he'd had a lot going on, but he was sorry and he wanted to start again where we left off. Should I trust him?

Leave your comment....

Posted by: Daniel1988
Level: Silver user
Time: 12:57

Hello Adey,

I'm sorry to tell you that this guy is bad news. There's no doubt in my mind that he's using you. He (16) _____ (should/ not/ treat) you like that. If you (17) _____ (ask) me, he's acted really selfishly. Are you willing to put up with that kind of behavior, or would you rather have a more fulfilling relationship? Ask yourself how much you really care about him. I suggest you (18) _____ (refuse) to see him for a while and see what happens. If he's interested, he'll do everything he can to win you back. If not, you (19) _____ (have/ better / end) it now, before you get hurt again.

Top stude