

**VARIANTĂ DE SUBIECT LA PROGRAMUL DE STUDII
UNIVERSITARE DE LICENȚĂ, SPECIALIZAREA „LOGISTICĂ”**

A. PROBA 1 – LIMBA ENGLEZĂ

PART I: READING COMPREHENSION

For items 1 through 15, choose the one correct answer a, b, c, or d:

I. Pollution is the degradation of natural environment by external substances introduced directly or indirectly. Human health, ecosystem quality and aquatic and terrestrial biodiversity may be affected and altered permanently by pollution.

Pollution occurs when ecosystems cannot get rid of substances introduced into the environment. The critical threshold of its ability to naturally eliminate substances is compromised and the balance of the ecosystem is broken.

The sources of pollution are numerous. The identification of these different pollutants and their effects on ecosystems is complex. They can come from natural disasters or the result of human activity, such as oil spills, chemical spills, nuclear accidents... These can have terrible consequences on people and the planet where they live: destruction of the biodiversity, increased mortality of the human and animal species, destruction of natural habitat, damage caused to the quality of soil, water and air. [...]

Preventing pollution and protecting the environment necessitate the application of the principles of sustainable development. We have to consider a manner to satisfy the needs of today without compromising the ability of future generations to meet their needs. This means that we should remedy existing pollution, but also anticipate and prevent future pollution sources in order to protect the environment and public health. Any environmental damage must be punishable by law, and polluters should pay compensation for the damage caused to the environment.

1. Pollution permanently alter:
 - a. human health;
 - b. ecosystem quality;
 - c. aquatic and terrestrial biodiversity;
 - d. human health, ecosystem quality and aquatic and terrestrial biodiversity.

2. Ecosystems:
 - a. can always cope with pollutants;
 - b. never cope with pollutants;
 - c. mustn't cope with pollutants;
 - d. are not able to cope with pollutants.

3. An ideal solution to prevent pollution would be:
 - a. refrain the development of some countries;
 - b. continue developmental projects;
 - c. take into consideration the future generations' need to live in an unhealthy environment;
 - d. identify the different pollutants and their effects.

II. A stereotype is a fixed idea that people have about what specific social groups or individuals are like, especially an idea that is wrong. Other terms that are associated with the term stereotype are prejudice and cliché. The term has a Greek origin: *stereos* means *solid* or *firm* and *typos* means *blow, impression, or mark*. The term was first used in the printing business. The first modern English use of the term was in 1850, meaning "image perpetuated without change".

Because stereotypes are standardized and simplified ideas of groups, based on some prejudices, they are not derived from objective facts, but rather subjective and often unverifiable ideas. As sociologist Charles E. Hurst states: "One reason for stereotypes is the lack of personal, concrete familiarity that individuals have with persons in other racial or ethnic groups. Lack of familiarity encourages the lumping together of unknown individuals".

The existence of stereotypes may be explained by the need of groups of people to view themselves as more normal or more superior than other groups. Consequently, stereotypes may be used to justify ill-founded prejudices or ignorance and prevent people of stereotyped groups from entering or succeeding in various activities or fields. The stereotyping group are, generally, reluctant to reconsider their attitudes and behavior towards stereotyped group.

Stereotypes may affect people negatively. This includes forming inaccurate and distorted images and opinions of people. Stereotypes may also be used for scapegoating or for making general erroneous judgments about people. Some stereotyping people may feel comfortable when they prevent themselves from emotional identification with the stereotyped group, which leads to xenophobic or racist behavior. Finally another serious consequence of stereotypes is the feeling of inferiority that the stereotyped people may have and which may negatively influence their performance.

4. Stereotypes are:

- a. sophisticated ideas of social groups or individuals;
- b. simplified ideas of groups, based on prejudices;
- c. statements;
- d. parts of speeches.

5. The term "stereotype" is associated with the term:

- a. prejudice;
- b. belief;
- c. devotion;
- d. thought.

6. Stereotypes are derived from:

- a. objective facts;
- b. routine;
- c. subjective ideas;
- d. subjective and often unverifiable ideas.

7. The stereotyping groups are generally reluctant:

- a. to reconsider their attitudes;
- b. to reconsider their attitudes and behaviour towards the stereotyped group;
- c. to share their views;
- d. to make their ideas clear.

8. Stereotypes:

- a. never affect people
- b. have a negative effect on people
- c. never make people feel inferior
- d. are always humorous

9. The term "stereotype" was first used in modern English in:

- a. 1650;
- b. 1812;
- c. 1850;
- d. 1950.

10. Charles E. Hurst was:

- a. a biologist;
- b. a sociologist;
- c. a psychiatrist;
- d. a politician.

11. The term "stereotype" has:

- a. a Greek origin;
- b. a Latin origin;
- c. a Celtic origin;
- d. a French origin.

12. Stereotypes are:

- a. accurate images and opinions of people;
- b. inaccurate images and opinions of people;
- c. inaccurate and distorted images and opinions of people;
- d. right judgements about people.

13. Scapegoating is:

- a. gossiping about somebody;
- b. telling the truth;
- c. saying nothing to anybody;
- d. blaming everything on somebody.

III. The Platypus is a mammal that is typically found in eastern Australia. Together with the four species of echidna, it is one of the five mammals that lay eggs instead of giving birth to live young. This animal has a very strange appearance. It has a duck-like bill that greatly surprised naturalists when it was first discovered. It is one of the few mammals around the world that is poisonous to people; the poison of a male Platypus can cause strong pain to humans but not death. The Platypus is shown on the back of the Australian 20 cent coin because its unique features make it a recognizable and iconic symbol of Australia. Scientists also agree that it is an important subject in the study of evolutionary biology.

14. The Platypus is an Australian animal that:

- a. lays eggs like birds;
- b. gives birth to live young;
- c. belongs to the family of large ducks;
- d. is a kind of a strange-looking echidna.

15. Many people know about the Platypus because:
- a. it was discovered by chance;
 - b. you can see its image on some Australian coins;
 - c. it is one of the most poisonous animals in the world;
 - d. scientists argue about its place in the evolution of animals.

PART II: GRAMMAR AND VOCABULARY

For items 16 through 35 choose the one correct answer a, b, c, or d to complete the sentences.

16. If I... you, I wouldn't go there.
- a. would be
 - b. will be
 - c. am
 - d. were
17. He was born on the ... of January.
- a. 31
 - b. 31st
 - c. 31th
 - d. 31rd
18. The clerk didn't bring mail today.
- a. two
 - b. some
 - c. no
 - d. any
19. I am interestedmeeting your friend.
- a. of
 - b. for
 - c. in
 - d. by
20. We must drive a car without a driving license.
- a. always
 - b. never
 - c. usually
 - d. perhaps
21. Excuse me, I'm afraid I.....a mistake.
- a. made
 - b. did
 - c. gave
 - d. give
22. This is not a good tire. You should
- a. replace it
 - b. replaced it
 - c. replacing it
 - d. it replace

23. Water...at100°C.
a. is boiling
b. was boiling
c. boils
d. boiled
24. He isn't the owner of the car, so he can't
a. buy it
b. sell it
c. ride it
d. rent it
25. Fashion designers pictures of clothes.
a. buy
b. own
c. draw
d. owe
26. I appreciate classical music. I this type of music.
a. understand and enjoy
b. hate and avoid
c. don't know
d. don't want
27. She's very busy looking after her ... mother.
a. sick
b. iller
c. hurtly
d. healthy
28. Howtea do you drink every day?
a. many
b. lots of
c. much
d. cups of
29. When the teacher came into the room, I.....
a. talking
b. am talking
c. can talk
d. was talking
30. The owner of the restaurant was well known. He was
a. sad
b. fat
c. poor
d. famous
31. Frank enjoyed.....at the new catalog.
a. looking
b. looked
c. look
d. to look

32. The post office is straight ahead. In other words, the post office is...
- to your left
 - behind you
 - very close
 - in front of you
33. If you're looking for a.....book, please contact us.
- particular
 - personal
 - strange
 - uninteresting
34. To.....advantage of this offer, put your order in now.
- make
 - take
 - have
 - do
35. Be careful of the hot water! I'm going to.....the carrots.
- fry
 - bake
 - boil
 - roast

PART III: WRITING For items 36

through 39, choose the one correct word order a, b, c, or d:

36. a. The students are playing basketball now.
 b. Basketball now students are playing.
 c. Students playing basketball now are.
 d. Are students playing the basketball now.
37. a. When I left home this evening it was raining.
 b. This evening left home I was it raining when.
 c. When I raining this evening it home left was.
 d. I when left was raining home this evening it.
38. a. Tomorrow morning could present you the briefing?
 b. Could you present the briefing tomorrow morning?
 c. Could the briefing you present morning tomorrow?
 d. Morning tomorrow could you the briefing present?
39. a. A lot of experience had in she administration working.
 b. She had a lot of experience working in administration.
 c. Working in administration she a lot of experience had.
 d. She a lot of experience working had in administration.

For items 40 through 45 on your answer sheet, order the following sentences (a through f) to form a letter. Write the order of the sentences in the table.

a) Now I'm really looking forward to showing it to all my friends, and you'll be one of the first to see it.

b) Fve had a lot of things to do, because, as you may remember, I bought a new apartment 2 months ago. I wasn't very expensive but it needed a lot of work.

c) Dear Samantha,

d) Can't wait till you arrive next week. Lots of love,

e) I had to paint it all, change the tiles, redo the kitchen. You can imagine how much work went into all of these things. But I finally managed to move in a week ago and right now I am putting all my things into their places.

f) I got your letter and I'm glad that you are OK and enjoying your new job. As for me, sorry I haven't been able to write back sooner, but I have been extremely busy.

REZOLVARE SUBIECT

Item	Răspuns			
1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d
11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d
21.	a	b	c	d
22.	a	b	c	d
23.	a	b	c	d
24.	a	b	c	d
25.	a	b	c	d
26.	a	b	c	d
27.	a	b	c	d
28.	a	b	c	d
29.	a	b	c	d
30.	a	b	c	d
31.	a	b	c	

Item	Răspuns			
32.	a	b	c	d
33.	a	b	c	d
34.	a	b	c	d
35.	a	b	c	d
36.	a	b	c	d
37.	a	b	c	d
38.	a	b	c	d
39.	a	b	c	d
40.	c			
41.	f			
42.	b			
43.	e			
44.	a			
45.	d			

B. PROBA 2 – MATEMATICĂ-ECONOMIE

1. Valoarea maxima a funcției $f(x) = -2x^2 + 4x + 5$ este obtinuta pentru $x = \dots$

a) 7; b) 1; c) 9; d) 2;

2. Valoarea minima a funcției $f(x) = 3x^2 - 2x + 7$ este obtinuta pentru $x = \dots$

a) 23/3; b) 3/23; c) 1/3; d) 20/3;

3. Valoarea numărului natural n pentru care $3C_{2n}^{n-1} = C_{2n+1}^n$ este

a) 3; b) 1; c) 4; d) 5

4. Valoarea numarului C_n^0 este :

a) 1; b) 0; c) 2; d) 3.

5. Fie $(a_n)_{n \in \mathbb{N}}$ o progresie aritmetica ai cărei termeni satisfac sistemul de ecuații .

$$\begin{cases} a_2 - a_6 + a_4 = -7 \\ a_8 - a_7 = 2a_4 \end{cases}$$

Atunci primul termen și rația acestei progresii aritmetice sunt :

a) $a_1 = 5, r = 2$; b) $a_1 = 2, r = 5$; c) $a_1 = 3, r = 1$; d) $a_1 = -5, r = 2$

6. Matricile A cu elemente numere reale ce satisfac egalitatea $A^2 = \begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$ sunt :

a) $A = \pm \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 1 \\ -1 & 1 \end{pmatrix}$ b) $A = \pm \frac{1}{\sqrt{3}} \begin{pmatrix} -1 & 1 \\ 1 & -1 \end{pmatrix}$ c) $A = \pm \frac{1}{\sqrt{5}} \begin{pmatrix} 0 & 1 \\ -1 & 2 \end{pmatrix}$ d) $A = \begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$

7. Soluția următorului sistem de ecuații $\begin{cases} 2x_1 + 4x_2 + 3x_3 = 13\alpha \\ 2x_1 - 5x_2 + x_3 = -26\alpha \\ x_1 - x_2 + x_3 = 13\alpha \end{cases}$ este:

a) $x_1 = -\frac{143\alpha}{3}, x_2 = -\frac{55\alpha}{3}, x_3 = 117\alpha$ b) $x_1 = 0, x_2 = -\frac{29\alpha}{19}, x_3 = -\frac{31\alpha}{19}$

c) $x_1 = 1, x_2 = \frac{\alpha}{19}, x_3 = -\frac{29\alpha}{19}$ d) $x_1 = 2, x_2 = -\frac{19\alpha}{29}, x_3 = \frac{29\alpha}{19}$

8. Valoarea numarului $2^2+3^3+4^4$ este :
a) 287; b) 64; c) 27; d) 300
9. Solutiile ecuatiei $X^2+2x+1=0$ sunt :
a) -1; b) 0; c) 6; d) 2
10. Suma numerelor $C_n^0+C_n^1+C_n^2+\dots+C_n^n$ este :
a) 2^n ; b) $1000n$; c) $3n$; d) 1
11. Urmatorul numar in secventa 1, 4, 16, 64este
a) 200; b) 256; c) 64; d) 4
12. Modulul numarului complex $z=3+4i$ este :
a) 2; b) 3; c) 4; d) 5
13. Suma solutiilor ecuatiei $3x^2+5x+2=0$ este
a) $-5/3$; b) $5/3$; c) $3/5$; d) $-3/5$
14. Valoarea numarului P_5 , adica permutari de ordin 5 este:
a) 30; b) 120; c) 20; d) 5
15. Partea reala a numarului complex i^3+i^5 este :
a) i ; b) 1; c) 0; d) -1
16. Fie inecuatiea $x^2 < 4$.
a) numarul 2 este solutie; b) numarul -2 este solutie; c) numarul $\frac{1}{2}$ este solutie; d) nici un raspuns corect
17. Produsul radacinilor ecuatiei $x^2-10x+5=0$ este
a) 1; b) 10; c) 5; d) nici un raspuns corect .
18. Produsul radacinilor ecuatiei $2x^2-10x+6=0$ este
a) 3; b) 10; c) 5; d) nici un raspuns corect .
19. Fie inecuatiea $x^2-x+1 > 4$.
a) numarul 2 este solutie; b) numarul -2 este solutie; c) numarul $\frac{1}{2}$ este solutie; d) nici un raspuns corect
20. Valoarea polinomului $2X^3+x+1$ in numarul complex i este:
a) $i-1$; b) $i+1$; c) $-i+1$; d) $-i-1$
21. Principala caracteristică a nevoilor umane se referă la:
a) caracterul lor nelimitat;
b) caracterul lor neregenerabil;
c) caracterul lor limitat și dinamic;
d) raritatea lor.

22. Coeficientul de elasticitate a cererii în raport de venit ($K_{eC/V}$) are valoarea:
- 2 la o cerere inelastică;
 - 0,5 la o cerere elastică;
 - 1,5 la o cerere inelastică;
 - 0,5 la o cerere inelastică.
23. Factorul activ și determinant al producției este:
- capitalul;
 - natura;
 - munca;
 - ajutoarele de stat.
24. În cadrul unei firme, numărul de lucrători (L) crește cu 10%. Cu cât trebuie să se modifice nivelul producției (Q) pentru a menține constantă productivitatea medie a muncii (W_L), dacă producția în perioada T_0 a fost de 100 de unități?
- $\Delta Q=20$ unități;
 - $\Delta Q=10$ unități;
 - Q crește cu 20%;
 - Q scade cu 10%.
25. La o societate comercială, costul variabil mediu (CVM) este de 20 u.m. iar nivelul producției (Q) la care profitul (Pr) este nul 50 bucăți. Dacă prețul unitar (P) este egal cu 40 u.m., atunci costul total (CT), costul total mediu (CTM) și profitul total sunt:
- 1250; 25; 0;
 - 3000; 60; 0;
 - 2000; 40; 0;
 - 2000; 80; 0;
26. Dacă rata profitului calculată la cost ($R_{Pr/CT}$) este de 20%, atunci rata profitului calculată la cifra de afaceri ($R_{Pr/CA}$) este:
- 33,33%;
 - 16,66%;
 - 20%;
 - 25%.
27. Numerarul se transformă în bani scripturali prin:
- depunerea numerarului într-un cont bancar;
 - ridicarea numerarului dintr-un cont bancar;
 - acordarea de către o bancă a unui credit în numerar;
 - schimbarea valutei în lei.
28. Concurența monopolistică se deosebește de concurența perfectă prin:
- câțiva vânzători;
 - atomicitatea ofertei;
 - diferențierea produselor;
 - atomicitatea cererii
29. Pe piața de monopol:
- prețul este controlat de consumator;
 - prețul este impus de producător;
 - prețul pieței determină întotdeauna obținerea de profit;
 - există un singur producător și un singur consumator.

30. Creează masă monetară:
- doar banca centrală;
 - doar băncile comerciale;
 - banca centrală și băncile comerciale;
 - banca centrală și guvernul

REZOLVARE SUBIECT

Item	Răspuns			
1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
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21.	a	b	c	d
22.	a	b	c	d
23.	a	b	c	d
24.	a	b	c	d
25.	a	b	c	d
26.	a	b	c	d
27.	a	b	c	d
28.	a	b	c	d
29.	a	b	c	d
30.	a	b	c	d