This is a Class 1 exam

Lebanon Evangelical School
for Boys and Girls
Loueizeh - Baabda

Stage Exam 06

13JUN2024 and 14JUN2024

Do NOT write in this box. Your MARK will be placed here.

Subject :	Economics
Class :	11SE and 11D
Teacher :	Mr. George El Haber
Duration :	1 hour

Your name :		*Time taken to complete exam*
Your Class :		
Exam Room :		
How many sheets, including cover sheet :		

- Do not open this paper until the teacher in charge instructs you to do so.
- The most important thing to remember in taking an exam is NEVER PANIC.
- If you are caught cheating in this exam, you will be awarded zero for ALL exams that are taken on this day.

1. An individual deposited 200,000 m.u. in a bank with a compound interest rate of 7% annually and this was on 8 February, 2004. In 15 May from the same year, he withdrew the amount with its interest and deposited it in the same day in another bank with a simple annual interest rate of 7% for a period extending to 21 September of the same year.
   Calculate the total amount received on the maturity date 21 September. **(2pts)**

2. On 17-05-2012, someone deposited an amount of 10,000 (ten thousand) mu in a bank, with an annual simple. interest rate of 6.75%. On 01-08-2012, he/she added to the previous total sum a new capital worth 15,000 (fifteen thousand) mu at the same yearly interest rate.
   Calculate the total value of the capital earned on 27-12-2012. **(2pts)**

3. An individual deposited an amount of 60.000 m. in a bank at a simple interest rate for a period extending from April 6 till September 24 (same year), at the maturity, he received an amount of interest equal to 1200 m.u. **(2pts)**

   3.1- Calculate the annual interest rate (i)
   3.2- Calculate the total value (acquired value) at the maturity date.

4. Mr. Nassif deposited two financial capitals in a commercial bank at the same date; the first amounted to 70,000 mu with a yearly simple interest rate of 8% and the second with a yearly compound interest rate of 8%. After ten years, he earned the same amount of interest from both financial capitals. **(2pts)**

   4.1- Calculate the value of the second financial capital.
   4.2- Specify the reason that made Mr. Nassif earn the same amount of interest despite the difference in the values of both capitals.

5. Mr. Fadi has an amount of 55,000 m.u. and he has two options: **(2pts)**
   1st option: depositing the amount in the bank for 4 years with a yearly simple interest of 5%.
   2nd option: depositing the amount in the bank for 4 years with a yearly compound interest of 5%.

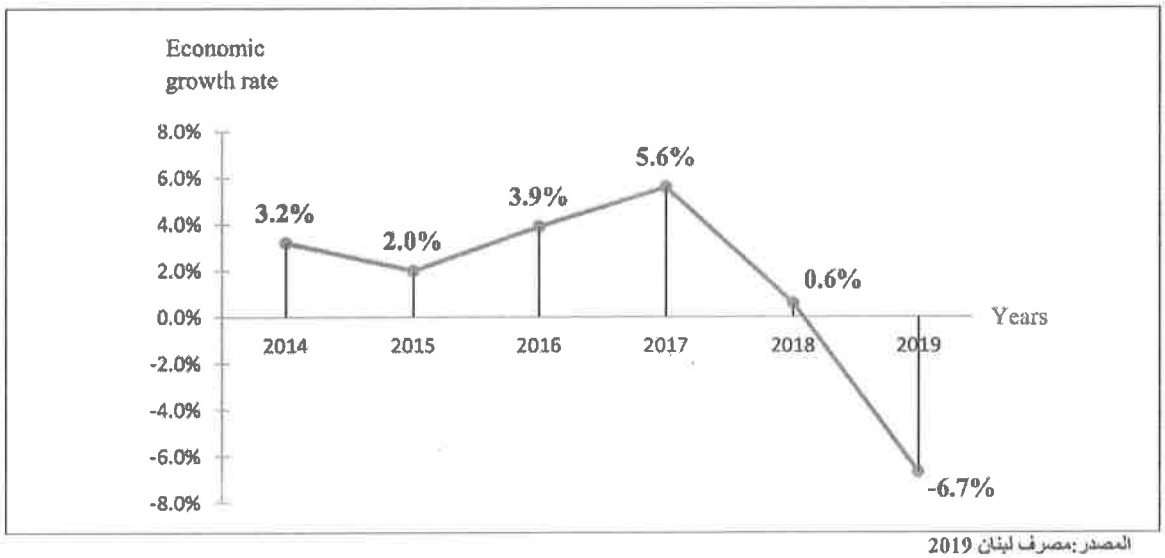
   5.1- Calculate the amount of interest that Mr. Fadi will earn in each of the two options.
   5.2- Specify the best choice for Mr. Fadi, and state the cause of the difference between the two amounts of interest earned.

6. Mr. Imad deposited an amount of capital in a bank at an annual simple interest rate of 2% during the period extending from March 5 to June 27 of the same year. At maturity date, he received an amount of interest of 1520 m.u. **(2pts)**
   6.1- Calculate the initial amount deposited.
   6.2- Calculate the total value (acquired value) that Mr. Imad will receive at the maturity date on June 27.

7. **Justify the following statements: (Sequence) (8pts)**

7.1- Economic establishments decrease their prices in the stage of depression of the economic cycles.
7.2- Decrease interest rate on loans for producers leads to economic growth.
7.3- Specialization and division of labor leads to economic growth.
7.4- The government decides to decrease taxes on profit leads to economic growth.

8. **<u>Document no. (1):</u> The Economic Growth Rate in Lebanon**



المصدر: مصرف لبنان 2019

8.1- By referring to the data given in document no (1), specify the stages of the economic cycle that Lebanon passed through between 2014 and 2019, and justify your answer by a proof for each stage. **(10pts)**

Example: (2014-2015): **State the stage** and **give the reason**

9. **Answer the following multiple-choice questions: (1pt/question)**

1. Perfect competition is characterized by which of the following conditions?

a) A single powerful seller
b) A large number of well-informed independent buyers and sellers who exchange identical products
c) Few buyers and sellers dealing in unique products
d) High barriers to entry

2. What is one of the key characteristics of a perfectly competitive market?

a) Differentiated products
b) High level of advertising
c) Identical products
d) Government intervention

3. In a perfectly competitive market, what determines the equilibrium price?

a) Individual firms
b) Supply and demand
c) Government policies
d) Advertising campaigns

4. Which of the following is closest to a perfectly competitive market?

a) Automobile industry
b) Local vegetable farming
c) Fast food industry
d) Cable TV industry

5. Monopolistic competition differs from perfect competition primarily because:
a) Firms have control over prices
b) Firms produce identical products
c) Firms differentiate their products
d) There are barriers to entry

6. What is an example of nonprice competition in monopolistic competition?

a) Lowering prices
b) Increasing production
c) Advertising and giveaways
d) Merging with competitors

7. Which market structure is characterized by a few very large sellers dominating the industry?

a) Perfect competition
b) Monopolistic competition
c) Oligopoly
d) Monopoly

8. What often occurs when oligopolies engage in price competition?

a) Stable prices
b) Price wars
c) Decreased advertising
d) Increased product differentiation

9. A monopoly is a market structure with:

a) Several large firms
b) Many small firms
c) Only one seller of a particular product
d) Government-regulated prices

10. Which type of monopoly is based on exclusive control over a manufacturing method or process?

a) Geographic monopoly
b) Natural monopoly
c) Technological monopoly
d) Government monopoly

11. In a monopoly, the firm is considered a:

a) Price taker
b) Price maker
c) Price follower
d) Price competitor

12. Why do natural monopolies often exist?

a) Because of government policies
b) Because multiple firms can efficiently share resources
c) Because production costs are minimized by having a single firm
d) Because of product differentiation

13. Which of the following is an example of a government monopoly?

a) Local cable provider
b) Automobile manufacturer
c) State-controlled liquor store
d) Private university

14. How do monopolists maximize profits?

a) By equating average cost with average revenue
b) By increasing advertising
c) By equating marginal cost with marginal revenue
d) By producing large quantities at lower prices

15. What is a key disadvantage of monopolies compared to perfect competition?

a) Lower prices
b) Higher production costs
c) Higher prices and limited quantity for sale
d) Higher levels of product differentiation

16. Under which market structure do firms compete by making their products appear different from their competitors?

a) Perfect competition
b) Monopolistic competition
c) Oligopoly
d) Monopoly

17. Which type of monopoly is common in utility services like water and electricity?

a) Geographic monopoly
b) Natural monopoly
c) Technological monopoly
d) Government monopoly

18. What role does product differentiation play in monopolistic competition?

a) It leads to identical pricing strategies
b) It reduces the need for advertising
c) It attracts more customers by highlighting real or imagined differences
d) It limits the number of firms in the market

19. In which market structure is the firm's ability to change prices within a narrow range due to product differentiation?

a) Perfect competition
b) Monopolistic competition
c) Oligopoly
d) Monopoly

20. Which market structure can best be described by the presence of only one firm with significant barriers to entry?

a) Perfect competition
b) Monopolistic competition
c) Oligopoly
d) Monopoly

SEOG Economics IISED

1) $C_0 = 200{,}000$ $\quad i = 0.07$

$$I = 200{,}000\left[\left(1+\frac{0.07}{360}\right)^{97}-1\right]$$

$= 3807.65$ m.u

$3807.65 + 200{,}000 = 203{,}807.65$ m.u.

$$I = \frac{203{,}807.65\,(0.07)(129)}{360}$$

$= 5112.17$

$5112.17 + 203807.65 = 208{,}919{,}825$ m.u.

on Feb 8 → 15 May

Feb → 29 − 8 =	21
Mar	31
April	30
May	15
	97 days

2nd Period: May 15 → 21 Sep

May 31 − 15 =	16
June	30
July	31
Aug	31
Sep	21
	129 days

2)

$$I_1 = \frac{C_0 \times i \times n}{360}$$

$$= \frac{10{,}000 \times 0.0675 \times 76}{360}$$

$= 142.5$ m.u.

$10{,}000 + 142.5 = 10{,}142.5$ m.u.

$10{,}142.5 + 15{,}000 = 25{,}142.5$ m.u.

$$I_2 = \frac{C_0 \times i \times n}{360} = \frac{25{,}142.5 \times 0.0675 \times 148}{360}$$

$= 697.7$ m.u

$25142.5 + 697.7 = 25840.2$ m.u.

On 17-05-2012

May 31 − 17 =	14
June	30
July	31
Aug	1
	76 days

2nd period:

Aug	30
Sep	30
Oct	31
Nov	30
Dec	27
	148 days

3) $I_n = \frac{C_0 \times i \times n}{360}$

$1200 = \frac{60000 \times i \times 171}{360}$

$i = 0.042$ or 4.2%

From Apr. 6 → Sep 24

Apr. 30-6 =	24
May	31
June	30
July	31
Aug	31
Sep	24
	171 days

3.2) $C_n = 60000 + 1200$

$= 61{,}200$ m.u.

4) $I_n = C_0 \times i \times n$

$= 70000 \times 0.08 \times 10$

$= 56000$

$56000 = C_0[(1+0.08)^{10} - 1)]$

$C_0 = 48320.64$

4.2) Because the First Initial amount was deposited on a simple interest rate, and the second amount was deposited on a compound interest rate.

5) 5.1) 1st option: $I_n = C_0 \times i \times n$

$= 55{,}000 \times 0.05 \times 4$

$= 11{,}000$ m.u.

2nd option $I_n = C_0[(1+i)^n - 1]$

$= 55{,}000[(1+0.05)^4 - 1]$

$= 11{,}852.84$ m.u.

5.2) The best option is the second option since the amount of interest resulted from depositing the amount according to the 2nd option 11,852.84 is greater than the first one.

6) 6.1) Number of days = n = 26 + 30 + 31 + 27 = 114

$$I = \frac{C_0 \times i \times n}{360}$$

$$1520 = \frac{C_0 \times 0.02 \times 114}{360}$$

$C_0 = 240{,}000$ m.u.

6.2) $I = I_n + C_0$

$= 240{,}000 + 1520$

$= 241{,}520$ m.u.

7) 7.1) Economic Establishment decrease their prices to get rid of the unsold stock during a period of depression.

7.2) Decrease interest rate on loans for producers leads to decrease in cost of production → Increase in investment → increase in production and productivity → increase in competitiveness → E.G

7.3) Specialization and division of labor → increase in productivity → improvement in quality of economic products → decrease in unemployment → increase E.G.

7.4) Decrease taxes on profit → ↓ Cost of prod. → ↑ profit → ↑ Inv. → ↑ Productivity → ↑ E.G.

8) (2014 - 2015) Recession (E.G. Rate ↘ 3.2% to 2%)
(2015-2017) Recovery reaching growth (E.G. Rate ↗ 2% to 5.6%)
(2017-2018) Recession (E.G. Rate ↘ 5.6% to 0.6%)
(2018-2019) Depression (E.G. Rate ↘ 0.6% to -6.7%)

9)
1) b
2) c
3) b
4) b
5) c
6) c
7) c
8) b
9) c
10) c
11) b
12) c
13) c
14) c
15) c
16) b
17) b
18) c
19) b
20) d