SECOND QUARTER EXAM in GENERAL MATHEMATICS
School Year 2022-2023

Name: _____ Date:_____

Grade &Section:_____ Score:_____

General Directions: Read the following questions thoroughly and choose the correct answer from the given choices. Write legibly the LETTER of your correct answer on the blank provided before each number.

_____1. What interest remains constant throughout the investment term?
A. Simple
B. Compound
C. Annuity due
D. Ordinary annuity

_____2. It is an interest computed based on the principal amount.
A. Simple
B. Compound
C. Annuity due
D. Ordinary annuity

_____3. What is the difference between simple and compound interest?
A. Simple yields higher interest than compound interest.
B. Simple interest has a shorter term than compound interest.
C. Simple interest is always better than compound interest.
D. Simple interest is computed based on the principal while compound interest is computed based on the principal and also on the accumulated past interests.

_____4. If you would like to invest money, which bank offer would you prefer if you do not plan to withdraw your money in 2 years?
A. 5% simple interest per annum
B. 4% compounded interest per annum
C. 3% compounded interest semi-annually
D. 2% compounded interest quarterly

_____5. Which of the following statement is true about the borrower or debtor?
A. It is the amount of money borrowed or invested on the origin date.
B. It is the interest is computed on the principal and also on the accumulated past interests
C. It refers to the person (or institution) who owes the money or avails of the fund from the lender.
D. It refers to the person (or institution) who invests the money or makes the funds available.

_____6. Which of the following statements is/are true?
I. Compound interest of a loan favors the borrower.
II. Simple interest remains constant throughout the investment term.
III. In compound interest, the interest from the previous year also earns interest.
A. I only
B. I and II
C. II and III
D. I and III

_____7. Which of the following formula can be used to solve for the simple interest?
A. I = Prt
B. SI = Prt/100
C. A= P(1 + rt)
D. All of the above

_____8. It is an amount after t years that the lender receives from the borrower on the maturity date.

A. Loan date
B. Maturity date
C. Maturity value
D. Term

_____9. Which of the following describes time or term?

A. It is the date on which money is received by the borrower.
B. It is the amount paid or learned for the use of money.
C. It is the date of which the money borrowed or loan is to be completely repaid
D. It is the amount of time in years the money is borrowed or invested; length of timE between the origin and maturity dates

_____10. In the formula, I= Prt, what is r?

A. Revenue
B.Real value
C. Repaid
D. Rate of interest

_____11. It is the amount of money borrowed or invested on the origin date.

A. Future value
B. Pprincipal value
C. Maturity value
D. Repayment value

_____12. A person (or institution) who invests the money or makes the funds available.

A. Lender
B. Creditor
C. Both a and b
D. None of the choices.

_____13. It refers to an interest that is computed based on the principal and interest accumulated every conversion period.

A. Simple
B. Compound
C. annuity due
D. Ordinary annuity

_____14. It refers to the amount after *t* years that the lender receives from the borrower on the maturity date?

A. Present value
B. Future value
C. Interest
D. Ordinary annuity

_____15. Which interest is computed on the principal and then added to it?

A. Simple
B. Compound
C. Annuity due
D. 0rdinary annuity

_____16. The simple interest formula is I = Prt. What does the t represent?

A. Principle
B. Time
C. Interest
D. Percent ratE

_____17. All of the following are used to find simple interest, EXCEPT?

A. Principal
B. Rate of interest
C. Time
D. Future value

_____18. It is the amount after t years that the lender will receive from the borrower.

A. Future Value
B. present Value
C. Interest
D. Principal

_____19. Which of the following describes rate (r)?

A. It is the amount of money borrowed or invested on the origin date.
B. It is the amount paid or earned for the use of money.
C. It is charged by the lender, or rate of increase of the investment
D. It is computed on the principal and also on the accumulated past interests.

_____20. Rate of interest must be converted into _____ before substituting to the formula of finding the interest.

A. Fractions
B. Decimals
C. Mixed numbers
D. Percentage

_____21. The principal in the formula I = Prt is _____.

A. The amount of money borrowed or deposited
B. The percent interest for his year
C. The amount taxed
D. The amount the bank owes you for being a customer at their bank

_____22. The interest from the previous year also earns interest, which of the following describes the statement?

A. Simple
B. Compound
C. Rate
D. Time

_____23. Variable P in simple interest formula when you are the creditor stands for?

A. Original Amount borrowed
B. Original Amount invested
C. Maturity Amount Borrowed
D. Maturity Amount invested

_____24. The following statements are true EXCEPT _____.

A. The amount invested to a compounded interest yields to greater maturity value than to a simple interest.
B. The amount borrowed from a simple interest yields to a smaller maturity value than a compound interest
C. The simple interest yields interest only from initial principal amount.
D. The interest in a compound account yields interest only from initial principal amount.

_____25. What interest is computed on the principal and also on the accumulated past interests?

A. Simple
B. Compound
C. Annuity due
D. Ordinary Annuity

_____26. If the investment amounting to ₱35,000 earned an interest of ₱2,500 how much will be the maturity value?

A. ₱32,500
B. ₱37,500
C. ₱30,000
D. ₱40,000

_____27. Given that P = ₱5,250, r = 1.25% and t = 5 years, find the simple interest.

A. ₱32,812.50
B. ₱3,281.25
C. ₱328.13
D. ₱32.82

_____28. What is the frequency of conversion if the annual rate is compounded quarterly?

A. 2
B. 3
C. 4
D. 12

_____29. If the interest rate is 5% compounded monthly, what is the interest rate per conversion period?

A. 2.5%
B. 1.67%
C. 1.25%
D. 0.42%

_____30. Given that $IIss$=750, r = 5% and t = 3 years, what is the principal or present value?

A. ₱50
C. ₱5.000

B. ₱500 D. ₱50,000

_____31. If F = ₱25,000 and P = ₱20,000, how much is the compound interest?
A. ₱45,000 C. ₱20,000
B. ₱25,000 D. ₱5,000

For numbers 11 – 12, use the following values: F = 40,000, t = 3 ½ years, $i^4=0.10$ and m= 4

_____32. What is the present value?
A. ₱30, 000.25 C. ₱25, 307.15
B. ₱28, 309.09 D. ₱20, 432.75

_____33. How much is the compound interest?
A. ₱9,999.75 C. ₱14,692.85
B. ₱11,690.91 D. ₱19,567.25

_____34. If the maturity value is ₱23,000 and the compound interest is ₱3,500, how much is the present value?
A. ₱26,500 C. ₱19,500
B. ₱23,000 D. ₱15,000

For numbers 14 – 15, use the following values: P = ₱15,000, $i^{12}=5\%$, t = 4 years, m = 12.

_____35. How much is the maturity value?
A. ₱18, 313.43 C. ₱16, 313.37
B. ₱17, 413.37 D. ₱15, 413.43

_____36. How much is the compound interest?
A. ₱413.43 C. ₱2,413.37
B. ₱1,313.37 D. ₱3, 313.43

_____37. Which of the following described to formula $I_s=Prt$?
A. Simple interest C. Present value
B. Compound interest D. Maturity value

_____38. What will you get if you divide the simple interest by the product of the rate and time?
A. Present value of compound interest
B. Present value of simple interest
C. Maturity value of compound interest
D. Maturity value of simple interest

_____39. If the investment amounting to ₱45,000 earned an interest of ₱3,500 how much will be the maturity value?
A. ₱41,500 C. ₱40,000
B. ₱48,500 D. ₱25,000

_____40. Given that P = ₱15,250, r = 3.25% and t= 3 years, find the simple interest.
A. ₱24,868.80 C. ₱1,486.88
B. ₱14,868.80 D. ₱148.69

_____41. Given that P = ₱20,820, r = 2,1/4% and t = 9 months, find the simple interest.
A. ₱ 351.34 C. ₱ 4,216.05
B. ₱ 3513.38 D. ₱ 42160.50

_____42. What is the frequency of conversion if the annual rate is compounded monthly?

A. 2 C. 4
B. 3 D. 12

_____43. If the interest rate is 12% compounded quarterly, what is the interest rate per conversion period?

A. 3% C. 1.25%
B. 2.5% D. 0.42%

_____44. Given that Is=3,750, r = 2 ½ % and t = 3 years, what is the principal or present value?

A. ₱500 C. ₱50,000
B. ₱5,000 D. ₱500,000

_____45. Given that F = ₱50,000 and P = ₱35,000 how much is the compound interest?

A. ₱15, 000 C. ₱35,000
B. ₱25,000 D. ₱45,000

For numbers 11 – 12, use the following values: F = 150,000, t = 6 years, i^2=5% and m= 2

_____46. What is the present value?

A. ₱100,353.83 C. ₱123,153.83
B. ₱111,533.38 D. ₱132,531.38

_____47. How much is the compound interest?

A. ₱49646.17 C. ₱26846.17
B. ₱38466.62 D. ₱17468.62

_____48. If the maturity value is ₱50,000 and the compound interest is ₱3,500, how much is the present value?

A. ₱53,500 C. ₱46,000
B. ₱46,500 D. ₱3,000

For numbers 14 – 15, use the following values: P=₱150,000, i^2=6%, t=4 years, m=2

_____49. How much is the maturity value?

A. ₱190, 015.51 C. ₱167, 313.51
B. ₱179, 413.35 D. ₱159, 413.35

_____50. How much is the compound interest?

A. ₱9,413.35 C. ₱29,413.35
B. ₱17,313.51 D. ₱40,015.51

_____51. How much money will Michael add on his funds for his new business?

A. ₱ 459.38 C. ₱ 6,000.00
B. ₱ 4,593.75 D. ₱ 60,000.00

_____52. How much will he need to pay after 5 years?

A. ₱ 5,709.38 C. ₱ 11,250.00
B. ₱ 9,843.75 D. ₱ 65,250.00

_____53. If Michael borrowed the same amount of money payable for the same number of years and Castañas Cooperative Bank offered a promo as part of its anniversary celebration and make all the interest loans 1.25%, how much interest must be paid?

A. ₱ 3,750.00 C. ₱ 63,750.00
B. ₱ 37,500.00 D. ₱ 70,000.00

_____54. How much will he need to pay after 6 years if he availed the promo?
A. ₱ 64,500.00 C. ₱ 70,000.00
B. ₱ 65,250.00 D. ₱ 74,500.00

_____55. Among the different forms of conditional proposition, which of the following shows the contrapositive form of conditional proposition? Hypothesis: Juan is a Filipino. Conclusion: He is born in the Philippines.

A. If Juan is a Filipino, then he is born in the Philippines.
B. If he is born in the Philippines, then Juan is a Filipino.
C. If Juan is not a Filipino, then he is not born in the Philippines
D. of the above

_____56. there are only two propositions, p and q, how many rows should be included in constructing the truth table?
A. 1 C. 4
B. 2 D. 8

_____57.Select the statement that is the negation of “You wear matching socks to the interview or you don’t get hired.”

A. You wear matching socks to the interview and you get hired.
B. You don’t wear matching socks to the interview or you get hired.
C. You don’t wear matching socks to the interview and you don’t get hired.
D. If you don’t wear matching socks to the interview, then you don’t get hired.

_____58. Given the statement p: Jay lives in Sarangani and q: Jay drives a red car, write the compound proposition “Jay lives in Sarangani and Jay drives a red car” using the appropriate symbols.
A. p ∧ q C. $p \rightarrow q$
B. p ∨ q D. $p \leftrightarrow q$

_____59. Determine the truth values of the proposition : $(p \wedge p) \leftrightarrow p$

A.

$(p \wedge p) \leftrightarrow p$
T
T
T
T

B.

$(p \wedge p) \leftrightarrow p$
F
F
F
F

C.

$(p \wedge p) \leftrightarrow p$
T
F
T
T

D.

$(p \wedge p) \leftrightarrow p$
F
T
T
T

_____60. Which of the following is a valid argument?

A. All animals are mortal. A lion is an animal. Therefore, a lion is mortal.
B. All rocks are hard. Some rocks are blue. Therefore, some blue are hard.
C. If I lie, then I will say sorry. I said sorry. Therefore, I lied.
D. If I lie, then I will say sorry. I did not lie. Therefore, I did not say sorry
.