

2022 Malaysian Economics Olympiad

Part 1: Objective

1. Net domestic product is defined as
 - a. Gross domestic product minus depreciation
 - b. Gross domestic product minus income from abroad
 - c. Gross domestic product minus disposable income
 - d. Gross domestic product minus income from services

2. Fiscal policy involves the following:
 - a. Government spending and taxation
 - b. Interest rate and taxation
 - c. Taxation and private spending
 - d. Capital control and taxation

3. Which of the following is commonly used to measure income inequality?
 - a. Big Max Index
 - b. Gini Coefficient
 - c. Kolmogorov-Smirnov
 - d. Durbin-Watson

4. Which of the following reflects group who are not considered as *economically inactive*?
 - a. Retired employee who receives monthly pension from Government
 - b. Student
 - c. Housewife
 - d. Unemployed person actively looking for job

5. The following explains the Rawl's ideal hypotheses:
 - a. There would be no disadvantaged or advantaged group, and hence, a situation where ideal equal fairness would be in place.
 - b. Equal fairness can be achieved if the utility of each unit/agent in a society can be maximized.
 - c. Equal fairness can be achieved if the Government intervenes in the economic policy especially via taxation to ensure a more equal distribution of resources.
 - d. Equal fairness would be in place if rule of law is preserved.

6. If instant noodle is an inferior good, what will happen to the price of the instant noodle as the income of the consumer increases?
 - a. Increase
 - b. Decrease
 - c. Remain unchanged
 - d. Insufficient information to determine

7. Suppose that the interest rate is 10%, which of the following statement is correct?
 - a. The future value for RM100 in 3 years' time is RM130 using compound interest
 - b. The future value for RM200 in 3 years' time is RM260 using simple interest
 - c. The present value of RM100 in 3 years' time is RM133
 - d. The present value of RM200 in 3 years' time is RM260
8. The following best reflects the concept of Permanent Income Hypotheses?
 - a. The income of a consumer should increase in tandem with the inflation rate
 - b. The income of an employee should increase gradually until retirement age in tandem with the increase in the working experience
 - c. The income of an employee will remain constant if the output remains the same
 - d. Consumer will spend their financial resources consistent with the expected long term average income
9. Which of the following statement is correct?
 - a. When interest rate goes up, the value of an asset also goes up
 - b. Quantitative easing happens when a government lower the interest rate to induce more spending
 - c. Government spending is not included in the computation of GDP
 - d. The market price of a fertilizer may not reflect the full social cost of their use
10. Which of the following best describe the English Auction?
 - a. Bidders make increasing bidding; the bidding continues until no bidder is willing to bid higher. The highest bidder wins the bid.
 - b. The initial bidding price is set a relatively high level and is progressively lowered until a bidder is prepared to buy
 - c. Bidders place their bid in a sealed envelope and simultaneously hand them to the auctioneer. Bidder with the highest bid wins, paying the amount bid.
 - d. Bidders place their bid in a sealed envelope and simultaneously hand them to the auctioneer. The highest bidder wins, paying a price equal to the second highest bid.
11. What is the maximum price that a buyer is will to pay for a product if the cost of the good sold is RM100 and the consumer surplus is RM50?
 - a. RM150
 - b. RM100
 - c. RM50
 - d. Insufficient information to determine

12. Spending RM100 in Malaysia vs USD100 in US results in a different goods or services procured. Which of the following method can be used to gauge the different purchasing power in two different locations?
- Gini Coefficient
 - Big Mac Index
 - Herfindahl Hirschman Index
 - Kolmogorov-Smirnov
13. An increase of interest rate by the central bank is expected to:
- Increase the spending by the consumer
 - Increase the investment made by the Government
 - Increase the inflation rate
 - Increase the cost of borrowing
14. Rationality and maximization are the critical assumptions for:
- Contract Theory
 - Optimisation for Supply and Demand
 - Game Theory
 - Permanent Income Hypotheses
15. Which of the following is/are known as "broad money"?
- M1
 - M2
 - M3
 - M4
- M3 & M4
 - M4 only
 - M1 and M2
 - M2, M3 and M4
16. What is the minimum level of capital adequacy generally required for a bank, as proposed by the Basel Committee on Banking Supervision?
- Same as the current prevailing risk-free rate
 - 5%
 - 8%
 - 10%
17. The following are generally the theories/methodologies in the field of marketing, except for:
- Maslow's Hierarchy of Needs
 - SWOT analysis
 - Porter's Five Forces
 - Contract Theory

18. Which of the following is the pricing strategies that are commonly used by low-cost airline company?
- Economy Pricing
 - Skimming Pricing
 - Geographical Pricing
 - Penetration Pricing
19. If the demand of a good is inelastic, a decrease in its price will cause the total expenditure by the customers on the goods to
- Increase
 - Decrease
 - Remains the same
 - Insufficient information to determine
20. Which of the following reflects the application of the Utility Theory?
- In an insurance/takaful contract, a claim can only be made if the loss is more than RM500
 - A company selling baby milk powder is using Skimming Strategy for its product pricing
 - In a bidding process, the bid starts with a predetermined price and gradually increase – the winner is determined when no high bid is made
 - A briber is given an option to either become the accused party or the witness in court on a bribery case
21. Which of the following instrument generally has the most level of volatility/risk-reward?
- Bond
 - Shares
 - Derivatives
 - Demand deposit
22. Why does a pure monopolist make pure profits in the long run equilibrium?
- The monopolist can determine whatever price to be charged
 - Based on economy of scale, the monopolist will reduce the fixed cost over the long run
 - No competitor available in the market
 - Pure monopolist can never make pure profits in the long run
23. What is the average fixed cost, assuming that the short run cost function is $TC = 20Q + 150$?
- 150
 - 20
 - $150/Q$
 - Insufficient information to determine

24. Which of the following an example of economic concept of *moral hazard*?
- A banker extending a financing to a sub-prime customer knowing that the financing originated will allow the banker to earn high commission
 - An officer is taking a bribe from a contractor to let a project to be granted to the contractor
 - A seller is getting profit from unlawful business activities
 - More crimes reported during economic recession period
25. Why is opportunity cost an important concept in economy?
- It provides a catalyst to specialization that improve production
 - It allows for the net benefit of an activity to be determine, based on the cost and benefit analysis
 - It allows the benefit of an economic policy to be channeled to all level of society
 - Resources are scarce and limited, hence need to be allocated efficiently
26. The following are generally the roles of a Government, except for:
- Determine and operationalize the taxation
 - Provide the social security safety net
 - Ensure the consumer does not over spend
 - Provide ecosystem that supports smooth economic activities
27. Demonetization happens when:
- Government reduces the interest rate to spur spending
 - Government reduces the tax rate to increase the disposable income of the public
 - Government retracts the currency to replace it with a new currency
 - Government pegged the currency to gold
28. Which of the following is not part of the business cycle:
- Expansion
 - Hibernation
 - Peak
 - Contraction
29. Which of the following would cause the Ringgit to depreciate against US dollar?
- Fall of income in Malaysia
 - Fall of income in US
 - Trade war between US and China
 - War

30. How do we ascertain that the *Nash Equilibrium* is achieved?

- a. When there is a more superior strategy can be adopted by either one of the players
- b. When two or more players have option to change their strategy to achieve better outcome
- c. When there is no other possible strategy can be adopted to increase the pay off
- d. When the cost and benefit matches, hence, the net benefit is zero

Part 2: Subjective

1. In some of theme park across the world, the price of the entrance ticket is set a relatively high level, however, upon entering into the park, the use of all the facilities in the theme park is free. This is also observed in some of the restaurants around Kuala Lumpur, where buffet concept is offered – specifically, a customer will need to pay a relatively high fixed entrance fee, but a customer can take unlimited food upon entering (takeaway is not allowed).
 - a. Using the concept of price discrimination, explain how this concept allows for the seller to maximise their profit. (20 points)
 - b. Explain why such pricing mechanism may not be best to be applied for other businesses such as grocery stores or supermarket. (10 points)

2. During the pandemic, most of the classes at school are conducted online. Certain teachers also assign group work for the students to complete at home and submit it via online. In addition, several tests are also conducted online. One of the issues identified is the problem of students cheat in their exams as it is difficult to ensure that during an examination, students do not refer to their textbooks or search for answers online. A student with high ethical value will continue to be honest in their examination, however, this comes with a risk of having a score much lower as compare to students who are not being ethical and cheat during the examination. Using reverse game theory, please suggest a mechanism that can be introduced to disincentivise students to cheat in examination. (30 points)

31. One of the most challenging issues faced by the public is to ensure there is sufficient savings at the point of retirement. Although generally the concept of saving is well understood by many people, not many actually has the discipline and willingness to set aside some money each month to build up the savings. Nevertheless, with the right policy tool, intervention by the authority can be done to encourage the building up of savings for retirement. Using the Nudge Theory, please suggest on possible mechanism that can be introduced to increase the savings for retirement. (30 points)

32. a. Please explain the differences between inflation, deflation and stagflation. (10 points)

- b. Please explain the four different types of inflation (10 points)

- c. Please explain on why a certain level of inflation may be desirable and deflation may not be favorable? (10 points)