



## AP<sup>®</sup> Macroeconomics 2002 Sample Student Responses Form B

**The materials included in these files are intended for use by AP teachers for course and exam preparation in the classroom; permission for any other use must be sought from the Advanced Placement Program<sup>®</sup>. Teachers may reproduce them, in whole or in part, in limited quantities, for face-to-face teaching purposes but may not mass distribute the materials, electronically or otherwise. These materials and any copies made of them may not be resold, and the copyright notices must be retained as they appear here. This permission does not apply to any third-party copyrights contained herein.**

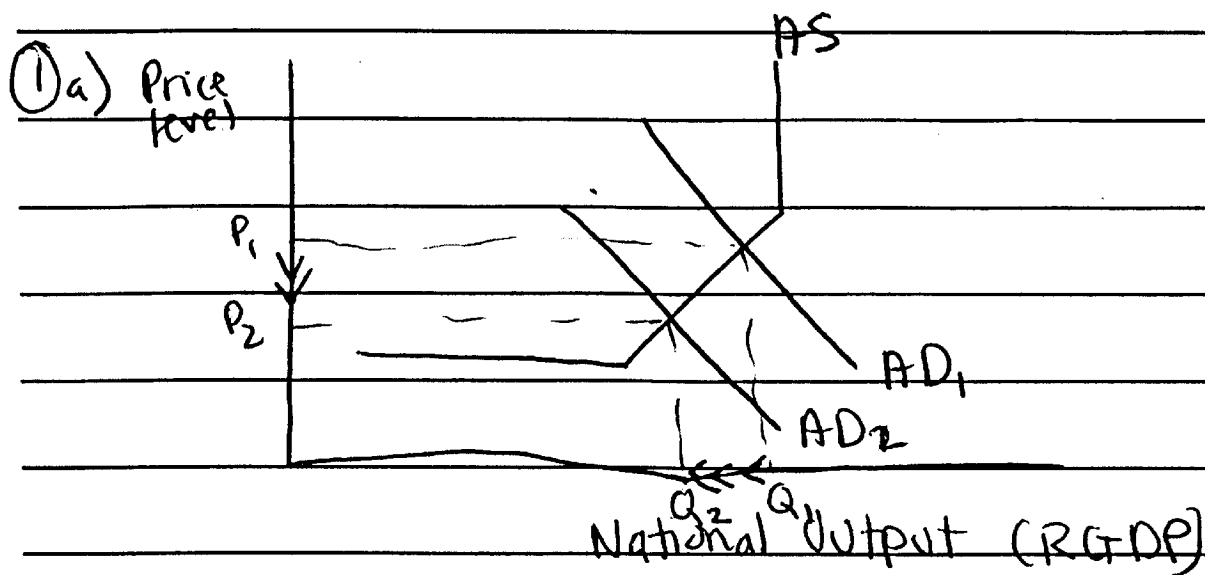
These materials were produced by Educational Testing Service<sup>®</sup> (ETS<sup>®</sup>), which develops and administers the examinations of the Advanced Placement Program for the College Board. The College Board and Educational Testing Service (ETS) are dedicated to the principle of equal opportunity, and their programs, services, and employment policies are guided by that principle.

The College Board is a national nonprofit membership association dedicated to preparing, inspiring, and connecting students to college and opportunity. Founded in 1900, the association is composed of more than 4,200 schools, colleges, universities, and other educational organizations. Each year, the College Board serves over three million students and their parents, 22,000 high schools, and 3,500 colleges, through major programs and services in college admission, guidance, assessment, financial aid, enrollment, and teaching and learning. Among its best-known programs are the SAT<sup>®</sup>, the PSAT/NMSQT<sup>®</sup>, and the Advanced Placement Program<sup>®</sup> (AP<sup>®</sup>). The College Board is committed to the principles of equity and excellence, and that commitment is embodied in all of its programs, services, activities, and concerns.

Copyright © 2002 by College Entrance Examination Board. All rights reserved. College Board, Advanced Placement Program, AP, SAT, and the acorn logo are registered trademarks of the College Entrance Examination Board. APIEL is a trademark owned by the College Entrance Examination Board. PSAT/NMSQT is a registered trademark jointly owned by the College Entrance Examination Board and the National Merit Scholarship Corporation. Educational Testing Service and ETS are registered trademarks of Educational Testing Service.

Write in the box the number of the question you are answering on this page as it is designated in the examination.

1



- i) Output decreases as a result of the decrease in aggregate demand. Since aggregate demand is directly influenced by changes in consumer spending, government spending, <sup>private</sup> investment, and net exports, a sudden, large decrease in private investment will cause AD to ~~decrease~~ fall.
- ii) The price level falls as a result of the decrease in aggregate demand.

b) Employment decreases because of the decrease in output. Since the economy ~~is~~ is producing less, ~~fewer~~ fewer people will be hired.

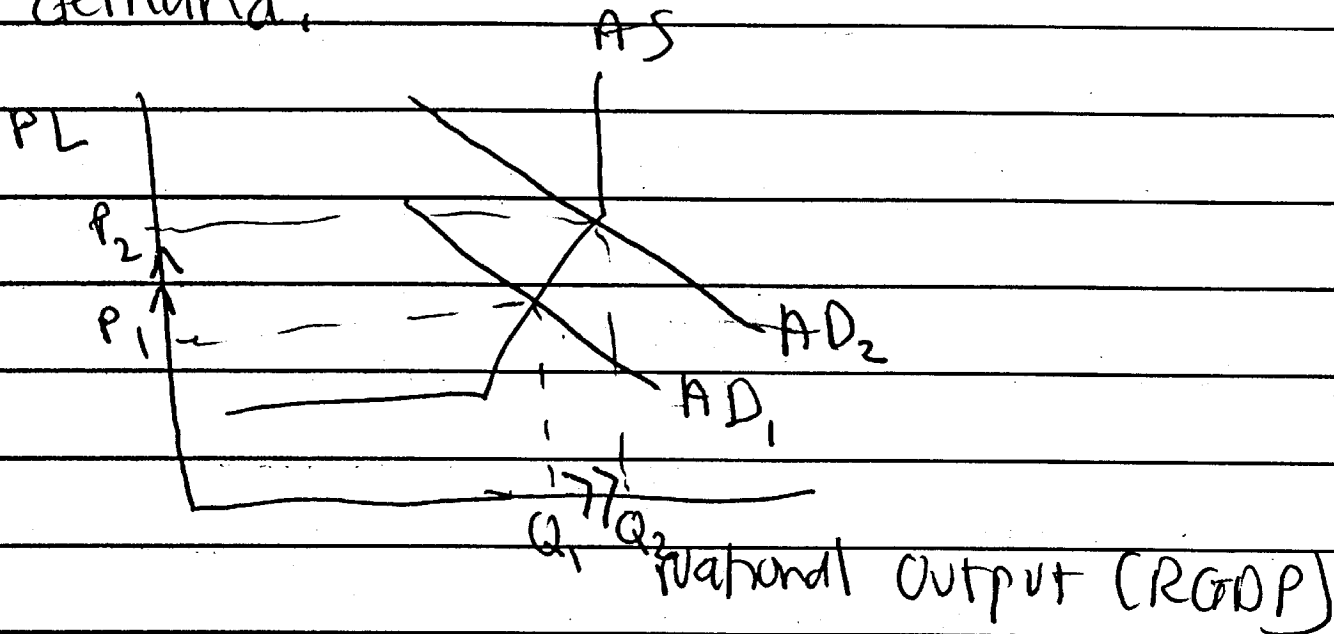
c) An expansionary fiscal policy is needed to stimulate AD, in order to ~~offset~~ offset the effects of the decrease in investment. An increase in government spending

1

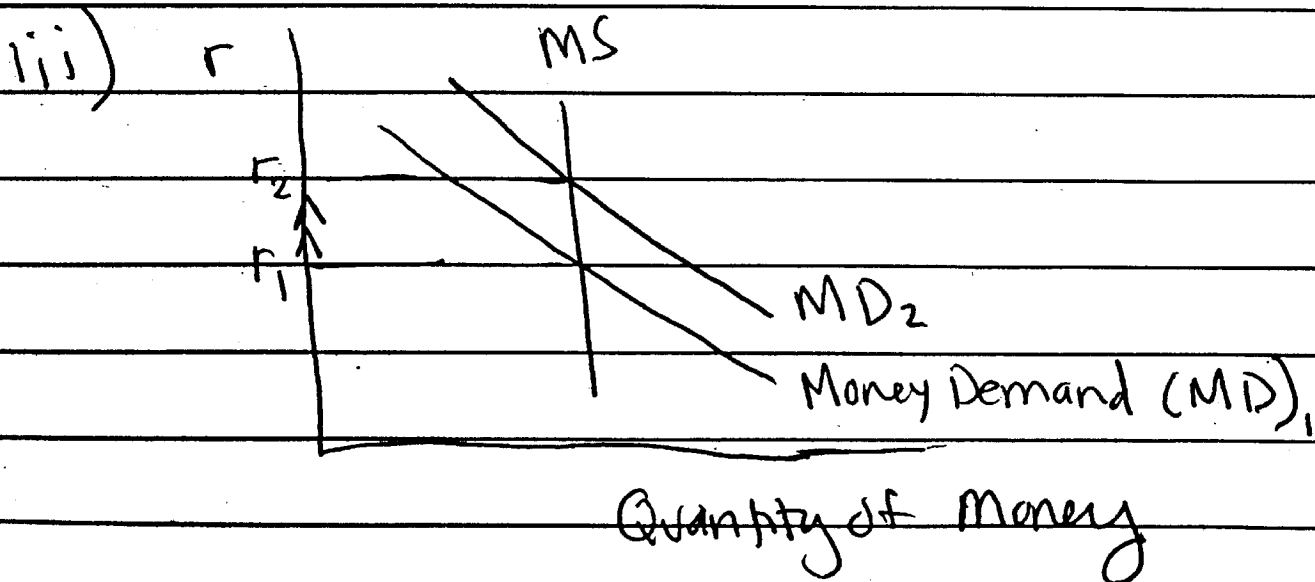
Write in the box the number of the question you are answering on this page as it is designated in the examination.

could accomplish this purpose.

i) Since aggregate demand is the sum of consumer spending, government spending, private investment, and ~~net~~ net exports, increasing government spending would increase aggregate demand.



ii) As shown in the graph above, the increase in AD caused by more government spending would cause output and price level to rise.



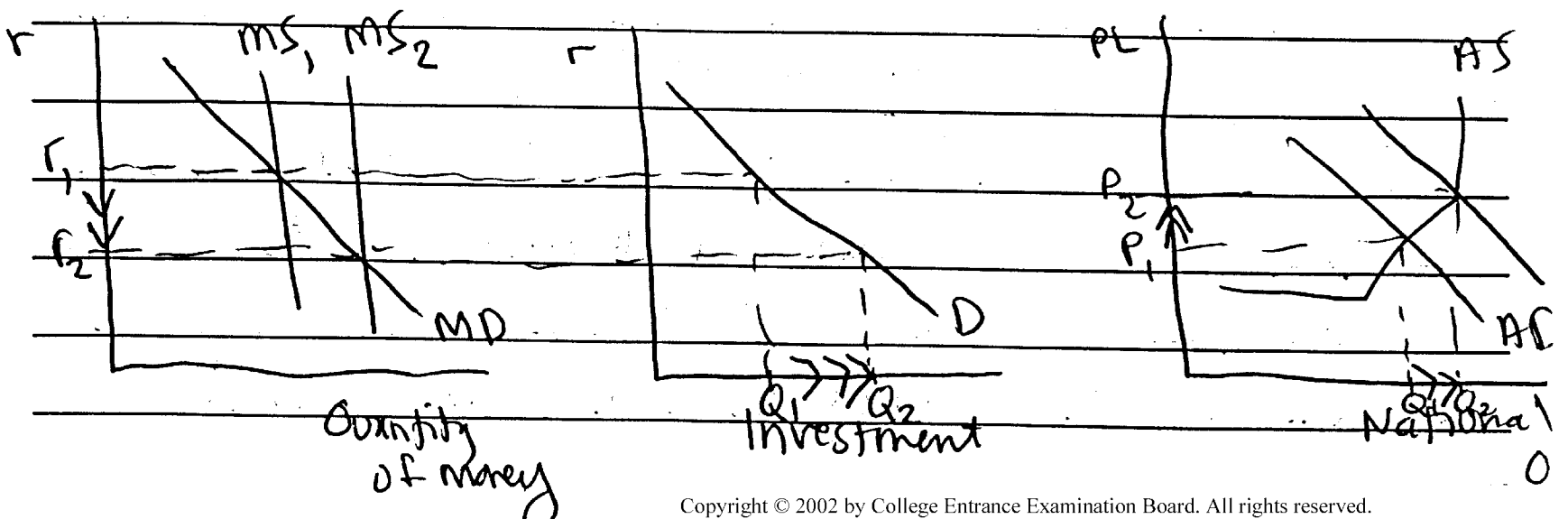
The increase in government spending would

Write in the box the number of the question you are answering on this page as it is designated in the examination.

1

increase the demand for money, thereby increasing

d) To offset the effects of the decrease in investment, the central bank should practice an easy ~~money~~ monetary policy to ~~the~~ encourage investment and stimulate AD. By buying bonds on the open market, the ~~the~~ central bank can increase the money supply. The increase in the supply of money will cause interest rates to fall. Lower interest rates will encourage investment, thereby offsetting the effects of the decrease in investment by stimulating aggregate demand



Write in the box the number of the question you are answering on this page as it is designated in the examination.

1

- i) Real interest rates will decrease because of the expansion of the money supply.
- ii) Lower real interest rates encourage investment, thereby increasing aggregate demand.
- iii) The increase in AD causes an increase in output and the price level.
- e) i) Inflation will increase because the price level will continue to rise as long as AD keeps increasing. ~~AD~~ Buying bonds on the open market increases the money supply, lowers the interest rate, encourages investment, and stimulates AD.
- ii) The value of the domestic currency in foreign ~~markets~~ markets will depreciate. Because of the lower interest rates, foreigners will have less of an incentive to deposit their money in this country. They will ~~de~~ therefore demand less of this country's currency. Also, ~~the~~ high inflation discourages ~~foreigners~~ foreigners from buying this country's exports since the relative prices of these goods would be much higher. This would further decrease the demand for

Write in the box the number of the question you are answering on this page as it is designated in the examination.

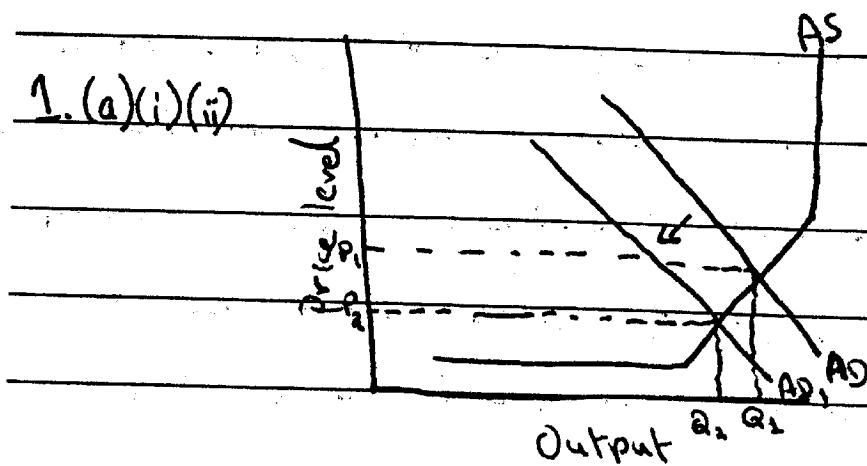
1MACCLAS

1
---

This country's currency.

Write in the box the number of the question you are answering on this page as it is designated in the examination.

IMACCLB,  
Question 1



(b). The employment rate will decrease because of the decrease in private investment. The reason it will decrease is that since aggregate demand decreases, it causes Aggregate supply to decrease, and since aggregate supply decreases, the firms fire many of their workers to reduce costs.

(c). ~~The~~ In this case the Expansionary fiscal policy will be used to offset the effects of the decrease in investment.

(c)(i). The aggregate demand will increase. The reason it will increase is that when the govt implements the Expansionary fiscal policy, the money supply in the economy will increase, causing the interest rates to decrease and investment to increase. And an increase in investment will cause a direct rise in Aggregate demand, since will people will now have more money to spend.

(ii). The output will increase, whereas the price level will also increase

## Question 1

Write in the box the number of the question you are answering on this page as it is designated in the examination.

if the wages are flexible, but if they are sticky, the price level might remain unchanged. The reason output will increase is because the aggregate demand has increased, so to fulfil the demands of the people, the aggregate supply needed to be increased. The price level will ~~also~~ increase if the wages are flexible and change with the price level, so if in this case if the ~~price~~ wages rise, then so will the price level, but if the wages remain unchanged, then the price level will also not change.

(iii) The real interest rates will decrease due to the increase in money supply. The reason they will decrease is because the ~~govt~~ govt. has increased the money supply to the banks and ~~the~~ ~~govt~~ has also decreased the discount rate at which it lends the money to the bank. So if the bank gets money at low interest rates, then ~~so will~~ <sup>the bank</sup> will also reduce the interest rates for the public.

(d) An open market operation that would be used to offset the ~~de~~ effects of the decrease in investment would be the buying of govt. bonds/securities from the public. This will increase the money supply in the economy and increase investment.

(d)(i) The real interest rates will decrease because of the



Write in the box the number of the question you are answering on this page as it is designated in the examination.

Question 1

increase ~~of~~ <sup>of</sup> money the money supply in the economy.

The increase in money supply will reduce the interest rates because the banks will now have more money to loan which they will want to loan out, so in order to loan that money out and receive profit on it, they will lower interest rates so more people will borrow.

(ii). The aggregate demand will increase because since the money supply has gone up, the investment will increase and if the investment increases, then so will the demand.

(iii) The output will also increase due to the increase in aggregate demand as more people's <sup>will</sup> ~~require~~ ~~product~~ purchasing power increases, so to fulfil that output needs to be increased. The price level will increase if the wages are flexible ~~and~~ ~~increase~~ ~~and~~ ~~change~~ ~~with~~ ~~the~~ ~~level~~ <sup>more</sup> with effect to the price level, but if they are sticky then prices will remain unchanged.

(e)(i). There will be high inflation since the supply of money in the economy has increased and the price level will be high.

(ii). The value of the dollar will depreciate since people will now have more money to spend and they will demand