

# 30

QUESTION PAPER  
SERIES CODE

## A

Registration No. :

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Centre of Exam. :

Name of Candidate :

Signature of Invigilator

**ENTRANCE EXAMINATION, 2014**

**M.A. ECONOMICS**

**[ Field of Study Code : ECOM (216) ]**

Time Allowed : 3 hours

Maximum Marks : 100

### INSTRUCTIONS FOR CANDIDATES

Candidates must read carefully the following instructions before attempting the Question Paper :

- (i) Write your Name and Registration Number in the space provided on the top of this Question Paper and in the Answer Sheet.
- (ii) **Please darken the appropriate Circle of Question Paper Series Code on the Answer Sheet.**
- (iii) All questions are compulsory.
- (iv) Answer all the questions in the Answer Sheet provided for the purpose by darkening the correct choice, i.e., (a) or (b) or (c) or (d) with a **BALLPOINT PEN** only against the corresponding circle. Any overwriting or alteration will be treated as wrong answer.
- (v) Each correct answer in Section—A carries **1** mark and each correct answer in Section—B carries 2 marks.
- (vi) **There will be negative marking and for each wrong answer,  $\frac{1}{4}$  mark would be deducted for 1 mark questions and  $\frac{1}{2}$  mark would be deducted for 2 marks questions.**
- (vii) Answer written by the candidates inside the Question Paper will not be evaluated.
- (viii) Pages at the end have been provided for Rough Work.
- (ix) Simple calculators may be used for calculations.
- (x) Return the Question Paper and Answer Sheet to the Invigilator at the end of the Entrance Examination.  
**DO NOT FOLD THE ANSWER SHEET.**

### INSTRUCTIONS FOR MARKING ANSWERS

1. Use only Blue/Black Ballpoint Pen (do not use pencil) to darken the appropriate Circle.
2. Please darken the whole Circle.
3. Darken ONLY ONE CIRCLE for each question as shown in example below :

Wrong ● (b) (c) ●	Wrong ⊗ (b) (c) (d)	Wrong ⊗ (b) (c) ⊗	Wrong ● (b) (c) ●	Correct ● (a) (b) (c) ●
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4. Once marked, no change in the answer is allowed.
5. Please do not make any stray marks on the Answer Sheet.
6. Do rough work only on the pages provided for this purpose.
7. Mark your answer only in the appropriate space against the number corresponding to the question.
8. **Ensure that you have darkened the appropriate Circle of Question Paper Series Code on the Answer Sheet.**

**Section—A**

Each question carries 1 mark

Answer Question Nos. 1–10 on the basis of the following information :

<i>Expenditure on Gross Domestic Product (in ₹ 100 billion)</i>				
<i>At Current Prices</i>	<i>2009–10</i>	<i>2010–11</i>	<i>2011–12</i>	<i>2012–13</i>
1. Final consumption expenditure	448	525	617	696
1.1 Government final consumption expenditure	77	89	103	119
1.2 Private final consumption expenditure	371	436	514	577
2. Gross fixed capital formation	206	241	286	307
3. Change in stocks	18	27	17	17
4. Valuables	12	16	25	27
5. Exports of goods and services	130	171	215	243
5.1 Export of goods	85	114	147	163
5.2 Export of services	45	57	68	79
6. Import of goods and services	165	205	272	311
6.1 Import of goods	136	168	235	267
6.2 Import of services	28	37	38	44
7. Discrepancies	0	3	14	32
8. Expenditure on gross domestic product	A	B	C	D
<i>At Constant 2004–05 Prices</i>	<i>2009–10</i>	<i>2010–11</i>	<i>2011–12</i>	<i>2012–13</i>
1. Final consumption expenditure	340	368	400	421
1.1 Government final consumption expenditure	55	58	62	66
1.2 Private final consumption expenditure	285	309	338	355
2. Gross fixed capital formation	159	177	199	200
3. Change in stocks	14	21	12	11
4. Valuables	9	13	13	18
5. Exports of goods and services	100	120	138	145
5.1 Export of goods	66	82	96	100
5.2 Export of services	34	38	42	45
6. Import of goods and services	133	154	187	199
6.1 Import of goods	112	127	163	174
6.2 Import of services	21	27	23	25
7. Discrepancies	-10	-15	-12	-6
8. Expenditure on gross domestic product	479	X	Y	Z

Source : CSO Press Note dated 31st January, 2014

1. D (i.e., expenditure on GDP at current prices in 2012–13) is equal to
- 1011
  - 1568
  - 1633
  - 2883

2. Growth rate during 2012–13 has been estimated to be
- (a) 12.25%
  - (b) 10.91%
  - (c) 6.50%
  - (d) 4.74%
3. GDP deflator during 2012–13 has been estimated to be
- (a) 1.6
  - (b) 1.7
  - (c) 1.8
  - (d) 1.9
4. As compared to 2010–11, the growth rate in 2012–13 has come down by
- (a) 7.9 percentage points
  - (b) 5.5 percentage points
  - (c) 3.5 percentage points
  - (d) 1.9 percentage points
5. The current account deficit at current price as proportion of GDP during 2012–13 has been estimated to be
- (a) 5.34%
  - (b) 6.74%
  - (c) 9.15%
  - (d) 11.55%
6. Investment rate (excluding valuables) at constant prices during 2012–13 has been estimated to be
- (a) 14%
  - (b) 24%
  - (c) 34%
  - (d) 44%

7. Private consumption-GDP ratio at current prices during 2011-12 has been estimated to be
- (a) 50%
  - (b) 57%
  - (c) 65%
  - (d) None of the above
8. By 2012-13, in Indian economy, the degree of openness has crossed
- (a) 50%
  - (b) 60%
  - (c) All of the above
  - (d) None of the above
9. The inflation based on GDP deflator during 2012-13 has been estimated to be
- (a) 10%
  - (b) 9%
  - (c) 8.5%
  - (d) 7.2%
10. "At current prices, the gross fixed capital formation of the public sector has increased by 23.5% from 6.4 lakh crore in 2011-12 to 7.9 lakh crore in 2012-13, that of private corporate sector by 0.8% from 8.5 lakh crore in 2011-12 to 8.6 lakh crore in 2012-13, and the household sector by 3.9% from 13.7 lakh crore in 2011-12 to 14.3 lakh crore in 2012-13." The government expenditure to GDP ratio in 2012-13 would then approximately be
- (a) 15%
  - (b) 20%
  - (c) 25%
  - (d) 30%

Answer Question Nos. 11–15 on the basis of the following passage :

“The denial of the crucial role of the interest rate as equilibrator of savings and investment led directly to the Keynesian theory of employment determinants. Given the ‘propensity to consume’ and hence the proportion of any given income that will be spent by individual consumers (on which the size of R. F. Kahn’s ‘multiplier’ depends), the level of output and employment will be a function of investment. According to the level at which investment (also consumption) stands, the level of output and employment may be almost anything between zero and full capacity output. There is at any rate no longer any unique level to which the system is necessarily tending. So far as investment consists of private investment, it will remain governed by the ‘marginal efficiency of capital’ (anticipated profitability), modified, on the one hand, by ‘expectations’ (powerfully swayed by ‘business mood’ and the like) and on the other hand by the cost of borrowing, namely the prevailing rate of interest. Thus was the causal emphasis of theory reversed : instead of any change in saving being translated into an equivalent shift of investment, investment became the independent and (via income changes) the volume of savings the dependent variable.

Interest was converted virtually into a *money rate*—something influenced on the one hand by monetary policy (affecting the supply of money available) and on the other hand by the current attitude towards it as something worth holding (*qua* bank deposit e.g.) in preference to other assets (e.g. bonds). This latter constituted the famous ‘liquidity preference’—a preference powerfully influenced by expectations (or uncertainty) about *future* movements of interest rates (and hence of bond prices).”

—From Maurice Dobb, *Theories of Value and Distribution since Adam Smith*, page 218–9

11. There is no unique level of output and employment to which the economic system tends, because
- (a) investment consists only of private investment
  - (b) investment determines the level of output and can vary
  - (c) changes in saving are translated into an equivalent level of investment
  - (d) investment depends upon the propensity to consume
12. The ‘multiplier’ referred to here relates to
- (a) the propensity to consume which determines how much consumers spend
  - (b) the change in employment consequent upon a change in output
  - (c) the change in output consequent upon a change in investment
  - (d) the number that equilibrates saving and investment

**13. Expectations**

- (a) determine the prevailing rate of interest
- (b) contribute to liquidity preference
- (c) govern the cost of borrowing
- (d) determine the money supply

**14. Keynes treated the interest rate as**

- (a) entirely determined by expectations about the future
- (b) the rate at which current savings and investment are equilibrated
- (c) reflecting both monetary policy and liquidity preference
- (d) an indicator of expected profitability

**15. Liquidity preference**

- (a) is about holding money relative to other assets
- (b) is the difference between bond prices and interest rates
- (c) affects the supply of money
- (d) is unrelated to any of the above

**16. The Malthusian principle of growth of human population argues that**

- (a) population growth is constrained by the rate of growth of food production
- (b) human population growth has been restricted by changes in climatic conditions
- (c) expansion of human population leads to migration to less densely populated areas
- (d) historically population growth has been constrained by decline in gross fertility rate

**17. Suppose that the exchange rate of the Indian rupee appreciates by 10% and, over the same period, inflation in India be 8% and inflation in India's trading partners is 3%. What is the change in India's real exchange rate?**

- (a) 5% appreciation
- (b) 10% appreciation
- (c) 15% appreciation
- (d) 5% depreciation

18. Consider a country *A* whose citizens working abroad remit to the country in a particular year an amount in local currency units (LCUs) that is 250 LCUs more than what foreigners working in *A* are remitting to their parent countries. Foreign firms operating in *A* repatriate profits to their home countries that exceed the profits repatriated to *A* by its firms operating abroad by 750 LCUs. If GDP in the relevant year is 50,000 LCUs and there are no other cross-border flows of income, the country's GNP would be
- (a) 50,500 LCUs
  - (b) 49,500 LCUs
  - (c) 49,750 LCUs
  - (d) 50,750 LCUs
19. Which of the following is an example of pure public good?
- (a) National defence
  - (b) Fire protection
  - (c) Congested highway
  - (d) All of the above
20. The free rider problem is typically known as
- (a) the reluctance of individuals to contribute voluntarily for the provisioning of the public goods
  - (b) journey without ticket in train
  - (c) watching movie without ticket in cinema hall
  - (d) the reluctance of individuals to contribute voluntarily for the provisioning of the Giffen goods
21. 'Club goods' are
- (a) non-rivalrous and non-excludable
  - (b) rivalrous but non-excludable
  - (c) excludable but non-rivalrous
  - (d) rivalrous as well as excludable

22. If the quantity demanded of rice increases by 5% when the price of wheat increases by 20%, the cross-price elasticity of demand for rice would be
- (a) - 4
  - (b) - 0.25
  - (c) 0.25
  - (d) 4
23. Suppose the demand for good Z goes up when the price of good Y goes down. We can say that goods Z and Y are
- (a) complements
  - (b) perfect substitutes
  - (c) unrelated goods
  - (d) substitutes
24. In the long run, existing firms exit a perfectly competitive market, when
- (a) economic profits are zero
  - (b) economic profits are greater than zero
  - (c) normal profits are greater than zero
  - (d) they incur an economic loss
25. Which of the following statements is correct?
- (a) The compensated demand curve of a commodity is always steeper than the ordinary demand curve of the commodity
  - (b) The ordinary demand curve of a commodity is always steeper than the compensated demand curve of the commodity
  - (c) The compensated demand curve of a commodity always has the same slope as the ordinary demand curve of the commodity
  - (d) None of the above
26. When speaking of the 'invisible hand', Adam Smith was referring to
- (a) competition of a kind that would lead an individual pursuing his private interest to serve the public interest
  - (b) competition of a kind that would lead the individual pursuing his private interest to pursue private interest
  - (c) a situation where a person works in the public interest without showing himself
  - (d) None of the above



27. The purchasing power parity exchange rate is determined by
- (a) the nominal exchange rate
  - (b) the central bank
  - (c) the relative price levels of the two countries
  - (d) foreign exchange markets
28. Over the financial year 2013-14, India's foreign exchange reserves increased by more than \$ 5 billion. This was because
- (a) the country ran a surplus on the current account of its balance of payments
  - (b) the country ran a deficit on the budget of the central government
  - (c) the country was a net recipient of capital flows besides recording a current account surplus
  - (d) the country was a net recipient of capital flows which exceeded the size of its current account deficit
29. Let us assume that the GDP of some country was ₹ 100 at current prices in 2012-13 and that was ₹ 90 in 2011-12; and that the GDP at constant 2004-05 prices was ₹ 59 in 2012-13 and that was ₹ 56.1 in 2011-12, then the GDP of 2011-12 at 2012-13 (constant) prices would be
- (a) ₹ 59.1
  - (b) ₹ 90
  - (c) ₹ 95.1
  - (d) ₹ 100
30. As the captain of Indian cricket team, if Sachin Tendulkar is assumed to have observed the rule of calling 'head' every time the toss was made during the five matches of the one-day series, then what is the probability of winning the toss by India in all five matches?
- (a)  $1/2$
  - (b)  $1/5$
  - (c)  $(1/2)^5$
  - (d)  $(1/5)^2$

**Section—B**

Each question carries 2 marks

31. Consider the inequality  $[(4/x) - 5] < 6$ . Which of the following statements is true?
- (a)  $x > 5$  is sufficient for the inequality to hold
  - (b)  $x > 5$  is both necessary and sufficient for the inequality to hold
  - (c)  $x > 5$  is neither necessary nor sufficient for the inequality to hold
  - (d)  $x > 5$  is necessary for the inequality to hold

Answer Question Nos. 32–34 on the basis of the following information :

Three individuals, A, B and C, are suspected of income tax evasion. They testify under oath as follows :

A : B is guilty and C is innocent.

B : If A is guilty, then so is C.

C : I'm innocent but at least one of the others is guilty.

32. Which of the following is true?
- (a) Testimony of A follows from testimony of B
  - (b) Testimony of B follows from testimony of A
  - (c) Testimony of C follows from testimony of A
  - (d) Testimony of A follows from testimony of C
33. Assuming everybody's testimony to be true, who is innocent and who is guilty?
- (a) A and C are innocent and B is guilty
  - (b) B and C are innocent and A is guilty
  - (c) C is the only innocent individual
  - (d) All three are innocent

34. Assuming the innocent told the truth and the guilty told lies, who is innocent and who is guilty?
- $A$  and  $C$  are innocent and  $B$  is guilty
  - $B$  and  $C$  are innocent and  $A$  is guilty
  - $A$  and  $B$  are innocent and  $C$  is guilty
  - $C$  is the only innocent individual
35. An outward shift of the production possibility frontier may be caused by
- an increase in demand
  - more government spending
  - better training of employees
  - productive inefficiency

Answer Question Nos. 36–38 on the basis of the following information :

Suppose in an economy in any period  $t$  the aggregate value of output is  $Y(t) = C(t) + I(t)$ , the sum of aggregate consumption and investment expenditures.

36. Suppose  $C(t) = 0.6Y(t) + 0.3Y(t - 1)$  and  $I(t) = 1000$  for all  $t$ . What is the only value of output which, once attained in this economy, will continue to persist over time?
- 2000
  - 2500
  - 4000
  - 10000
37. Suppose  $C(t) = 0.6Y(t) + 0.3Y(t - 1)$  and  $I(t) = 600 + 0.1Y(t)$  for all  $t$  and  $Y(0) = 40000$ . What is the rate of growth of output in the economy in period 1?
- 2%
  - 5%
  - 7.5%
  - 12%
38. Suppose  $C(t) = 0.6Y(t) + 0.3Y(t - 1)$  and  $I(t) = 2.4[Y(t) - Y(t - 1)]$  for all  $t$ . What is the rate of growth of output in the economy?
- 2%
  - 5%
  - 7.5%
  - 12%

Answer Question Nos. 39–41 on the basis of the following information

Suppose in economies  $A$  and  $B$  the aggregate value of output is  $Y = C + G$ , the sum of aggregate consumption and lump-sum government expenditures. The government imposes only lump-sum direct taxes and suppose  $T$  denotes the aggregate value of such taxes collected by the government.  $C = a + bY_d$ , where  $a$  is the value of autonomous consumption expenditures,  $b$  is the constant marginal propensity to consume out of income and  $Y_d$  is the aggregate value of disposable incomes in the economy. The value of  $b$  is higher in  $B$  than in  $A$ .

39. Suppose  $T = 0$  in economies  $A$  and  $B$  and the value of  $a$  is also the same in both economies. Suppose the value of  $G$  is higher in economy  $B$  than in economy  $A$ . In which economy will aggregate private savings be higher?
- (a)  $A$
  - (b)  $B$
  - (c) Will be the same in both economies
  - (d) More information is needed to answer the question
40. Suppose the values of  $a$  and  $G$  are the same in both economies. Suppose the value of  $T$  is higher in economy  $B$  than in economy  $A$ . In which economy will aggregate private saving be higher?
- (a)  $A$
  - (b)  $B$
  - (c) Will be the same in both economies
  - (d) More information is needed to answer the question
41. Suppose the value of  $G - T$  is the same in both economies. Suppose that the value of  $a$  is higher in economy  $B$  than in economy  $A$ . In which economy will aggregate private saving be higher?
- (a)  $A$
  - (b)  $B$
  - (c) Will be the same in both economies
  - (d) More information is needed to answer the question

Answer Question Nos. 42-44 on the basis of the following information :

Suppose there is a closed economy without government expenditure or taxation in which aggregate consumption expenditure  $C$  is the following function of aggregate income  $Y$  and the rate of interest (expressed per cent)  $r$  :  $C = 388 + 0.75Y - 15r$ . Suppose investment expenditure  $I$  is given by the following function :  $I = 1863 + 0.05Y - 25r$

42. What is the value of the slope of the IS curve for this economy?
- (a)  $-0.0175$
  - (b)  $-0.02$
  - (c)  $-0.025$
  - (d) None of the above
43. If the rate of interest is fixed at 15%, what is the value of aggregate income at which the values of demand and supply for goods and services are equalized in the economy?
- (a) 5575
  - (b) 6825
  - (c) 7675
  - (d) 8255
44. Suppose the rate of interest falls from 15% to 6%. What is the change in the value of aggregate income at which demand and supply for goods and services are equalized in the economy?
- (a) 1800
  - (b) 4590
  - (c) 2790
  - (d) None of the above

Answer Question Nos. 45-48 on the basis of the following information :

Consider a firm which is a monopolist in each of two completely segregated markets  $A$  and  $B$ . The total cost of the monopolist  $C$  is the following function of its total output  $Q$  :  $C = 10 + 4Q$ . The equations for the demand curves faced by the monopolist in markets  $A$  and  $B$  are  $P_A = 16 - Q_A$  and  $P_B = 36 - 4Q_B$  respectively.

45. What is the profit-maximizing price for the firm in market  $A$ ?
- (a) 4
  - (b) 6
  - (c) 8
  - (d) 10

46. What is the profit-maximizing price for the firm in market B?
- (a) 10
  - (b) 12
  - (c) 16
  - (d) 20
47. What is the profit-maximizing level of total output for the firm?
- (a) 6
  - (b) 10
  - (c) 12
  - (d) 14
48. What is the maximum level of total profits which can be earned by the monopolist?
- (a) 64
  - (b) 72
  - (c) 90
  - (d) 105
49. If  $f(x) = \sin x^2$ , then what is the value of  $f'(-\sqrt{\pi})$ ?
- (a) 0
  - (b)  $-2\sqrt{\pi}$
  - (c)  $-2\pi$
  - (d)  $2\sqrt{\pi}$
50. A set of 16 real numbers each number is multiplied by a positive real number. After multiplication, the variance of the resulting set of numbers is found to be 6.25 times the variance of the set of numbers before multiplication. What is the number which was used to multiply all the observations?
- (a) 4
  - (b) 6.25
  - (c) 12.5
  - (d) None of the above

51. Suppose two dice are rolled. What is the probability that the sum of the points on the two dice is 8, if it is known that the sum is an even number?
- (a)  $1/12$
  - (b)  $5/36$
  - (c)  $1/6$
  - (d)  $5/18$

Answer Question Nos. 52-54 on the basis of the following information :

The behaviour of a variable  $x$  over time is described by  $dx/dt = x^2 - x$  (where  $t$  is the variable denoting time).

52. Suppose at the initial point in time  $x$  has a negative value. What happens to the value of  $x$  over time?
- (a) Decreases without any bound
  - (b) Increases and approaches 0 over time
  - (c) Increases and approaches 1 over time
  - (d) Increases without any bound
53. Suppose at the initial point in time  $x$  has a positive value less than unity. What happens to the value of  $x$  over time?
- (a) Decreases without any bound
  - (b) Increases and approaches 0 over time
  - (c) Decreases and approaches 1 over time
  - (d) Increases without any bound
54. Suppose at the initial point in time  $x$  has a positive value greater than unity. What happens to the value of  $x$  over time?
- (a) Decreases without any bound
  - (b) Decreases and approaches 0 over time
  - (c) Decreases and approaches 1 over time
  - (d) Increases without any bound

55. What is the value of  $\lim_{x \rightarrow 0^-} \left[ \frac{|x|}{x} \right]$ ?
- (a)  $-\infty$   
(b) 0  
(c) -1  
(d) 1
56. Let  $f(x) = [x]$ , where  $[x]$  denotes the greatest integer  $\leq x$ . On which of the following intervals is  $f$  a continuous function?
- (a)  $[-2, -1]$   
(b)  $(-2, -1]$   
(c)  $[-2, -1)$   
(d) None of the above
57. In the world of Indian stock markets, participatory notes refer to
- (a) permits given to foreign institutional investors registered to trade in Indian stock markets  
(b) derivative instruments linked to shares (equity) of Indian firms sold to outside participants  
(c) notes issued to lenders providing credit to participants in the stock markets  
(d) permits given to brokerages to trade in stock markets
58. If the correlation coefficient between two random variables  $X$  and  $Y$  is given by  $r$  ( $-1 < r < 1$ ) and the bivariate regression coefficient of  $Y$  on  $X$  is denoted by  $b_{yx}$ , which is greater than unity, then  $b_{xy}$  must be
- (a) greater than unity  
(b) less than unity  
(c)  $1 - b_{yx}$   
(d)  $1/b_{yx}$



Answer Question Nos. 59–60 on the basis of the following information :

The mean value theorem states that if  $f$  is a continuous function on  $[a, b]$  and is differentiable in  $(a, b)$  ( $a$  and  $b$  being any two real numbers), then there exists at least one real number  $c \in (a, b)$  such that  $f(b) - f(a) = f'(c)(b - a)$ .

59. Suppose  $f(x) = x^2$ ,  $a = 3$  and  $b = 6$ . Which of the following can be taken as a value of  $c$ ?
- (a) 4.4  
 (b) 4.6  
 (c) 4.8  
 (d) None of the above
60. Suppose  $f(x) = x^3$ ,  $a = -1$  and  $b = 2$ . How many value(s) of  $c$  is/are possible?
- (a) None  
 (b) One  
 (c) Two  
 (d) Three

Answer Question Nos. 61–65 on the basis of the following information :

<i>Union Budget of India at a glance (in ₹ crore)</i>	<i>2014–15</i>
1. Tax Revenue (net to centre)	9,86,417
2. Non-tax Revenue	1,80,714
3. Capital Receipts	5,96,083
4. Recoveries of Loans	10,527
5. Other Receipts	56,925
6. Borrowing and other Liabilities	5,28,631
7. Non-plan Expenditure on Revenue Account	11,07,781
8. Of which, Interest Payments	4,27,011
9. Non-plan Expenditure on Capital Account	1,00,111
10. Plan Expenditure on Revenue Account	4,42,273
11. Plan Expenditure on Capital Account	1,13,049
12. Nominal GDP	1,28,39,952
13. Plan Expenditure to GDP Ratio	A
14. Capital Expenditure to GDP Ratio	B
15. Revenue Deficit to GDP Ratio	C
16. Fiscal Deficit to GDP Ratio	D
17. Primary Deficit to GDP Ratio	E

61. A is equal to
- (a) 0.88%  
 (b) 3.44%  
 (c) 4.32%  
 (d) None of the above

62.  $B$  is equal to

- (a) 0.88%
- (b) 0.78%
- (c) 1.66%
- (d) None of the above

63.  $C$  is equal to

- (a) -1.66%
- (b) 0.00%
- (c) 2.98%
- (d) None of the above

64.  $D$  is equal to

- (a) -0.53%
- (b) 0.00%
- (c) 3.33%
- (d) 4.12%

65.  $E$  is equal to

- (a) -3.33%
- (b) 0.00%
- (c) 0.79%
- (d) 1.32%

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