

TSA Week One Series Two (25/7/2021)

Question One (2010 - Q5)

If drivers were made to pay for road use according to the amount of time they spent on the road, they would drive more dangerously. Experiments were conducted with volunteers using a driving simulator. In the first experiment, the volunteers were charged for time spent driving below 10mph in order to see how people coped with trying to avoid congestion. In the second experiment, they were charged for the time spent in a particular area. The results were alarming. The volunteers in the first experiment jumped many red lights in an attempt to keep their speed up. Those in the second frequently broke the speed limit, and overtook in dangerous situations. In the interests of road safety, we should not introduce such payment schemes.

Which one of the following is an underlying assumption of the above argument?

- A Driving simulators are a reliable guide to real-life driving.
- B We need to do more experiments on schemes of payment for road use.
- C More people should practise their driving skills using a simulator.
- D Schemes involving payment for road use will not solve the problem of road congestion.
- E Road congestion could be solved in ways other than payment for road-use schemes.

Question Two (2010 - Q9)

A two-month study of major producers of ivory products showed that worldwide demand for elephant tusks for ivory had fallen sharply. Consequently it is safe to assume that there will be a general decline in elephant poaching.

Which one of the following, if true, would most weaken the above argument?

- A There are far fewer elephants than there were ten years ago, so poachers are finding it increasingly difficult to make a living from the ivory trade.
- B Poachers now use high-powered rifles which make it far easier for them to kill larger numbers of elephants than was possible in the past.
- C The worldwide demand for ivory fluctuates considerably at certain times of the year, so poachers stockpile ivory to sell when the market improves.
- D More and more synthetic materials are being used as substitutes for ivory in the construction of such things as piano keys and billiard balls.
- E The worldwide demand for ivory has been falling consistently for the last twenty years and many ivory poachers have found alternative sources of income.

Question Three (2010 - Q12)

- 12 Sue and Ben are buying some kitchen goods at a shop which is having a sale. The terms of the sale are as follows:

<i>Total marked price of purchases (before discount)</i>	<i>Reduction (%)</i>
<i>Up to £50</i>	25
<i>Up to £100</i>	33
<i>£100 or more</i>	50

The marked prices of the goods they have chosen come to £96.

How much less would they actually spend, to the nearest £1, if they chose extra goods to the value of £6?

- A £ 2
- B £ 6
- C £ 10
- D £ 13
- E £ 16

Question Four (2010 - Q13)

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QUARTERLY ELECTRICITY BILL					
Meter Readings		Units Charged	Tariff	Pence per unit	Amount (£)
Previous	Present				
45856	47846	1990	standard	8.45	168.15
			FIXED CHARGES		12.30
65026	65284	258	Off-peak	3.90	10.06
			FIXED CHARGES		5.45
			TOTAL AMOUNT DUE		195.96

At the end of the quarterly charging period to which the above bill relates, the householder changed her electricity consumption pattern. In the next quarter she roughly halved her standard consumption and increased her off-peak consumption by about ten times.

What approximate total bill should she expect for the next charging period?

- A £ 90
- B £ 120
- C £ 150
- D £ 170
- E £ 200

Question Five (2010 - Q14)

- 14 The diagram shows the outline of a window which is intended to be composed of a number of panes of glass, all of the same size and shape.



Which one of the shapes below could be used to fill this window?



Question Six (2010 - Q15)

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Statement	Young smokers' perceptions of parents' attitudes to their smoking	Parents' actual attitude to their children smoking
<i>Don't mind</i>	56 %	13 %
<i>Rather they didn't</i>	22 %	15 %
<i>Do not like it</i>	19 %	63 %
<i>Don't know that they smoke</i>	3 %	9 %

Which one of the following conclusions is best supported by the data given above?

- A Young people are likely to be more tolerant of smoking than their parents.
- B Young people tend to underestimate their parents' disapproval of their smoking.
- C More than half of young people's parents are tolerant of smoking.
- D Smoking in a young person can lead to a deterioration in relations with their parents.
- E Parents are unlikely to express strong disapproval of their children's habits.

Question Seven (2010 - Q16)

The siting of mobile phone masts is a controversial matter in the UK, particularly when they are situated at or near schools and hospitals. The Stewart Report concluded that the balance of evidence indicated that there was no general risk to the health of people living near mobile phone masts but recommended a regular audit of Radio Frequency Radiation (RFR) emissions from masts sited near schools and hospitals. The Government have complied with this latter recommendation and carried out regular audits all of which show that RFR emissions are far below the levels of national and international guidelines. Therefore, mobile phone masts are safe and not injurious to health and can be sited anywhere.

Which one of the following is an underlying assumption of the above argument?

- A RFR emissions are more injurious to younger people.
- B RFR emissions can affect sensitive equipment in hospitals.
- C The audits are not carried out frequently.
- D Mobile phones are an essential part of modern communications.
- E The only health risk from mobile phone masts is RFR emissions.

Question Eight (2010 - Q17)

The expense of advertising adds greatly to overall production costs and thus to the prices of goods when they reach the public. There is particular public resentment of mass advertising for rival brands of products such as petrol or detergents - which, most people suspect, are so similar in character as to be virtually indistinguishable except in their packaging. Much of the huge sum devoted to advertising could be used more fruitfully to bring down prices. Therefore, advertising disadvantages the consumer. Which one of the following, if true, would most weaken the above argument?

- A Manufacturers would not spend money on advertising unless they believed it would benefit the public.
- B By increasing competition, advertising leads to an overall improvement in the quality of goods.
- C Advertising does not affect in any way what customers choose to buy.
- D The advertising industry is able to employ people who would otherwise be out of work.
- E Advertisements often make misleading claims about the quality of the product

Question Nine (2010 - Q19)

- 19 It is 12 noon and I have just arrived in the centre of town for a meeting that is due to last for at least three and a half hours.

After this meeting, I have an important appointment at 6.00pm which requires me to leave before 5.30pm.

There are 5 car parks in the town centre that charge as follows:

Grove Street	£6.00 per day, flat rate.
Victoria Square	£1.00 per hour or part of an hour.
Central Park	Free for 2 hours, then £2.00 per hour or part of an hour.
Bonningtons	Free for 1 hour, then £1.50 per hour or part of an hour.
Grange Road	£2.50 for 3 hours, then £1.50 per hour or part of an hour.

In which car park should I leave my car in order to pay as little as possible in parking fees?

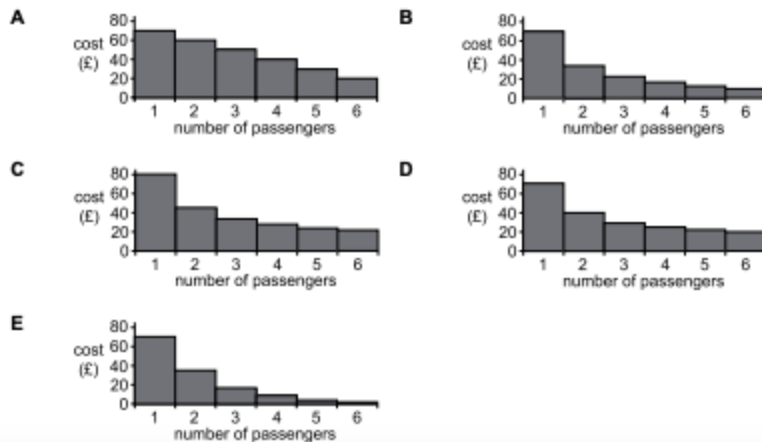
- A Grove Street
- B Victoria Square
- C Central Park
- D Bonningtons
- E Grange Road

Question Ten (2010 - Q20)

20 A taxi service advertises its rates for travel to the local airport as shown below:

AIRPORT TAXI SERVICE	
£70	
(includes return journey)	
EXTRA PASSENGERS £10 EACH	
(vehicles licensed to carry 6 passengers)	

Which one of the following bar graphs correctly illustrates how the cost per person decreases as more people get together to share a taxi to the airport?



Question 11 (2010 - 22)

Amrik cannot afford to buy the Advanced version of the software. The Professional version is even more expensive, so Amrik cannot afford that either. Which one of the following most closely parallels the reasoning used in the above argument?

A Amrik does not like foods containing garlic. This pizza contains garlic and anchovies, so Amrik won't like it either.

B It is too far for Amrik to walk to the garden centre. The shops are closer, so he will go there instead.

C Amrik cannot sleep at night if he drinks a cup of tea after 9pm, because tea contains caffeine. Coffee contains more caffeine than tea, so Amrik won't drink that after 9pm either.

D Amrik didn't have enough patience to complete the 1000 piece jigsaw he got for his birthday. The Times crossword also requires patience, so he won't complete that either.

E Amrik's hair is shorter, and Callum's hair is longer, than Bill's. So Amrik's hair is shorter than Callum's.

Question 12 (2010 - 23)

We do not pay a fixed amount for electricity, gas or telephone calls irrespective of how much we use. How is it then that some people are still expected to do so in the case of water? People

who use relatively little water should no longer be required to subsidise those who use a great deal. Water meters should therefore be introduced in all regions as soon as it is feasible to do so. Which one of the following best illustrates the principle underlying the argument above?

A Our town is providing a series of recycling banks so that residents who wish to recycle household waste can do so.

B When we eat out as a group we divide the bill by the number of people dining.

C The government is paying compensation to house owners whose properties were damaged in the floods.

D The new road is going to be financed by a toll system rather than out of taxation.

E People who have difficulty paying the annual television licence fee may pay in monthly instalments.

Open Questions

1. Should performance enhancing drugs in sport be allowed?
2. What is the single biggest threat to world peace and prosperity in the next 50 years?