



1.

On a particular experimental farm, it is found that the number of nematode worms per cubic metre in the soil tends to be greater when there is a lower concentration of fertiliser residues in the soil.

Which **one** of the following claims does this finding justify?

- A Nematode worms help break down fertiliser residues in the soil.
- B The number of nematode worms per cubic metre of soil is negatively correlated with the concentration of fertiliser residues.
- C Removing fertiliser residues from the soil would encourage the growth of nematode worm populations.
- D Fertiliser residues interfere with the reproduction of nematode worms.

BMAT Q17 (2003)

2.

On a Roman archaeological site, three coins were found with dates corresponding to 88, 123 and 157 AD. The coins were mixed with other Roman debris so must have entered the site during Roman occupation.

Which **one** of the following can definitely be said about the dates of occupation of the site?

- A It was abandoned not later than 157 AD.
- B It was first occupied before 88 AD.
- C It was not in use before 88 AD.
- D It was occupied only from 88 to 157 AD.
- E It was abandoned in or later than 157 AD.

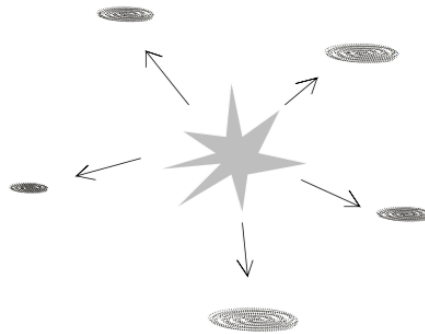
BMAT Q22 (2003)



Other Questions

3.

If all the matter in the universe was created in the Big Bang, and if the universe has been expanding ever since, galaxies would tend to move apart, not towards each other.



However, galaxies can and do collide.

Which **one** of the following, if true, would best explain why these two statements are not incompatible?

- A Local movement is independent of overall expansion.
- B The Andromeda galaxy is moving towards our own galaxy.
- C Gravity is believed to be slowing down the universe's rate of expansion.
- D The movement of galaxies is analogous to that of spots on the surface of a balloon as it inflates.
- E The Big Bang did not occur *in* the universe, but created the universe.

BMAT Q4 (2005)

4.

"There is a fundamental error in the claim that wind farms will spoil Britain's natural beauty. Most of the beautiful areas of Britain where wind farms may be sited are managed in some way, usually for agricultural reasons. Without sheep grazing, most hill and moorland areas would be forested. Without crop growing, the same would be true of most of the rest of Britain. In the 12th century, 90% of Britain was covered by woodland. Wind farms may be unsightly, but it is a mistake to refer to the natural beauty of our countryside, since -----."

Which **one** of the following most logically completes the above argument?

- A some parts of Britain are heavily industrialised.
- B many of the areas where wind farms would be sited are not beautiful.
- C wind farms are necessary in order to reduce carbon emissions.
- D any form of energy production has an impact on the environment.
- E human activity has changed the British countryside over the last 800 years.

BMAT Q17 (2005)



5.

'WMD' (weapons of mass destruction) is a recently invented term and one that is not well defined. It includes everything from nuclear warheads to chemical and biological weapons, and is supposed to fill us with special dread. But any idea that 'WMD' are _____ is easily disproved. In 1945 fewer than 200,000 people were killed, albeit in a frightful way, by the atomic bombs dropped on Hiroshima and Nagasaki; but this was at the end of a war in which well over a million Germans and Japanese had already been incinerated or asphyxiated by 'conventional' bombing. It would have been little consolation to those dying in the air raids on Hamburg and Tokyo to know that there had been nothing 'mass-destructive' about their deaths.

A phrase has been omitted from the above passage. Which one of the following phrases most logically completes the argument?

- A morally unacceptable
- B a serious threat
- C uniquely dangerous
- D necessarily devastating

BMAT Q2 (2007)

6.

The word 'globalisation' has mistakenly become associated in people's minds with the internet. But globalisation must involve a worldwide network of trade in goods and services, which is possible without the communication provided by the internet. Of course, the internet allows people to exchange ideas and information at a distance, but it is not capable of moving tradable goods and people around the world. For that to happen there must be easily affordable transport. So what really drives globalisation is the availability of cheap air travel and cheap shipping.

It follows from what is stated in the above argument that the internet is:

- A a necessary, but not a sufficient condition for globalisation.
- B a sufficient, but not a necessary condition for globalisation.
- C both a necessary and a sufficient condition for globalisation.
- D neither a necessary nor a sufficient condition for globalisation.

BMAT Q24 (2007)



7.

Some Malgons are Zanders and all Zanders are Tvints

Which one of the following statements is definitely true?

- A** All Zanders are both Malgons and Tvints.
- B** All Malgons are Tvints
- C** All Tvints are Malgons
- D** Some Malgons are Tvints
- E** Nothing can be said about the relationship between Malgons and Tvints

BMAT Q1 (2008)



4Uadmission



8.

**Growing digital divide
between age groups**

55 % of males aged 15 – 19 regularly browse social networking sites according to a survey in early 2008, whereas only 13 % of 45 – 54 year old men do the same.

Which of the following express(es) why the headline does not accurately reflect the evidence provided by the survey?

- 1 45 – 54 year old men might be using other digital applications.
- 2 Evidence from a single survey is insufficient to show that a gap is growing.
- 3 Surveys can be misleading if they are taken from unrepresentative samples.

- A 1 only
B 2 only
C 3 only
D 1 and 2
E 1 and 3
F 2 and 3
G 1, 2 and 3



4Uadmission

BMAT Q6 (2008)



9.

Figures show that, during the course of a year, cars in the UK emit 69.9 million tonnes of CO₂, whereas domestic and international flights from the UK emit 37.5 million tonnes. Even though emissions of CO₂ at high altitude can be more environmentally damaging than at ground level, cars still make a greater contribution to climate change than do planes. However, the number of people who think that flying is the bigger contributor has risen rapidly in the past eighteen months, a period during which there has been an increase in activity by pressure groups opposed to any growth in air travel. In a National Statistics survey 34 % of those questioned thought that cars contributed more than planes to climate change, while 40 % thought planes contributed more than cars. 47 % thought that air travel should be limited, but only 15 % were willing to fly less often.

If the statements in the above passage are true, which of the following must also be true?

- 1 Some people's opinions about the impact of flying on climate change have been influenced by pressure groups.
- 2 Some people in the UK are mistaken about the relative contributions of aviation and car travel to climate change.
- 3 Some people in the UK who believe that air travel should be limited are not willing to fly less often.

- A 1 only
B 2 only
C 3 only
D 1 and 2
E 2 and 3
F 1, 2 and 3



4Uadmission

BMAT Q13 (2008)



10.

"As one of the millions around the world watching the much anticipated Live Earth concerts, I found myself increasingly irritated by the artists chosen to make us all more aware of the damage we are doing to the environment. Fly less, drive less, waste less, recycle more. Yet these pop stars rack up thousands of miles a year on increasingly large world tours, leading to higher sales of CDs, which in turn produce thousands of tonnes of waste in plastic packaging. They own private jets, fleets of cars, and heat and light huge mansions that are empty for half the year. They then go and pocket extra cash and exposure advertising cars and soft drinks. By taking part, the artists increase their public profile and gain exposure to new audiences, thereby landing bigger tours, selling more CDs and being able to buy more planes, cars and houses, all whilst encouraging me to give up my holidays and cycle to work. Rather than let these people lecture me about what I could do, I left my TV on standby and went for a drive."

If true, which of the following present effective challenges to the position taken by the writer?

- 1 Pop stars and celebrities have a broader appeal than politicians and environmentalists and are more likely to influence the public.
- 2 By becoming more aware of themselves, the artists will start to do more to raise awareness of environmental issues.
- 3 The artists weren't paid to perform and therefore did not gain financially from the concert.

- A 1 only
- B 2 only
- C 1 and 2 only
- D 2 and 3 only
- E All of the above



4Uadmission

BMAT Q17 (2008)



11.

Home vs. Hospital

Where would you rather give birth to your baby?

Cosily by the fire - or in a hi-tech room?
One midwife to hand - or a team of experts on standby?

By Sophie Goodchild

The news that the Health Secretary wants more women to give birth at home will outrage clinicians, but delight the natural birth lobby, who say the delivery of babies has shifted too far in favour of 'medicalisation'.

The debate amongst feminists over whether childbirth should take place away from the hi-tech environment of the labour ward or surrounded with as much pain relief and medical intervention as possible has divided women for decades.

The above issue, presented as it is, implies which one of the following?

- A The Health Secretary is wrong to encourage women to give birth at home.
- B The highest levels of pain relief and medical intervention are not possible away from a labour ward.
- C Cost cutting is at the heart of the Health Secretary's enthusiasm for home births.
- D Feminists are strongly opposed to the medicalisation of childbirth.
- E Mothers and their babies progress better when childbirth takes place in a hospital.

BMAT Q2 (2009)



12.

Is forgery 'art'? Received opinion says not, despite it unquestionably being a craft. This has nothing to do with it being illegal or immoral, though it may be both. The standard objection is that it is copying, and therefore not creative. But how is that an objection when all art is ultimately a copy of something? Is a picture of a ship or a hay-wagon or a bowl of fruit not art? If all art is copying, then forgery, by definition, is art.

Which one of the following makes the same reasoning error as the above argument?

- A Water is liquid and liquid is fluid, so water is a fluid.
- B Petrol is flammable and volatile, so everything volatile is flammable.
- C Being overweight is unhealthy so maintaining the right weight is healthy.
- D The French are European and Spaniards are European, so the French are Spaniards.

BMAT Q26 (2012)

13.

Though it has now been contested, it is still believed by many archaeologists that the first inhabitants of the Americas were a group of people from Asia who walked across from Siberia to Alaska and headed south. They were the Clovis, accomplished toolmakers and hunters who subsisted on big game killed with their characteristic flint spears. Around 13,500 years ago, near the end of the last ice age, a brief window of opportunity opened up for humans to enter North America. The sea level was lower than it is today and Siberia and Alaska were connected by a now-submerged land bridge. As the world began to warm, the huge ice sheets that blocked entry into North America began to retreat, leaving an ice-free corridor to the east of the Rockies. The Clovis walked right in before the sea rose again. The presence of distinctive stone tools throughout the US and northern Mexico supports the 'Clovis-First' theory, as does the timing of an extinction that wiped out more than 30 groups of large mammals, including mammoths, camelids and sabre-toothed cats.

Which one of the following, if true, would most seriously challenge the Clovis-First theory?

- A The discovery of other tools and artefacts unlike those found in Siberia.
- B Evidence that the ice age lasted longer than was previously thought.
- C The discovery of a human settlement in America dating to around 12,000 BC/BCE.
- D Evidence of a natural disaster that would explain the extinction of sabre-toothed cats, mammoths and many other large mammals.
- E The discovery of ocean currents which could have carried boats from Asia to America.

BMAT Q6 (2013)



14. There has been a great deal of research into the use of placebos and, whilst it remains unclear why they work, the research clearly shows that placebos can have a powerful effect. Placebos present in some cases an ideal therapy; they are cheap and have few or no side effects. Those who argue that the prescription of a placebo represents a breach of patient-doctor trust should recognise that whilst placebos may not contain any active ingredients, a doctor may prescribe one in the genuine hope that this will offer their patient a real therapeutic benefit. In the interests of providing the most desirable outcomes, it is clear that placebos should be used as a treatment offered by the NHS.

Which one of the following principles can be best used to support the above argument?

- A Doctors should use only treatments that they know will work.
- B Doctors should not use treatments that cause harm to their patients.
- C Doctors should not mislead their patients.
- D Doctors should offer treatments on the basis of the outcome for the patient.
- E Doctors should use only treatments that are proven.

BMAT Q13 (2013)

15. In an effort to make children understand where their food comes from many schools are now keeping chickens and other livestock on school grounds. Whilst this does help children to learn about the realities of the origins of their dinner, this is an unwise policy from which schools should refrain. It seems that many children and their parents are unprepared for the harsh, yet obvious reality that this will eventually mean the slaughter of these animals. There have been parental complaints in some cases and reports that some children have opted to become vegetarian when faced so cruelly with this outcome. Whilst some point to the apparent hypocrisy of eating meat yet not wanting to see where it comes from, it seems that many children are simply not ready to face this reality at such a young age without damaging consequences.

Which one of the following is a principle that could give support to the above argument?

- A Schools should educate their students about the realities of life, however unpleasant.
- B Parents and schools should educate children about matters of life and death.
- C Realities, however harsh, should be acknowledged.
- D Children should be protected from harm.

BMAT Q28 (2013)



16.

Memory loss and growing mental incapacity used to be seen as inevitable consequences of ageing. Now we talk of dementia as an illness that could possibly be cured or prevented. The incidence of new cases of dementia is falling. A survey in the UK in 1994 revealed roughly 650 000 cases of dementia. With a subsequent increase in the average age at death, a survey in 2013 should have found nearly 900 000 cases, but in fact the total was less than 700 000. Why should this be so? Over the same period rates of heart disease have fallen, and in general the health of the blood vessels of the elderly has improved. Given that brain function requires the supply of oxygen to the brain from blood vessels, the improvement in the health of blood vessels ...

Which one of the following most logically completes the above argument?

- A must be the explanation as to why people are living longer.
- B and the fall in new cases of dementia must both be due to some other factor.
- C is the cause of the reduction in the incidence of new cases of dementia.
- D could be a contributory factor in the reduction of the incidence of new cases of dementia.

BMAT Q23 (2014)

17.

In the history of the Earth there have been three extinctions of marine animals, which as yet we cannot explain. Earlier this year, researchers discovered that periods when the oceans had high levels of trace elements, such as zinc, copper, manganese and selenium, seemed to overlap with periods when most groups of living animals first appeared. These minerals are called essential trace elements because without them we die. Now new research has shown that drops in selenium levels in the oceans correlate well with each of the extinction events at the end of the Ordovician, Devonian and Triassic periods. Thus the level of selenium in the oceans ...

Which one of the following most logically completes the last sentence in the above passage?

- A ... must be the explanation as to why marine animal life developed on Earth.
- B ... could be a contributory factor in the three incidences of extinction of marine animals.
- C ... is more crucial than the other trace elements to the survival of marine animal species.
- D ... must have caused the extinctions of marine animals at the end of the Ordovician, Devonian and Triassic periods.

BMAT Q13 (2017)



18.

How did Earth get its water? It seems it had it all along. There are two possible sources for our water: either bombardment by meteorites soon after Earth's formation, or it was present in the dust from which our planet formed. So a team from the University of Glasgow looked at the ratio of heavy hydrogen – an isotope known as deuterium – and normal hydrogen in water trapped for 4.5 billion years in volcanic rock. They found little sign of deuterium, which rules out meteorites since they have much more of this isotope. Instead the water must have originated in the dust cloud from which the solar system, including Earth, condensed.

Which one of the following most closely matches the reasoning in the above argument?

- A Soil is either acidic or alkaline, but there are camellias growing here, which cannot tolerate alkalinity, so this soil must be acidic.
- B Were the dinosaurs warm-blooded or cold-blooded? Obviously they were cold-blooded since they were reptiles and all reptiles are cold-blooded.
- C A planet that is neither too hot nor too cold to support life is known as a 'Goldilocks planet'. Since many of these exist in the universe, there must be life on some of them.
- D There are two possible ways to get to the airport, bus or taxi. A taxi will get you there faster, but since the bus is cheaper, most people travel by bus instead.

BMAT Q15 (2017)

19.

How much value does a particular new product or service bring to our lives? This is hard to quantify, and yet traditional economics has provided us with a neat means for doing so: look at how much it costs. In a free market economy, how much something costs tells us how much people are prepared to pay for it. And how much people are prepared to pay for something is a direct sign of how much they value it. The problem with this model – using the market price to assess value – is that it is starting to break down with new technologies. Many of the products and services we value most, including popular apps and social media platforms, are provided for free. While there may indeed be a cost, such as a loss of privacy, this is not a financial cost.

Which one of the following statements is best supported by the above passage?

- A It is impossible to measure the true value of any given product or service.
- B There is no such thing as the true or real value of a given product or service.
- C We need to find alternatives to using cost if we want to measure the value of a product or service.
- D If we want to determine the actual value of a product or service, there are more serious costs to consider than merely financial ones.

BMAT Q6 (2019)



20.

A survey at a leisure centre has found that 70% of members use the swimming pool regularly and only 40% use the climbing wall.

The following statements have been made:

- 1 At least 10% of members swim and climb.
- 2 All members either swim or climb or do both.
- 3 At least half of those who climb never swim.

Based only on the information given, which of the statements, taken independently, **could** be true?

- A all of them
- B 1 and 2
- C 1 and 3
- D 2 and 3
- E none of them



BMAT Q29 (2019)

4Uadmission