**Part 1**

Epidemiology is the study of the emergence distribution and control of disease disability and death among groups of people. It's a field that combines elements of biology clinical medicine sociology mathematics and ecology to identify and understand health patterns and improve human health across the globe. Epidemiologists are doctors and scientists who work to understand the source of disease and other negative health effects.They estimate how many people are exposed and how the disease spreads. Epidemiologists are generally associated with infectious diseases and outbreaks such as the kovat 19 pandemic, but they also study non-infectious health problems like the prevalence of lung cancer from smoking or communities increase in homicide rates. The epidemiologic triangle is a tool epidemiologists use for explaining the connection between the cause of a disease and the conditions that allow it to spread. The triangles three corners represent the who, what and where of a disease. Who is the host or person or people, who has the disease, what is the agent or cause of the disease and where or in what environment does the disease occur. The goal of an epidemiologist is to figure out how to suffer at least one link between the corners of that triangle breaking the connection between the host agent and environment stops the disease in its tracks in early March 20 2010. Akavit 19 pandemic epidemiologists from Imperial College London released a model showing the potential impacts of the disease. If certain prevention methods were implemented or not the scientists recommended large-scale social distancing to slow the spread of the virus and prevent millions of people from dying thus severing the connection between the wear and the hue. The team's recommendations became public policy and many parts of the world and will result in fewer cases of the disease than expected had the triangle remained intact

Source: <https://www.youtube.com/watch?v=q-17icRTMyY>

**Part 2**

From Gucci to Chanel, Topshop to Primark, clothes industry heavyweights rely on fashion forecasters for next season's new look. But advancements in artificial intelligence are about to turn their art into a science. **Cognitive Computing** is now able to identify patterns previously inaccessible to humans. It can simultaneously analyze vast amounts of global data, from social media buzz to political polls, making it possible to accurately spot what's hot and what's not. WGSN, the world's biggest fashion forecaster, now uses AI alongside more traditional methods, a move that could reduce forecasting errors by up to 50%. **Trendspotting mistakes** can have far-reaching consequences. H&M recently confessed to a $4.3 billion unsold stock mountain. Industry waste costs both profits and reputation. Technology could make the fashion industry more sustainable. By using machine learning, an AI technique, to match supply with demand, unnecessary manufacturing could be limited, and fashion's **environmental footprint** reduced. Online retailers are cottoning on. In the next two years, 75% of fashion retailers plan to invest in AI. But keeping up with tech giants is going to be tough.Amazon is now developing what's believed to be the world's first AI fashion designer. It plans to use an algorithm that designs clothes by **analyzing images** and copying popular styles, using them to build completely new designs. This technological makeover could hold huge benefits, especially for those who like to shop online. A Japanese company has unveiled the ZOZO, a **body measurement** suit that will ensure the clothes you order fit you perfectly, all meaning our future wardrobes could contain clothes designed for us and sold to us by technology alone.

Source: <https://www.youtube.com/watch?v=M-drGOlhDn0>

**Part 3.**

**Interviewer (I):** Not long ago stressed out executives at embattled Marks & Spencer’s were packed off on a training course. There’s nothing unusual in that. But the team was in for a surprise. This was not a time management seminar, with flashy flip-charts. Instead they were faced with cardboard, paint and glue. With us here is Maria Stefanovich, co-founder of Droll, the creativity group which ran the creative workshop for those executives. What exactly did the team do with these art supplies?

**Maria:** During this particular day-long session, each delegate was required to create a mask to show the face they presented at work. You see, mask-making is a very effective tool. Often people create faces that is anxious and alienated. The process of looking inwards and transforming difficult issues helps them access their intuitive, imaginative skills.

**Interviewer:** Why do you believe such an unconventional approach to seminars has caught on?

**Maria:** Creativity has become a prized commondity, even in such professions as accountancy. Whereas once we could drag themselves into work, safe in the expectation of doing more taxing than, er work, nor bosses have other ideas. They have begun to see that if you sit in a boring meeting in a boring conference room, you will emerge with boring ideas. All companies are hungry for new ideas, but if you push and pull in a pressured atmosphere, there’s creative bankruptcy. As companies become desperate to harness creativity and lateral thinking, they are being forced to look at new ways of fostering those talents.

**Interviewer:** Where did such programmes originate from?

**Maria:** The roots of the play industry lie on the other side the Atlantic. Ten years ago, the marketing firm, Play, pioneered the techniques now taking off here in Britain. Staff at Play invent their own superheroes and costumes. They have an office on playroom and a company dog which is picked up for work even when its owner is away, anf there are no conventional job titles. Instead, employees have business cards printed with pecular slogans such as ‘What if’ and ‘Voice of reason’. When you turn work into a place that encourage people to be themselves, have fun and take risks, you unleash their creativity. It all comes down to employers having at last realised that a happy team is a creative one. Funnily enough, excuse the pun, most of the companies that sign up are the ones that have least need for it; young, gung-ho firm s in the new media and the advertising. They do a lot of presentations, but their workers do them in. a. linear way. Creativity programmes make them think laterally. Some companies send people on adventure excursions. Creativity group are another way of getting people focused and excited.

**Interviewer:** The Humberside Training and Enterprise Council found that storytelling workshops breed confidence. How so?

**Maria:** Storytelling workshops are particularly beneficial in confidence building. There was one woman who presented a story about how nervous she felt giving a presentation to the board. She said she felt like a rabbit caught in the headlights and her teeth felt too big for her mouth. So, we acted out a story with her as a rabbit. The humour of it allowed her to overcome that fear. These days, we are seeing everything from mime, circus skills and comedy to finger-painting. It all sounds worryingly New Age, but our company has been called in by such conservative and long-established corporations such as Smith-Kline Beecham, Hedron, Chesterton, Property and government agencies. It has also worked with staff at the Industrial Society. We asked them to describe the society as if it were a landscape. At first, everyone talked about how it was beautiful, serene place. Then someone described a bog, another a volcano about to erupt. It’s all about encouraging better communication. The benefits are tangible. We’ve had lots of feedback about how staff bring more passion and ideas to their work. They take more risks and more honest.

***Source: CPE Practice test 2***

**Part 4.**

Plants require several things to grow. Most of us know that they need things like water, sunlight, and CO2, but plants also need a variety of nutrients as well: things like nitrogen and phosphorus. Usually, plants will get all the required nutrients from the soil through their roots. But, when the soil is bad, or there's been a lot of erosion or leaching, farmers--or even just people trying to make their lawns green--will put down something called "fertilizer." What makes fertilizer so "fertile" is that it's been enriched with these nutrients that the plants need--again, mostly fixed nitrogen and phosphorus.

But plants aren't the best at soaking up every last nutrient in the soil, and it's also hard to gauge just how much fertilizer a field needs, as soil quality can vary drastically

over short distances. To be safe, farmers will usually apply excess fertilizer to a given plot of land. Better safe than sorry, y'know? But, instead of staying in the soil for years, most of the excess nutrients will be carried away by the rain or other forms of

irrigation. These nutrients mix with the water and find their way into bodies of water--like ponds, lakes, reservoirs, and even the oceans sometimes. With all these nutrients added, the algae, phytoplankton, and even plants in the water do the same thing the crops in the field do: they grow. Well, actually they \*explode\* in numbers.

This is called an "algal bloom," and entire lakes can become covered in layers of plant growth like this. To some, this might seem like a good thing. Plants are good for the environment, right? Well... not always. First off, this floating layer of algae forms basically an impenetrable roof on the water, not allowing sunlight through to the bottom of the lake.

Without the presence of sunlight, all plants below the surface cannot partake in photosynthesis-- You know--metabolize, make glucose, live, that sort of stuff? But, not even this is the bad part of it all. Many plants can store enough energy in their bodies to wait out these conditions. The real problem comes when all the nutrients are used up and the water can no longer support so much life. When this happens, the excess algae, phytoplankton, and plants die off and sink to the bottom of the body of water. Here, bacteria and other decomposers feast on the dead bodies in a chemical process of decay which consumes oxygen.

Now, in a usual ecosystem the amount of dead matter is relatively constant, so oxygen levels stay relatively constant as well. But, when a bloom occurs, far more organic matter is ready to decompose, and so nearly all the oxygen in the water is used in the process of decomposition, and none is left for the animals living in the water. Without this, animals that use the dissolved oxygen to breathe (so, things like fish), can actually suffocate. This causes even more death, leading to more decomposition and more oxygen usage. Basically, at this point, a positive feedback loop has been created. It can take a body of water a very long time to recover, though each one is different, and recovery depends on a lot of things, like: how many nutrients leaked into the water, how big the body of water is, what organisms are present there, and so on. When this happens in lakes, native species can be suppressed and allow invasives to come in while the environment is still disturbed. If this happens in the ocean, the lack of oxygen can cause corals to bleach and possibly even die. All around, this can greatly damage many ecosystems and leads to a decrease in biodiversity globally. Nutrient-rich runoff can also be caused by things like clear-cutting (which releases the nutrients which were kept in the soil by the plants) or also by things like animal farms (where nutrient-rich waste materials can leak into local bodies of water). And that's eutrophication, simply put! I hope you enjoyed the video and maybe think twice before using fertilizer or clearing a forest. If you want more people to see this video, give it a like, and if you want to see more videos like this, subscribe to this channel. I'll be back next week with another one... Thanks! :)

***Source: htt***[***ps://www***](http://www.youtube.com/watch?v=mLbDbmmV6Qc&t=26s)***.you***[***tube.com/watch?v=mLbDbmmV6Qc&t=26s***](http://www.youtube.com/watch?v=mLbDbmmV6Qc&t=26s)