

GS Test 17 (1st May 2022) (SOLUTION)

81. Correct Answer C

Explanation :

- Intellectual property is a broad categorical description for the set of intangible assets owned and legally protected by a company or individual from outside use or implementation without consent. An intangible asset is a non-physical asset that a company or person owns. **Intellectual property rights** are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. **So, statement 1 is correct.**
- **Trademark:**
 - It distinguishes the goods or services of one undertaking from those of other undertakings.
 - A trademark will only be granted for a limited period – in most countries, ten years – but the mark can be renewed as many times as the owner wishes on payment of additional fees, provided it is still being used, so **in practice a trademark can be protected indefinitely.**
- **Patent:**
 - By patenting an invention, the patent owner gets exclusive rights over it, meaning that he or she can stop anyone from using, making or selling the invention without permission.
 - **The patent lasts for a limited period of time, generally 20 years.**
 - In return, the patent owner has to disclose full details of the invention in the published patent documents.
 - Once the period of protection has come to an end, the invention becomes off-patent, meaning anyone is free to make, sell or use it. **So, statement 2 is not correct.**
- India's IPR regime recognizes various kinds of Intellectual property like Patents, Copyrights, **Plant varieties**, etc. The Protection of Plant Variety and Farmers' Rights Act was passed by the Indian Parliament in 2001, provides the legal basis for the recognition of Plant varieties as intellectual property.

So, statement 3 is correct.

Therefore, option (c) is the correct answer.

82. Correct Answer C

Explanation :

- BRCA1 (BRest CAncer gene 1) and BRCA2 (BRest CAncer gene 2) are genes that produce proteins that help repair damaged DNA. Everyone has two copies of each of these genes—one copy inherited from each parent. BRCA1 and BRCA2 are sometimes called tumor suppressor genes because when they have certain changes, called harmful (or pathogenic) variants (or mutations), cancer can develop.
- People who inherit harmful variants in one of these genes have increased risks of several cancers—most notably breast and ovarian cancer, but also several additional types of cancer. People who have inherited a harmful variant in BRCA1 and BRCA2 also tend to develop cancer at younger ages than people who do not have such a variant.

Therefore, option (d) is the correct answer.

83. Correct Answer C

Explanation :

- **Gravity** is what holds our world together. However, gravity isn't the same everywhere on Earth. It is slightly stronger over places with more mass underground than over places with less mass.
 - **Poles and Equator:**
 - At the equator the centrifugal force due to the spinning of the Earth is at its maximum, and vanishes at the poles. This means that the attractive force of gravity is slightly reduced because it is directed towards the center of the Earth, while the centripetal force is directed outward from the center.
 - The effective acceleration of gravity at the poles is 980.665 cm/sec/sec while at the equator it is 3.39 cm/sec/sec less due to the centrifugal force.
 - Therefore, **the gravitational pull changes in different parts of Earth.** Although the variation is small but is still there. **So, statement 1 is not correct.**
- **Microgravity is the condition in which people or objects appear to be weightless.** The effects of microgravity can be seen when astronauts and objects float in space. Microgravity can be experienced in other ways, as well. "Micro-" means "very small," so microgravity refers to the condition where gravity seems to be very small. **So, statement 2 is correct.**
- In our solar system, all the planets go around the Sun. By arguing the same way, we can say that there