• **Infrastructure related issue**: Lack of sophisticated instruments, utilization of modern techniques, facility to fabricate instruments locally restrict their widescale usage.

To resolve these, it is critical to ensure proper regulation of manufacturing and supply of traditional medicines, establish systems for the qualification, accreditation or licensing of traditional medicine practitioners. Further, since consumers often use both treatments simultaneously, it is necessary to improve collaboration between registered/licensed traditional practitioners and conventional health care providers.

9. When it comes to promoting competition and innovation, patent pools are a double-edged sword. Discuss. (150 words) 10

Approach:

- Briefly explain the concept of patent pooling.
- Mention the advantages associated with patent pools.
- Highlight the challenges of patent pools.
- Conclude on the basis of above points.

Answer:

Patent pool is defined as an agreement made between two or more patent holders **for licensing their patents to one another or any third party for the purpose of sharing their intellectual property rights**. Patents pools are usually made for complex technologies which necessitate complementary patents for providing productive technical solutions such as vaccines in the present Covid-19 crisis.

Patent pools offer various advantages, such as:

- In the context of India, many sectors like biotechnology, nanotechnology etc., there is the **prevalence of an increasingly fragmented patent landscape**, with many pieces of patented knowledge being required to produce a single product. This translates to the negotiation of multiple licenses and payment of multiple licensing fees, thus, **pushing up the prices of the final product**. This provides a scope for patent pools as it ensures that the sub-licensees of patented medicines not only have access to these drugs but they also allow them to **develop**, **manufacture and sell** the generic versions of these drugs.
 - It has facilitated the development of **generic drugs for HIV**, **tuberculosis**, **and hepatitis C**, allowing them to be sold at an affordable price, in the form of Medicines Patent Pool (MPP).
- It enables **innovation** between companies and **institutionalized exchange of technical information** that is not covered by patents. Apart from minimizing potential legal issues, it may also help in **clearing blocking patents**, when patents mutually block each other. Thus, it's an efficient tool to bring together **new technologies**, which can be used at **a fair price**.
- It leads to **lower transaction costs** and **better process efficiencies** as businesses that hold complementary patents can agree not to sue each other for infringement as they work to get new products to the marketplace. Further, pooling would help companies earn a steady income, recover their investments and reduce risk, which could spur them to further research and innovation.

However, patent pools are double-edged swords, because they also pose **various challenges**, such as:

- They have a potential to **foster monopoly**, **limit competition** and become a front for a **cartel**. It encourages **potential collusion**, for example by creating a forum to share competitively sensitive information, such as pricing, marketing strategies, or R&D information among its members
- Patent pools from time to time have been found guilty of many **anti-competitive practices** such as price fixing, tying arrangements and post-sales restrictions on patented goods.
- Patent pools that consist of **substitute patents** have a negative effect on competition because it is likely that competition between two substitute patents will be eliminated if these patents are pooled.