

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	Marks
Q1	<p>Mr. Rohit, while working as a research scientist in 2021, developed a compound LP16 that showed excellent results in treating Alzheimer's disease. She published her entire research in an international neuroscience journal. In 2024, during a separate research project, she found that the same molecule LP16 also shows promising activity in treating Parkinson's disease. She now wants to file patents in India and USA for this new therapeutic use.</p> <p>a) Analyse whether she can obtain a patent in India for the new use. b) Comment on patentability in the USA.</p>	[2.5+2.5]
Q2	<p>a) A patent application was filed by BB biotech ltd on 15 March 2015, In 2016 BB biotech ltd merges with Galaxy Bio LTD, and all assets including pending patent applications transfer to Galaxy. Galaxy wants to continue patent prosecution but the Patent Office records still show BB biotech ltd as applicant. What steps must the BB biotech ltd take? b) Discuss the grounds for obtaining compulsory Licence according to Indian Patent Act.</p>	[2.5+2.5]
Q3	<p>Answer the following questions.</p> <p>a) Whether a researcher residing in India can file a PCT application directly with WIPO without prior Indian filing or permission? Justify your answer. b) Explain how Sections 120-121 protect the integrity of the Indian patent system. Provide hypothetical examples. c) The Central Government decides that a particular patented water-purification technology is essential for disaster-relief operations and issues an order acquiring the patent. Which section empowers the Government to acquire the patent? What rights does the patentee retain after acquisition? What is the mechanism for determining compensation? d) A pharmaceutical company holds a patent for a critical cancer drug but imports it in very small quantities at very high prices. A generic manufacturer applies for a compulsory license after 3 years of grant. What grounds can the applicant use</p>	[3x4=12]

	under Section 84? How will Section 83 influence the Controller's decision? Can the patentee argue "valid reasons" for non-working?	
Q4	<p>Explain followings.</p> <p>a) Criterion for deciding protection of plant varieties?</p> <p>b) Delayed processing of the application by the national phase</p>	[3]
Q5	<p>a) A group of biomedical engineers at X Innovations developed a biological electronic hybrid biosensor that detects early sepsis markers within 5 minutes. The sensor uses immobilized engineered aptamers that selectively bind to procalcitonin (PCT) at concentrations as low as 10 ng/mL. The aptamers are attached to a graphene nanowire transducer that changes electrical resistance when PCT is bound. The sensor is integrated into a disposable cartridge and can be used in hand held devices. X Innovations wants to patent The aptamer specific to PCT. The biosensor apparatus containing graphene nanowire transducer. A method for detection of early sepsis using the biosensor. Draft three independent claims. aptamer, biosensor device, and detection method.</p> <p>b) Explain component of patent and their significance briefly.</p>	[7.5+2.5]