CHAPTER- II

THE EXPERT EVIDENCE

SINCE TIME IMMEMORIAL, men’s great thinking and curiousness is to know more, and this curiosity has resulted in the development of principles of science and technology. These developments in both of these fields have had a great impact on the way human live. For regulating the extent, use and abuse of the application of science and technology, law has to regulate. And the major question before us is whether we are well equipped with the laws to regulate the use of such technologies and can these advances is used in the field of law.

During my research, I attended - A one day seminar on multi-disciplinary national seminar on new frontiers and emerging issues of research (MNSNFEIR-2016), on 6th April, 2016, there I got the opportunity to hear Eminent Prof. Ganeshi Lal (Retd.) from Government National College, Sirsa, Haryana. He said, “One should lap in the nature to find the truth”, these wordings of his speech, brings my attention to the point and make me thought that Judges before coming to the decision in a case can take the help of expert who are experts from various field. It is true that nature itself give answers to some of our problems like when the dead body will decompose and the maggot, (a larva of housefly on dead body) on dead body will come, which tells about the time of death, We all have different finger-prints, foot-prints which give us different identity and help the experts who help the judges in giving the right decision by matching the finger-
prints or footprints that is available on the crime scene with the suspicious person. All
the individuals in this world have DNA, when the blood is seen on the crime scene
expert come collect the sample and match it with the suspicious person and help the
jury to give the right decision. It is truly said by Prof. Ganeshi Lal that nature give us
answer to our problems and help us in finding the truth. Who else will explore the
nature better then scientist, experts then why should we not take the help of modern
inventions which will help the jury while giving the decision? For that we have to firstly
study about the history of experts, then who are the experts etc.

Expert to form an opinion upon the matters related with the subject of expertise
and to give evidence is based on the formal or special study, training or experience.
Expert is to help the court to form a correct and independent judgment, for that expert’s
duty is to present the necessary scientific and technical criteria related to matter for
which his expertise is needed and to give his opinion.

2.1 HISTORY OF EXPERT EVIDENCE:

From the early times the courts have been acting on the opinion of experts. Heropelus and Eracis were the two physicians who conducted a postmortem in 300 BC in Alexandria.\(^1\) The application of science and technology to the detection and investigation of crime and administration of justice is not new to India. Although our ancestors did not know forensic science in its present form yet scientific methods in one way or the other seem to have been followed in the investigation of crime. Its detailed reference is found in Kautilya’s ‘Arthashastra’ which was written about 2300 years ago. Indians studied various patterns of the papillary lines, thousands of years ago. It is presumed that they knew about the persistency and individuality of fingerprints, which they used as signatures. Even Mr. K. M. Kata, a frequent contributor to Nature, stated that the Chinese records proved the use of fingerprints in an ancient kingdom of southern India. The Indians knew for long that the handprints, known as the Tarija, were inimitable. The use of fingerprints as signatures by illiterate people in India, introduced centuries ago, was considered by some people as ceremonial only, till it was scientifically proved that identification from fingerprints was infallible.\(^2\)

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During the nineteenth century, when the cases of death due to poisoning posed a problem to the law enforcement agencies, a need was felt for isolating, detecting and estimating various poisons absorbed in the human system. The first Chemical Examiner’s Laboratory was, therefore, set up for this purpose at the then Madras Presidency, under the Department of Health, during 1849. Later, similar laboratories were set up at Calcutta (1853), followed by one each at Agra (1864) and Bombay (1870). These laboratories were equipped to handle toxicological analysis of viscera, biological analysis of stains of blood, semen, etc. and chemical analysis of food, drugs, and various excisable materials to provide scientific support to the criminal justice delivery system within their limited means. These laboratories also provided analytical facilities to the neighboring States and Union Territories.3

In Europe, in the sixteenth century, medical practitioners in army and university settings began to gather information on cause and manner of death. Ambroises, a French army surgeon had made a systematically study of the effects of violent death on internal organs. Fortunato Fidelis and Paola Zacchia, two Italian surgeons, laid the foundation of modern pathology by studying changes which occurred in the structure of the body as the result of disease. In the late 1700s, writings on these topics began to appear. These included: *A Treatise on Forensic Medicine and Public Health* by the French physician Fodere, and *The Complete System of Police Medicine* by the German medical expert Johann Peter Franck.4

Swedish chemist Carl Wilhelm Scheele, in 1776, devised a way of detecting arsenous oxide, simple arsenic, in corpse. This investigation was expanded, in 1806, by German chemist Valentin Ross, who learned to detect the poison in the walls of a victim’s stomach and by English Chemist James Marsh, who used chemical processes to confirm arsenic as the cause of death in 1836 murder trial.5

Two early examples of English forensic science in individual legal proceedings demonstrate the increasing use of logic and procedure in criminal investigations. In 1784, in Lancaster, England, John Toms was tried and convicted for murdering Edward Culshaw with a pistol. When the dead body of Culshaw was examined, a pistol was

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3. *ibid.*
5. City of Anderson Police Department, *CSI Unit Year 3 Grant Proposal: Problem Statement: Overview, City of Anderson*, South Carolina CSI Unit Grant Proposal, Pg. 4.
(crushed paper used to secure powder and balls in the muzzle) found in his head wound matched perfectly with a torn newspaper found in Toms' pocket.6

In Warwick in 1816, in England, a farm labourer was tried and convicted of the murder of a young maid servant. She had been drowned in a shallow pool and bore the marks of violent assault. The police found footprints and an impression from corduroy cloth with a sewn patch in the damp earth near the pool. There were also scattered grains of wheat and chaff. The breeches of a farm labourer who had been threshing wheat nearby were examined and corresponded exactly to the impression in the earth near the pool.7

Later in the 20th century, several British pathologists, Bernard Spilsbury, Francis Camps, Sydney Smith and Keith Simpsohn would pioneer new forensic science methods in Britain.8

The earliest known use of expert witness in English law can be traced back to the late 18th century in the case of Folkes v. Chadd.9 In the case a harbor had decayed, and the question was whether it had anything to do with demolition of sea bank erected to prevent the sea overflowing into some meadows. Thomas Smeaton, an eminent engineer was called to give an opinion. Defendant objected, Lord Mansfield dealt with the objection thus:

*It is objected that Mr. Smeaton is going to speak, not to facts, but as to opinion. That opinion, however, is deduced from facts which are not disputed; the situation of banks, the course of tides and of winds, and the shifting of sands. His opinion, deduced from all these facts is that, mathematically speaking, the bank may contribute to the mischief, but not sensibly. Mr. Smeaton understands the construction of harbours, the cause of their destruction and how remedied. I have myself received the opinion of Mr. Smeaton respecting mills, as a matter of science. The cause of the decay of the harbor is also a matter of science, and still more so, whether the removal of the bank can be beneficial. Of this, such men as Mr. Smeaton

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7. Supra note 4.
8. Supra note 6.
alone can judge. Therefore, we are of the opinion that his judgment, formed on facts, was proper evidence.¹⁰

In this Lord Mansfield laid down the base of modern rules of expert evidence. Lord Mansfield confirmed “the opinion of scientific men upon proven facts may be given by men of science within their own science.”

With the development in the role of expert evidence in courts, expert evidence becomes the most important component of many civil and criminal cases. Fingerprint examination, blood analysis and DNA fingerprinting are common kinds of expert evidence heard in serious criminal cases. In civil case, the work of accident analysis, forensic engineers, accountants are important to assess the damages and cost in complex cases. As a result forensic laboratories were established. The first State Forensic Science Laboratory in India was established in the year 1952 at Calcutta. This laboratory becomes fully operated in the year 1953. The first Central Forensic Science Laboratory was established at Calcutta during 1957. To begin with this laboratory was organized into four basic disciplines viz. Forensic Physics, Forensic Chemistry, Forensic Biology and Forensic Ballistic. The Indian Academy of Forensic Sciences (IAFS) was established in the year 1960.

Now with the development on technology crimes related to communication, stalking, cyber crime increased as a result forensic electronic evidence enters the courtroom, audio and video evidence gets the authentication. Voice-mail recording, closed-circuit television (CCTV) recording become most common electronic evidence often used in litigation. Closed-circuit television recording in or out of bank, shops houses or streets, which recorded robberies or any other types of crime, any kind audio or video recordings of related to life threats, are presented in courts rooms through electronic expert evidence.

2.2 DEFINITION OF EXPERT EVIDENCE:

Before defining ‘expert evidence’ it is imperative to identify the concept of ‘Evidence’.

2.2.1 EVIDENCE:

The word evidence is defined by different people or agency in many ways. Evidence is the proof of fact (s) presented at a judicial hearing such as a trial. Evidence is that in which a court of justice is permitted by law to take into consideration for making clear or ascertaining the truth of the fact or point in issue.

The word ‘evidence’ is originated from Latin term *evidentia* which means to show clearly, to make clear to sight to discover clearly certain, to ascertain or to prove. Evidence is something, which serves to prove or disprove the existence or non-existence of alleged facts.

According to Webster dictionary evidence is that which is legally submitted to a competent court or tribunal as a means of ascertaining the truth or otherwise of an alleged matter of fact under investigation.

Under Sec. 3 on Indian Evidence Act, 1872 defines evidence as:-

"Evidence“ means and includes:

1. All statements which the Court permits or requires to be made before it by witnesses, in relation to matters of fact under inquiry; such statements are called oral evidence;

2. All document including electronic records produced for the inspection of the Court, such statements are called documentary evidence”

Indian evidence act under the definition of evidence includes both oral and documentary evidence.

Evidence is as an information which is given to the court and jury to help them decide if a crime has been committed or not and tends to prove the truth or probability of truth about a fact put before the court and jury.

2.2.2 EXPERTS:

An expert is a person who by study, practice and observation has become experienced in any science, art or trade.

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11. Duhaime’s Law Dictionary, Duhaime.org
Lawson defines an expert as a person who has special knowledge and skill in the particular calling to which inquiry relates.\(^\text{14}\)

**Phipson on Evidence**: The term ‘expert’ seems to imply both superior knowledge and practical experience in the art or profession; but generally nothing more is required to entitle one to give testimony as an expert than that he has been educated in a particular art or profession.\(^\text{15}\)

**The Shorter Oxford English Dictionary\(^\text{16}\)**: An expert has been defined as a person with the status of an authority (in a subject) by reason of special skill, training or knowledge; a specialist.

**Sec. 45 of Indian Evidence Act, 1872**: When the court has to form an opinion upon a point of foreign law or of science or art, or as to identity of handwriting or finger impressions, the opinions upon that point of persons specially skilled in such foreign law, science or art, or finger impressions are relevant facts.

Such persons are called experts.

Expert witnesses may also deliver expert evidence about facts from the domain of their expertise. At times, their testimony may be rebutted with a learned treatise, sometimes to the detriment of their reputations.

An expert witness is a witness who provides to the court a statement of opinion on any admissible matter calling for expertise by the witness and is qualified to give such an opinion.\(^\text{17}\)

### 2.2.2.1 THE INDIAN SCENARIO ON EXPERT EVIDENCE:

Let us first cultivate the legal aspect of forensic and medical evidence in the India. Law governing expert evidence consists of the following:

1. Enacted laws
2. Case laws
3. Court conventions

The expert evidence are governed under the legal provisions of:


2. Identification of Prisoners Act

3. Indian Evidence Act, 1872 under Sec. 45 – 60, 73 & 112

Sec. 53 and 53A, Cr.P.C. made the provisions for the examination of arrested person by registered medical examiner when a person is arrested on a charge of committing an offence of such a nature and alleged to have been committed under such circumstance (Sec. 53) or when a person is arrested on a charge of committing an offence of rape or an attempt to commit rape and that there are reasonable grounds for believing that an examination of his person will afford evidence as to the commission of an offence. The Code of Criminal Procedure, 1973 under Sec. 293., mentions the special provisions relating to ‘reports of certain Government scientific experts and a report submitted by Director, FPB as Expert opinion may be used as evidence.

Under the provisions of 73 of Indian Evidence Act and Sec. 4, 5 and 6 of Identification of Prisoners Act, the law enforcing authorities and courts have been empowered to take finger prints of a person for the purpose of investigation or identification. Under section 293 Cr.P.C. a report submitted by Director, FPB as Expert opinion may be used as evidence.18

2.2.2.1.1 SPECIAL PROVISION IN THE CR.P.C, RELATING TO

ATTENDANCE OF EXPERTS IN COURTS:

The Code of Criminal Procedure, 1973 under Sec. 293., mentions the special provisions relating to ‘reports of certain Government scientific experts’.

1. Any document purporting to be a report under the band of a Government scientific expert to whom this section applies, upon any matter or thing duly submitted to him for examination or analysis and report in the course of any proceeding under this Code may be used as evidence in any inquiry, trial or other proceeding under this Code.

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2. The court may, if it thinks fit, summon and examine any such expert as to the subject matter of his report.

3. Where any such expert is summoned by a court and he is unable to attend personally, he may, unless the court has expressly directed him to appear personally, depute any responsible officer working with him to attend the court, if such officer is conversant with the facts of the case and can satisfactorily depose in court on his behalf.

4. This section applies to the following Government scientific experts, namely.

   (a) Any Chemical Examiner or Assistant Chemical Examiner to Government.

   (b) The Chief Inspector of Explosives.

   (c) The Director of the Finger Print Bureau.

   (d) The Director, Haffkeine Institute, Bombay.

   (e) The Director (Deputy Director or Assistant Director of a Central Forensic Science Laboratory or a State forensic Science Laboratory)

   (f) The Serologist to the Government.

The section 2, 3, 4, 5 and 6 of the identification of Prisoners Act\(^\text{19}\) is relevant to the expert evidence. These sections provide legal sanctions for obtaining specimen evidence from the suspect, accused or convicts. These sections of the Act deals with taking of measurements and photographs of convict and others. Under Sec. 2 of Act defines as measurement includes finger-impressions and foot-print impressions. Under Sec. 3 of identification of Prisoners Act 1920, the SHOs and investigating officers are empowered to take the finger prints of every person who has been convicted of any offence punishable with rigorous imprisonment for a term of one year or upwards or of any offence which render him liable to enhanced punishment on a subsequent conviction and every person ordered to give security of his good behaviour under section 118 Cr.P.C. shall if so required allow his measurements (including Finger Prints)

\(^{19}\) 1920.
and photographs to be taken by a Police Officer in the prescribed manner. Sec. 4, 5 and 6 of Identification of Prisoners Act, the law enforcing authorities and courts have been empowered to take finger prints of a person for the purpose of investigation or identification. Above said section authorise the police officers if so required to allow to take measurements and photographs and give power to magistrate(sec-5) to order a person to be measured and photographed if he is satisfied that for the purpose of investigation it is necessary.

As per Sec. 45 of Indian evidence Act 1872; When the Court has to form and opinion upon a point of foreign law or of science or art, or as to identity of handwriting or finger impressions, the opinions upon that point of persons specially skilled in such foreign law, science or art, or in questions as to identity of handwriting or finger impressions are relevant facts. Such persons are called experts. Further as per Sec. 46 of Indian evidence Act 1872, it is stated that facts, not otherwise relevant, are relevant if they support or are inconsistent with the opinions of experts, when such opinions are relevant. Under the provisions of 73 of Indian Evidence Act courts have been empowered to take finger prints of a person for the purpose of investigation or identification.

Thus, the ingredients of Sec. 45 and 46 of IEA high lights that:-

1) The court when necessary will place its faith on skills of persons who have technical knowledge of the facts concerned.

2) The court will rely the bona fide statement of proof given by the expert concluded on the basis of scientific techniques.

3) The evidence considered irrelevant would be given relevance in eyes of law if they are consistent with the opinion of experts.

4) Thus we see that expert evidence helps the courts to draw logical conclusions from the facts presented by experts, which are based on their opinions derived by their specialized skills acquired by study and experience. Hence, experts are routinely involved in the administration of justice particularly in criminal courts.

Expert evidence is based on formal or on special study, training, experience or skill in the particular subject matter to which the inquiry relates and his opinion is asked. It was held by the Supreme Court that an expert is one who has acquired special
knowledge, skill or experience in any science, art, trade or profession and such knowledge have been acquired by practice, observation or careful studies. In the court expert is to present the necessary scientific or technical criteria on which his opinion is based, so that court can test the accuracy of its own conclusion and can form its own independent judgment of the evidence. But before this the experts are usually questioned by the court to evaluate their qualifications and experience in the subject.

2.3 EXPERT TESTIMONY:

First of all we discuss lay witness or lay opinion testimony. Lay witness is a witness who does not testify as an expert witness. Lay witness is a person who testifies under oath and whose evidence is based upon his own personal knowledge. He is one who himself saw the incident and who know something about the case.

Lay witness is a witness who is not an expert. Lay witness may not offer opinions, unless they are based on firsthand knowledge or help to clarify ‘testimony’. Lay opinion base their opinions on information they personally observed. Lay witnesses are ordinary witnesses having no special qualification or experience. These witnesses are testifying only about the facts what they perceived or their observations of an incident.

2.3.1 LAW GOVERNING THE LAY OPINION TESTIMONY:

Under United States Rule 701 of the Federal Rules of Evidence which deals with the opinion testimony by lay witness gives authenticity to the opinion by lay witness. Rule 701 read as follows:

If a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is:

(a) rationally based on the witness's perception;

(b) helpful to clearly understanding the witness’s testimony or to determining a fact in issue; and

(c) not based on scientific, technical or other specialized knowledge within the scope of rule 702

Sec. 3(2) of the Civil Evidence Act of England on lay witness read as follows:

*It is hereby declared that where a person is called as a witness in any civil proceedings, a statement of opinion by him on any relevant matter on which he is not qualified to give expert evidence, if made as a way of conveying relevant facts personally perceived by him, is admissible as evidence of what he perceived.*

On lay opinion Australian Evidence Act under Sec. 78 expresses point as

"*Opinion expressed by a person if:-*

(a) the opinion is based on what the person saw, heard or otherwise perceived about a matter or event; and

(b) evidence of the opinion is necessary to obtain an adequate account or understanding of the person's perception of the matter or event.

The Rule 701 was codified in a negative sense and puts limitation for the admissibility of lay opinion. To be admissible lay witness opinion must be rationally based on perception, means witness must have firsthand knowledge of the facts that forms the bases of the opinion. England Evidence Act is same on view relating from where knowledge of the facts of the witness comes from i.e. Witness must have firsthand knowledge of the facts. The difference between United States and England is that there is not limitation in English law as in United States for the admissibility of lay witness.

In India, under The Indian Evidence Act, there is no provision regarding lay opinion testimony. But, while reading Sec. 47-50 (IEA) concept regarding admissibility of lay opinion testimony comes before us, which deals with lay opinion testimony relating to handwriting, existence of right or custom, usages, tenets and relationships. Section 47 read as:-

*When the court has to form an opinion as to the person by whom any document was written or signed the opinion of any person acquainted with the handwriting of the person by whom it is supposed to be written or signed that it was or was not written as signed by that person, is a relevant fact.*

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So, in this section, the word “the opinion of any person” means that it does not talk about any expert. Any person who is acquainted with the handwriting of the person whose handwriting is in question may give testimony regarding the handwriting or signature of the person concerned. The feature of having a direct knowledge of fact under Rule 701 of United States law is not necessary under Indian law. The condition ‘acquainted’ is fulfilled if the witness had an opportunity to receive the document written by the person in question habitually, even though he had not seen the person write. An Explanation to Sec. 47 clears this, Explanation read as:-

* A person is said to be acquainted with the handwriting of another person when he has seen that person write, or when he has received documents purporting to be written by that person in answer to documents written by himself or under his authority and addressed to that person, or when, in the ordinary course of business, documents purporting to be written by that person have been habitually submitted to him.

Illustration appended to section B is a merchant in Calcutta, who has written letters addressed to A and received letters purporting to be written by him. C is B’s clerk, whose duty it was to examine and file B’s correspondence. D is B’s broker, to whom B habitually submitted the letters purporting to be written by A for the purpose of advising him thereon. The opinions of B, C and D on the question whether the letter is in the handwriting of A are relevant, though neither B, C nor D ever saw A write ‘clarifies the point on lay opinion laid down under section 47.

Under sections 48-50(IEA) non-expert opinion can be admitted regarding the existence of any right, custom (Sec. 48), usages (Sec. 49), tenets and relationship (Sec. 50).

Regarding the admissibility of lay opinion testimony difference between US and Indian law is that under Indian law subject of lay opinion testimony are specifically mentioned under Section 47 to 50, while in US law it is provided in general terms.

In England, lay opinion evidence to be admitted it is necessary it must come from the first hand knowledge of the witness. Law Reform Committee, England, in its 70th report states the reason for the admissibility of lay opinion witness as testimony unless opinion, estimate and inferences which men in their daily lives reach without conscious
ratiocination as a result of what they perceived with their physical senses were treated in the law of evidence as if they were statements of facts, witness would find themselves unable to communicate to the judge an accurate impression of the events they were seeking to describe. Lay witnesses are to state the facts only i.e. what they themselves saw, heard or perceived by other sense. It is the function of the judge and the jury to form their own conclusion or opinion on the facts stated by lay witnesses. There are, however, cases in which the court is not in a position to form a correct judgment, without the help of the persons who have acquired special skill or experience in a particular subject. In such cases, the help of expert is required. Expert is the one, who has devoted time and study to a special branch of learning and is thus specially skilled in that field wherein he is called to give his opinion. The term implies both superior knowledge and practical experience in the art or profession.

2.3.2 EXPERT WITNESS TESTIMONY:

We usually hear or read out in newspapers that expert say this on this issue, expert sits and give their opinion; he is an expert in this field or on that particular subject. The expert’s opinion is sought by many people or organization or even courts on various issues or subject of importance, the expert help is also sought to solve a complicated problem or in medical condition. Now, the question arises who is an expert? The expert is an extra-ordinary individual with high qualification in a particular field of study or who has acquired specialized skill and knowledge in a particular area through rigorous training and scholarly pursuit by devoting considerable amount of time and mental energy.25

‘An expert, more generally, is a person with extensive knowledge or ability based on research, experience, or occupation and in a particular area of study. Experts are called in, for advice on their respective subject, but they do not always agree on the particulars of a field of study. An expert can be, by virtue of credential, training, education, profession, publication or experience, believed to have special knowledge of a subject beyond that of the average person, sufficient that others may officially (and legally) rely upon the individual’s opinion. Historically, an expert was referred to as a

stage. The individual was usually a profound thinker distinguished for wisdom and sound judgment.”

Hon’ble Supreme Court in the case titled as Ramesh Chandra Agarwal v. Regency Hospital Ltd. & Ors has broadly dealt and interpreted the scenario and held that, an expert is a person who devotes his time and study to a special branch of learning. However, he might have acquired such knowledge by practice, observation or careful study. The expert is not acting as a judge or jury. It was further held that in order to bring the evidence of a witness, as that of an expert, it has to be shown that he has made a special study of the subject or acquired a special experience therein or in other words that he is skilled and has adequate knowledge of the subject. The real function of the expert is to put before the Court all the materials, together with reasons which induce him to come to the conclusion, so that the Court, although not an expert, may form its own judgment by its own observation of those materials. An expert is not a witness of fact (like other witnesses) and his evidence is really of an advisory character. The duty of the expert witness is to furnish the Judge with the necessary scientific criteria for testing the accuracy of the conclusions so as to enable the Judge to form his independent judgment by the application of these criteria. No expert can claim that he could be absolutely sure that his opinion was correct.

An expert witness or sometimes referred to as a professional witness is regarded as a qualified experts, who by virtue of education, training, skill or experience can provide accurate and specialized knowledge in a particular subject. Such expert’s knowledge and experience is beyond the knowledge and experience of average person and others may officially and legally rely upon the expert witness opinion about an evidence or fact issue within the scope of his expertise, referred to as the expert opinion as an assistance to the fact finder. It is common practice that expert witnesses will provide evidence in court about facts from their domain of expertise.

Expert witnesses may also deliver expert evidence about facts from the domain of their expertise. At times, their testimony may be rebutted with a learned treatise, sometimes to the detriment of their reputations.

Expert witnesses are the professionals with special knowledge, training and expertise in their respective field. They are hired by attorneys to testify in cases. Their

26. Ibid.
28. Supra note 4 at Pg. 30.
opinion reinforces evidence presented by the prosecution or defense. The meaning of practice for an expert witness is this preliminary preparation of his testimony.  

Expert testimony properly begins with testimony concerning those branches where some intelligence is requisite for judgment and when opportunities and habits of observation must be combined with some practical experience. The expert witness need not have acquired his knowledge professionally, it is sufficient, if he has made a special study of the subject or has acquired special experience in it. In *R v. Silverlock* Lord Russell said, 'the question is?, Is he peritus; is he skilled; has he adequate knowledge?'. Maule, J said, 'All persons, I think who practice a business or profession which requires them to possess a certain knowledge of the matter in hand are expert, so far as expertness is required.'.  

By giving a wider sense to the meaning of the word ‘expert’ in matters of technical nature, courts may obtain useful assistance from persons. Officials or non-official, specially skilled e.g. Officers of the excise post and telegraphs departments, Nasik security Printing Press, goldsmiths, blacksmiths, carpenters, bootmakers, shikaris, motor mechanics and others. Thus, expert evidence will not be confined to classified and specialized profession. It will become applicable wherever peculiar skill and judgment are applied to a particular subject or are required to explain results or trace them to their cause.  

Sec. 45 of Indian Evidence Act defines experts as the person who are specially skilled in foreign law science, art, to the identity of handwriting, finger impression, that means the person who are specially skilled only in this field but while interpreting the word science and art in narrow sense it limits the field of expert and when interpret it in wider sense we find the term *science* is not limited to higher sciences only and word *art* is not limited to fine arts only but it includes cover all subjects on which a course of special study or experience is necessary to the formation of an opinion.  

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29. *Supra note* 2.  
31. (1894) 2 QB 766.  
32. *Supra note* 14 at Pg. 2.  
2.3.3 LEGAL PROVISION RELATING TO EXPERTS TESTIMONY UNDER INDIAN EVIDENCE ACT:

The expert evidence is covered under Sec. 45 - 51 of Indian Evidence Act, 1872, which deals with an opinion of third person, wherever relevant and desirable.

According Sec. 45 "When the court has to form an opinion upon a point of foreign law, or of science, or art, or as to identity of handwriting or finger impression, the opinion upon that point of persons specially skilled in such foreign law or science or art or in a questions as to identify of handwriting or finger impression are relevant facts, such persons are called experts."

Illustrations:

(a) The question is, whether the death of A was caused by poison. The opinions of experts as to the symptoms produced by the poison by which A is supposed to have died, are relevant.

(b) The question is, whether A, at the time of doing a certain act, was, by reason of unsoundness of mind, incapable of knowing the nature of the act, or that he was doing what was either wrong or contrary to law. The opinions of experts upon the question whether the symptoms exhibited by A commonly show unsoundness of mind, and whether such unsoundness of mind usually renders persons incapable of knowing the nature of the acts which they do, or of knowing that what they do is either wrong or contrary to law, are relevant.

(c) The question is, whether a certain document was written by A. Another document is produced which is proved or admitted to have been written by A. The opinions of experts on the question whether the two documents were written by the same person or by different persons, are relevant.

Other sections:

- Sec. 47 : Opinion as to handwriting, when relevant
- Sec. 48 : Opinion as to existence of right or custom, when relevant
- Sec. 49 : Opinion as to usages, tenets, etc., when relevant
Expert witnesses are permitted to offer scientific, technical and other specialized information that will assist the trier of fact.\(^{35}\)

Witnesses are considered as the fact reporting agents of the legal machinery and their role in the adjudicating processes is to inform the court of facts. ‘Facts’ means and contain only facts and not opinions or inferences. Witnesses must testify only what he had perceived with one of his five senses. Therefore, it is worthwhile to know the meaning of opinion and its distinction from fact. In the law of evidence, opinion means any inference from observed facts. However, in some situations it will be difficult to distinguish between facts and opinion because there are border line cases in which the evidence of fact is mingled with evidence of opinion. eg. Statements relating to the speed of a particular thing identity of person etc. are mingled with fact and inferences. In such cases, the court permit witnesses to state their opinion without which the fact finder cannot come to a correct conclusion. In some other cases the line which differentiate facts from opinion, may be delicate. Ordinary lay witnesses cannot identify certain facts with his prudence, such facts may be obscure or invisible to him but the witness having a particular skill or training may be able to perceive such fact.

An ‘Expert’ witness is one who has devoted time and study to special branch of learning and this is specially skilled on those points on which he is asked to state his opinion. His evidence on such points is admissible, to enable the tribunal to come to a satisfactory conclusion.\(^{36}\)

Rules 702 of Federal Rules of Evidences of United States defines testimony by Expert witness as:-

\[A \text{ witness who is qualified as expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:}\]

\[(a) \text{ the expert’s scientific, technical or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;}\]


\(^{36}\) Powell, 10th edn., Pg. 39
(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods of the facts of the case.

According to part 35 of CPR, expert evidence shall be restricted to that which is reasonably required to resolve the proceedings. Expert has been instructed to give or prepare evidence for court proceedings. Expert is to help the court on the matters with his expertise. An expert witness is required to be independent and address his or her expert report to the court. An export, report must be verified by a statement of truth in the following form: -

“I confirm that I have made clear which facts and matters referred to in this report are within my knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Part 22 of CPR deals with statements of truth and rule 32.14 sets out the consequences of verifying a document containing a false statement without an honest belief in its truth.

2.4 QUALIFICATION OF AN EXPERT:

In State v. Sushil Kumar, Sec. 45 does not envisages the qualification of an expert whose opinion can be relevant in a criminal trial.

In 1923 Wigmore wrote: Professional men of honorable instincts and high scientific standards look upon the witness box as a golgotha, and disclaim all respect for the law’s methods of investigation. This was not a novel observation either; similar sentiments have been expressed regularly for over a century.

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39. Supra note 37.
40. 2007 Cri. L. J. 4008 (Del).
An 'Expert' witness is one who has devoted time and study to a special branch of learning and thus is specially skilled on those points on which he is asked to state his opinion. His evidence on such point is admissible, to enable the tribunal to come to a satisfactory conclusion.\textsuperscript{42}

\textit{In Rowley v. London & North Western Railway Company}\textsuperscript{43} 'the law requires that there should at least be a profession of special qualification that the part of a person who comes forward to dispose to matters lying beyond common knowledge.'\textsuperscript{44}

Where a witness does not possess any technical qualification in as much as he has never obtained a degree nor a diploma in Photography but his practical experience of working as a photographer in the Police Department for over twenty - five years, is sufficient enough to call him as an expert.\textsuperscript{45}

\textit{In Collector, Jabalpur v. A. Y. Jahagir Khan}\textsuperscript{46} An expert, in order to be competent as a witness, need not have acquired his knowledge professionally. It is sufficient so far as the admissibility of the evidence goes, if he has acquired special experience therein. However, the expert must show that he is skilled and has adequate knowledge of the subject in \textit{State H.P. v. Jai Lal 1999}.

\textit{In A. Nagi Reddi v. State}\textsuperscript{47} One who has acquired special knowledge and skill in any science is an expert. His opinion based on observations or experiments, is relevant in cases where questions relating to his science arise.

\textit{In State of Himachal Pradesh v. Jai Lal And Ors}\textsuperscript{48} “An expert witness, is one who has made the subject upon which he speaks a matter of particular study, practice, or observation and he must have a special knowledge of the subject.”

\textit{In Kennedy v. Cordia (Services)}\textsuperscript{49} Lord Ordinary on question of expert witness says, 'the real issue is whether he was in position to provide expertise in the area of health and safety to work which would not be within the knowledge of the court. In my view he clearly has the qualification and gives evidence here. He will be treated

\begin{itemize}
\item \textsuperscript{42} \textit{Supra note} 20.
\item \textsuperscript{43} (1873) LR 8 Exch 221.
\item \textsuperscript{44} Field, C. D., \textit{Law on Evidence}, (2012), 13th edn., Vol. 3, Pg. 3180.
\item \textsuperscript{45} Re. Govinda Reddy, A.I.R. 1958. Mys. 150 at 179, ibid, Pg. 3181.
\item \textsuperscript{46} AIR 1971 MP 32.
\item \textsuperscript{47} (1968) 1 Andh. W.R. 178.
\item \textsuperscript{48} (2000) 2 LRI 982 SC.
\item \textsuperscript{49} LLP[2016] UKSC 6.
\end{itemize}
therefore as an expert witness as he has given evidence on many occasions. He demonstrated a detailed knowledge of a number of international papers on the subject of slipping and personal protective equipment relating to footwear. As Mr. Greasly’s whose witness as an expert is in question have a degree in engineering and a diploma in safety and hygiene. He was a chartered member of the institute of safety and health and an associate member of the UK Slip Resistance case. He was a former member of the Health and Safety Executive, in which he had worked as an inspector of factories. He had worked for many years as an engineering consultant advising companies on health and safety, including carrying out slip testing and advising on the adequacy risk assessment.

In this case Miss Kennedy was employed by the respondent, Cordio as a home carer in Glasgow. Miss Kendy’s principal duty was to visit individual in their homes and to provide them with personal care. In one of a series of visit carried about by Miss Kennedy during her shift, she travelled to Mrs. Craigs house at about 8 pm on 18th Dec., 2010 after visiting another client. On that day there had been severe wintry condition in Central Scotland for number of weeks prior to that date, with snow and ice lying on the ground. Miss Kennedy was driven to house by a Colleague, who parked her car close to a public footpath leading to the house. The footpath was on a slope and was covered in fresh snow overlying ice. It had not been gritted or salted. Miss Kennedy was wearing flat boots with ridged soles. After taking a few steps along the footpath, she slipped and fell to the ground, injuring her wrist. She made Cardio, her employer liable for injury which she sustained at work.

In Arizona, the instructions for experts are as a witness qualified as an expert by education or experience may state opinions on matters in the witness’s field of expertise, and may also state reasons for those opinions. Expert opinion testimony should be judged just as any other testimony.50

Just as the medical field, provides experts in the forensic area, so too the Professional Land Surveyor can serve as an expert. So, expert is the person who is specially skilled, have a full knowledge and experience in his field.

A party seeking to adduce evidence of a person under Sec. 45 should, in the first instance show to the court from the evidence of such witness, that the witness is specially skilled in the particular science and then only such witness is called an expert.51

‘Expert witness’ is one who possess the relevant specific knowledge, experience or skill to help the court to come to a better understanding and a conclusion on a scientific and technical issues and where there is the need of evidence to be examined by expert. The expert is regarded as an assistant to court.

Under Federal rules 702 an expert witness is qualified by the knowledge, skill, experience or education. In determining the qualification of the expert, the Federal Rules of Evidence requires the expert have specialized education, training or practical experience in the subject matter relating to the case.

According to Dr. B.R. Sharma an expert appearing in the court is qualified to start with and for that he gives the following elements:-52

1. Basic educational qualification.
2. Training: The institute from where the training was obtained, the course contents and the length of the course can give fair idea of the training.
3. Experience: both in actual and related fields, the number of cases examined both jointly and independently are brought on the record.
4. His research work, the papers published and read in seminars, conferences and meeting are brought on record.
5. Authorship, if he is an author.
6. Teaching and training programs if any conducted.

2.5 TYPES OF EXPERTS WITNESS:

Expert witnesses come from all fields of work that involve highly specialized or technical knowledge. For example, a blood-splatter specialist may be called as an expert to testify on a type of weapon or the position of an attacker at the time of the crime.

51. Central Excise Dept. v. Somasundaram; 1980 CrLJ 533 (Kar.).
Expert from the field of fingerprints, track marks, documents, handwritings, voice analysis etc. are called whenever the question related to their expertise field arise. And their outcome affects the criminal investigation.

Expert witnesses must have information beyond knowledge of the layperson or lay witness. Expert witnesses in a courtroom typically testify as to their opinions based on observations of the facts in the case. Each jurisdiction has specialized rules for expert witnesses; those with specific questions on use of experts should ask an attorney.

2.5.1 MEDICAL EXPERT WITNESS:

Justice Goolsy defines to be competent as a medical expert, a witness must have acquired by reason of study and experience or both such knowledge and skill in the medical profession as to be better qualified than the fact finder to form an opinion on the particular subject of his testimony).

Duhaime's Law Dictionary defines the medical expert as a witness tendered to offer opinion evidence within the confines of his or her area of medical expertise.

Medical evidence helps the courts to draw logical conclusions from the facts presented. The evidence presented by medical experts is based on their opinions derived by their specialized skills acquired by study and experience. Medical experts are routinely involved in the administration of justice particularly in criminal courts. He offers an opinion about the medical issue related to the case. To be a medical expert it is necessary that expert should have extensive medical training.

2.5.2 FORENSIC EXPERT WITNESS:

A forensic expert witness is a scientist who performed examination so as to provide expert testimony regarding the case. He might be specialist in any of a number of fields of forensic science like forensic anthropology, forensic computer science, fingerprints, handwriting etc. who provides testimony in the court.

Once the crime is reported in short time forensic expert approach to the crime scene and collects appropriate evidences form there. Forensic expert collect, examine

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and analyze the collected samples with the tools and techniques the specialty of scientist while working in the laboratory.

2.5.3 TESTIFYING EXPERT WITNESS:

Everything the testifying expert does, writes and relies upon is fully discoverable. Testifying Experts are experts that are allowed to testify for the case. As expert witness duty is to assist the lawyer and court by giving the answer to the question of which he is expertise and on which court cannot come to any conclusion without the help of expert. So, whatever they do, their experience, their qualification, their submitted report everything is open for questioning and testifying in court.

2.5.4 NON-TESTIFYING EXPERT WITNESS:

Non-testifying experts are described as expert consultants. Non - testifying expert can be retained by attorney for their guidance and advice. He/she acts as consultant only and who can neither be used nor can be put on cross-examination by the parties to the cases. Non testifying expert is also termed as a consulting expert. He or she is a professional who provides an expert advice in the area of his/her expertise.

2.6 ADMISSIBILITY OF EXPERT EVIDENCE:

Admissibility itself mean whether the evidence is relevant or is there any value for the legal debate, as well as a variety of other factors such as the status of the expert witness, the quality of the methodology and the underpinning science. It is the judge, who determined the admissibility of expert evidence and considers whether the expert witness will be permitted or not permitted to give their testimony. The judge is said, by some legal authorities, to act as a ‘gatekeeper’ for expert evidence.55

In Clark v. Ryan56 Justice Dixon stated that it is a general rule that the opinion of witnesses possessing peculiar skill is admissible, whenever the subject-matter of inquiry is such that the inexperienced person are unlikely to prove capable of forming a correct judgment upon it without such assistance. In other words, this is so when it so far partakes of the character of science or art as to require a course of previous habit or study

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56. (1960) 103 CLR 486 HCA.
to obtain a competent knowledge of its nature.\textsuperscript{57} An ‘expert’ witness is one who has devoted time and study to a special branch of learning, and thus is specially skilled on those points on which he is asked to state his opinion. His evidence on such points is admissible, to enable the tribunal to come to a satisfactory conclusion.\textsuperscript{58}

\textit{A Nagi Reddi v. State}\textsuperscript{59} One who has acquired knowledge and skill in any science is an expert. His opinion based on observations or experiments, is relevant in cases where questions relating to his science arises.

In \textit{Sri Sundari v. Ganghram}\textsuperscript{60} It is the duty of an expert to furnish the judges with the necessary criteria for testing the accuracy of his conclusions, so as to enable the judge to form his own independent judgment by application of the criteria to the facts provided in evidence.

The particular witness must be suitably qualified as an expert in the particular field of knowledge; the question is whether the witness has sufficient skill and knowledge in relation to the field in question. There is no absolute requirement that the witness be professionally qualified, there being several areas where expertise is obtained through experience rather than study.

The opinion of witnesses possessing expert knowledge is admissible whenever the subject-matter of inquiry is such that inexperienced persons are not likely to prove, or capable of forming a correct judgment upon it\textsuperscript{61} and if he wanted his opinion to be accepted, he should put before the court all the materials which induced him to come to a conclusion so that the court although not expert might form its own judgment on those materials.\textsuperscript{62}

As a general rule the opinion, inferences, beliefs and mere speculations of witnesses are inadmissible before a Court of law. It means that such types of evidence do not merit consideration. Hence, they are excluded as inadmissible in the law of evidence. Witnesses are considered as fact reporting agents of the legal machinery and their role in the adjudicating process is to inform the Court of \textit{Fact} means and contains only facts and not opinions or inferences. Witness must testify only what he had

\begin{footnotesize}
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\item \textsuperscript{57} Taylor 12th edn., Pg. 902.
\item \textsuperscript{58} Supra note 36 at Pg. 39.
\item \textsuperscript{59} \textit{(1968)} Andh. W.R. 178.
\item \textsuperscript{60} \textit{(1979)} All LJ 38
\item \textsuperscript{61} Supra note 33.
\item \textsuperscript{62} \textit{Mst. Titi v. Alfred Robert Jones}; AIR 1934 All 273.
\end{itemize}
\end{footnotesize}
perceived with one of the five senses. Therefore, it is worthwhile to know the meaning of opinion and its distinction from fact. In the law of evidence opinion means any inference from observed facts. However, in some situations, it will be difficult to distinguish between fact and opinion because there are borderline cases in which the evidence of fact is mingled with fact and inference. In such cases, law permits witnesses to state their opinion, without which the fact finder cannot come to a correct conclusion. In some other cases, the line, which differentiates facts from opinion, may be delicate. Ordinarily lay witnesses cannot identify certain fact with his prudence. Such facts may be obscure or invisible to him. But a witness having a particular skill or training may be able to perceive such facts.63

When the question arises - When will expert evidence be admissible? The following conditions must be satisfied:-

- The matter must call for expertise; the inquiry has to be into a matter of art or science which is likely to be outside the experience and knowledge of the tribunal of fact. Expert help is therefore unnecessary on matters relating to normal human nature and behaviour.
- The evidence must be helpful to the court in arriving at its conclusion;
- There must be body of expertise in the area in question;
- The particular witness must be suitably qualified as an expert in the particular field of knowledge; the question is whether the witness has sufficient skill and knowledge in relation to the field in question. There is no absolute requirement that the witness be professionally qualified, there being several areas where expertise is obtained through experience rather than study.
- Permission to rely on the expert evidence must be obtained from the court

On the admissibility of expert evidence Sec. 79 of Australian Evidence Act, 1995 stated that such evidence is admissible only when person has specialized knowledge which is based on the person’s training, study or experience and his opinion is wholly or substantially based on that knowledge.

The two page opinion in *Fyre v. United States*\(^6^4\) issued in 1923 largely defined the way in which state and federal courts treated the question of the admissibility of scientific and technical proof. Most courts before Frye test solve the question of admissibility of expert by asking only about expert’s qualifications and whether the subject matter of the testimony was beyond the range of knowledge of the average juror. As in 1860, the New Hampshire High Court in *Jones v. Tucker*\(^6^5\) stated that *when a witness is offered as an expert, three question necessarily arise:-*

1. **Is the subject concerning which he is to testify, one upon which the opinion of an expert can be received?**

2. **What are the qualifications necessary to entitle a witness to testify as an expert?**

3. **Has the witness those qualifications?**

Courts in the pre-Fyre period attempted to answer the question posed in *Jones v. Tucker*\(^6^6\) as did the Supreme Court of Errors of Connecticut in *Taylor v. Town of Monroe* stated: “the true test of the admissibility of such testimony is not whether the subject matter is common or uncommon or whether many persons or few have some knowledge of it, but whether the witness offered as experts have any peculiar knowledge or experience, not common to the world, which renders their opinions founded on such knowledge or experience any aid to the court or jury in determining the questions at issue.”

In *Fyre v. United States*\(^6^7\) the defendant sought to adduce expert evidence about the results of a systolic blood pressure deception test, the precursor to the lie detector test, to prove his innocence. The court refused to allow the evidence to be admitted. Judges in Fyre ruled down a new test for the admissibility of expert evidence as:-

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\(^6^4\) (1923) 54 App. D. C. 46, 293 F. 1013 at 1014.
\(^6^5\) (1961) S.C.R. 43.
\(^6^6\) Ibid.
\(^6^7\) Supra note 64.
Just when a scientific principle or discovery crosses the between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

Fyre rule or Fyre test as laid down in Fyre v. United States was known as the general acceptance test which means that expert scientific evidence should not be deemed admissible until and unless the methods and principles in which it was based achieved widespread acceptance in the relevant discipline.

The next major case to fuel the growing debate on junk science is Daubert v. Merrell Dow Pharmaceuticals Inc.\textsuperscript{68} On 21\textsuperscript{th} June, 1993, Supreme Court of United States laid down a judgment which can be considered as a path breaker to the United States trail in courts regarding the admissibility of scientific evidence. The term ‘junk science’ was first coined in Huber Galileo’s Revenge; Junk Science in the Courtroom, refers to the abuse of science and scientific terminology in the courtroom setting by importing irrelevant or accurate evidence to advance a party’s arguments.\textsuperscript{69}

The facts of the Daubert case is that Jason Daubert and Eric Schuller (minor) suffered limb reduction birth defects. Minor and their parents sued respondent in California State Court alleging that the birth defects were caused by mother’s ingestion drugs Bendectin when she was pregnant, manufactured by the defendant, Merrell Dow Pharmaceuticals Inc., a prescription anti-nausea drug marketed by respondent.

In this case the US Supreme Refused to admit the plaintiffs evidence and in doing so, held that the Fyre test had been impliedly overruled by Rule 702 of the Federal Rules of Evidence which deals with the use of ‘scientific, technical or other specialized knowledge’ by the courts, as nothing in that test required ‘general acceptance’ as a prerequisite to admissibility.\textsuperscript{70}

\begin{thebibliography}{99}
\bibitem{68} 509 U.S. 579; 113 S. Ct. 2786 (1993).
\bibitem{70} Id at Pg.106.
\end{thebibliography}
In Daubert, the Court held that the appropriate standard for scientific admissibility was Federal Rules of Evidence 702; which demanded that scientific testimony be ‘not only relevant but reliable.’ Federal Rules of Evidence 702 reads as:-

*A witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if (a) the expert’s scientific, technical or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue, (b) the testimony is based on sufficient fact or data, (c) the testimony is the product of reliable principles and methods and (d) the expert has reliably applied the principles and methods to the facts of the case.*

Daubert case requires that judges must act as scientific ‘gatekeepers’ not only to access the scientific validity but also to decide whether the evidence offered for the legal question at issue.

In India, we have adversarial system of justice administration and ordinarily medical evidence is admitted only when the expert gives an oral evidence under oath in the courts of law except under special circumstances like:-

- a) When evidence has already been admitted in a lower court
- b) Expert opinions expressed in a treatise
- c) Evidence given in a previous judicial proceeding
- d) Expert cannot be called as witness
- e) Hospital records like admission/ discharge register, birth/ death certificates etc.

Expert evidence is admissible only when the expert gives the court the sufficient evidence of his coming to such conclusion. For that he is examined as a witness and is cross-examined. Expert should support his findings with reason without reasoning expert findings is rejected.


Opinion testimony may be admitted in circumstances where it will assist the jury to understand the evidence or a concept beyond experience. Thus, expert opinion is admissible if it is related to a subject that is sufficiently beyond common experience and would assist the trier of fact.73

Rule 95 of the ICTY Rules of Procedure and Evidence74 states, no evidence shall be admissible if obtained by methods which cast substantial no doubt on its reliability or if its admission is antithetical to and would seriously damage, the integrity of the proceedings.

In R v. Hodges75, the evidence of a police officer with years of experience in the investigation of drug offences and using knowledge acquired from informants and arrested suspects were admissible in relation to the issue of the normal manner of supply of heroin, the usual price and the quantity of drugs that would constitute a supply for personal use.

For the expert evidence to be admissible it must be reliable. The test for reliability is the method which is used in reaching that opinion, qualification and experience of expert, validated laboratory techniques and technologies and the processes through which he come to such an opinion are recognized or not as he is provide necessary scientific and technical criteria to the court which help the judge to come to conclusion.

In Ramesh Chandra Agrawal v. Regency Hospital Ltd. & Ors,76 Hon’ble Justice H. L. Dattu quotes that the expert opinion forms an important role in arriving at conclusion. The first and foremost requirement for an expert evidence to be admissible is that it is necessary to hear the expert evidence. The test is that the matter is outside the knowledge and experience of lay person. The scientific question involved is assumed to be not within court’s knowledge. The other requirements for the admissibility of expert evidence are:-

i) that the expert must be within a recognized field of expertise

76. Civil Appeal No. 5991 of 2002, SC.
ii) that the evidence must be based on reliable principles, and

iii) that the expert must be qualified in that discipline.

*V. Kishan Rao v. Nikhil Super Speciality Hospital & Another*[^77] ‘Expert evidence is necessary when court comes to the conclusion that case is complicated or such that it cannot be resolved without assistance of expert opinion.’

Upon the qualification and admissibility of expert evidence; court in *R. Jagdeesan v. N. Ayyasamy and another*[^78] held that ‘court should first ascertain whether or not particular individual is expert in particular field for particular purpose before seeking opinion of such expert’ and also held that “it is for the Court to first of all take a decision as to availability of expert.’

In *G. Govindaraj v. Smt. Saroja Ramakrishnan*[^79] ‘The expert also shall be examined as Court witness and opportunity also shall be given to both sides to cross-examine the expert, if they so desire.

In *State of Himachal Pradesh v. Jai Lal And Ors.***[^80] “In order to bring the evidence of a witness as that of an expert it has to be shown that he is skilled and has adequate knowledge of the subject.”

### 2.7 WHEN EXPERT WITNESS IS NOT APPLICABLE:

The phrase *expert testimony* is not applicable to all species of opinion evidence. A witness is not giving expert testimony who without any personal experience or special knowledge or intelligence simply testifies as to the impressions produced in his mind or sense by that which he has seen or heard and which can only be described to others by giving the impression produced upon the witness. Neither is he giving such testimony, strictly speaking, when he is testifying as to matters which require no peculiar intelligence, and concerning which any person is qualified to judge according to his opportunities of observation.

A maulvi (learned in the personal law, namely, Mohamedan law), is not an *expert* within the meaning of Sec. 45. A court cannot ascertain the law by taking the evidence of a maulvi, but it can take into consideration, the texts contained in Roddul Mohtar and

[^77]: Civil Appeal No. 2641 of 2010.
[^78]: Crl. R. C. Nos. 49/50; 2010, Madras High Court.
Fatwai-Alamgiri which are well-known books on Mohamedan law.\textsuperscript{81} The opinion of an expert by itself may be relevant but would carry a little weight with a court unless it was supported by a clear statement of what is noticed and on what he based his opinion.\textsuperscript{82}

A court is not bound by expert's evidence which is to a large extent advisory in nature. The court must derive its own conclusion upon considering opinion of experts which may be adduced by both sides, cautiously and upon taking into consideration the authorities on the point on which he deposes. Court can deny expert evidence, if it is not reliable, if it does not result in fair trial. As under section 112 of Indian Evidence Act there is a conclusive presumption about the paternity of a child born during the subsistence of a valid marriage. Sec. 112 of Indian Evidence Act 'the fact that any person was born during the continuance of a valid marriage between his mother and any man or within two hundred and eighty days after its dissolution, the mother remaining unmarried, shall be conclusive proof that he is the legitimate son of that man, unless it can be shown that the parties to the marriage had no access to each other at any time when he could have been begotten.' The said conclusiveness can be rebutted by the result of genuine DNA test. As in a paternity test, sought by Mr. Shekhar has established Mr. Tiwari, Congress veteran and former Uttarakhand Chief Minister, as his biological father. In this case in 2008, Rohit Shekhar filed a paternity suit claiming Tiwari to be his biological father. The court ordered that DNA test of Tiwari be done. The DNA test result which was released by the court on 27\textsuperscript{th} July, 2012 established that Tiwari is the biological father of Rohit Shekhar and that Ujjawala Sharma is the biological mother.\textsuperscript{83}

In \textit{R v. Turner}\textsuperscript{84} the accused had bludgeoned his girlfriend to death after she confessed her infidelity to him. The court refused the evidence of a psychiatrist that such an event was likely to have caused an explosion of rage in him, as 'jurors do not need psychiatrists to tell them how ordinary folk who are not suffering from any mental illness are likely to react to the stresses and strains of life.'\textsuperscript{85}

Expert opinion is not admissible if it consists of interference and conclusions which can be drawn easily and intelligently by the trier of fact as by the witness.\textsuperscript{86}
subject under investigation does not require specialist knowledge, expert evidence will generally be excluded.\textsuperscript{87}

The opinion of skilled witness cannot be received when the inquiry relates to a subject which does not require any peculiar habits or course of study to qualify a man to understand it.\textsuperscript{88}

Evidence by experts who are, patently unqualified or little more than ‘enthusiastic amateurs’ should not given. An expert should not give evidence in relation to matters outside of their expertise. In \textit{R v. Clarke & Morabir}\textsuperscript{89} a case where an expert in fractures and bone disease gave an opinion as to cause of death, in circumstances where the Court of Appeal held that "he did not have the experience or expertise to consider all of the causes of death."

If the judge consider that the expert qualification or experience are not sufficiently relevant to the case and when the court thinks that the case is not fit for the expert opinion, it is not admissible. In \textit{R. Tharmambal v. V. Christopher Moni Prakash},\textsuperscript{90} Court held that ‘opinion of Handwriting Expert was not necessary because other facts shown that the signature was of appellant and further opined that the established circumstances in this case spoke for themselves and candidly pointed towards appellant’s misconduct.’

As expert evidence is not one of fact but only advisory in nature so for the credibility of expert witness he/ she must submit his/her evidence on the reason in support of conclusion and the data and material should be furnished with it which form the basis of his/ her conclusion, otherwise his/her evidence is not admissible in the court. Justice D.P. Mohapatra in \textit{State of Himachal Pradesh v. Jai Lal And Ors}\textsuperscript{91} upon the credibility of expert witness said ‘The credibility of such a witness depends on the reasons stated in support of his conclusion and the data and materials furnished which form the basis of his conclusions.’

\textsuperscript{87.} \textit{United States Shipping Board v. The St. Albans} (1931) AC 632 (PC).
\textsuperscript{88.} \textit{Prem Chand v. State} 1996 CrLJ 1217(para 22).
\textsuperscript{89.} (2013) EWCA Crim 162.
\textsuperscript{90.} CRL .R. C. (MD) No. 457 of 2012.
\textsuperscript{91.} \textit{Supra note} 80.
In *State of Himachal Pradesh v. Jai Lal And Ors;* Justice D.P. Mohapatra\(^92\) said ‘The report submitted by an expert does not go in evidence automatically. He is to be examined as a witness in Court and has to face cross-examination.’

In *White Burgess Langille Inman v. Abbott and Haliburton Co*\(^93\) Justice Cromwell stated ‘Expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence. They must be aware of this duty and able and willing to carry it out. If they do not meet this threshold requirement, their evidence should not be admitted.’

### 2.8 EXPERT OPINION CAN BE TAKEN IN:

An Expert opinion can be taken in both Civil as well as Criminal courts. Analysis of forensic evidence is used in the investigation and prosecution of civil and criminal proceedings. As forensic expert can help the court and investigating team to establish guilt or innocence of possible suspects and evidences given by them are used to link crimes that are thought to be related to one another.

Some of the areas which require expert evidence are as follows:-

- Foreign Law
- Science
- Art
- Identity of handwriting
- Finger impressions
- Computer
- Cyber Crimes
- Odontology
- Entymology
- Voice Analysis
- Biology

### 2.9 ROLE AND DUTIES OF THE EXPERT WITNESS:

\(^92\) Supra note 48.
An expert witness is an individual who has specialized technical knowledge of a subject significantly related to a court proceeding. Expert witness may give testimony on evidence in a case without actually having seen the events in question because their highly specialized knowledge makes them an authority on the top. Experts are called by the judge or parties to the case to technically evaluate a certain fact or action, in order to provide the court with a complete knowledge on the fact for which he/she is called.

Australian Council of Professions\(^94\): set out the *Role and Duties of the Expert Witness* as:

1. **The role of the expert witness in litigation is to assist the court in the administration of justice by providing an opinion or factual information based on the expert’s competence in a subject which is outside the knowledge, skill or experience of most people. It is founded in the need for a court charged with the resolution of a matter for access to knowledge relevant to the matter which it does not possess of itself.**

2. **It follows that the opinion is only useful if it is based on the expert’s area of competence, includes all relevant matters and is impartial and dispassionate. Thus the primary duty of an expert is to the court because of his or her role in the process as defined above. An expert is subject to the normal duty in respect of evidence of fact to be complete, accurate and truthful.**

3. **The expert owes a second duty to the body of Knowledge and understanding from which his or her expertise is drawn. This implies recognition of its limitations and the humility which should flow from such recognition, since the outcome of litigation is likely to influence the practical application of such knowledge and understanding in the future. It also implies dealing with the opinions of other competent experts in respectful manners. It is important to the overall process that the integrity of the processes by which knowledge is acquired and understanding developed should not be degraded.** Thus the secondary
4. The expert witness owes a third duty to the party which has sought his or her advice. That the duty is to provide the advice in the context of the first and second duties above, which implies that the expert should not be an advocate for a party. This is a tertiary duty.

In case of an expert witness there exists the tendency to support the view which is favourable to the side which employs him so that it is difficult to get from him independent opinion. An expert may revise his opinion if he finds cogent reason and his evidence need not be disbelieved on this ground.95

In State of Maharashtra v. Damu Gopinath Shinde96 Supreme Court held that 'without examining the expert as a witness in the court, no reliance can be placed on expert evidence.'

2.9.1 DUTIES OF EXPERTS:

The foundation on which expert evidence rest is the supposed superior knowledge or experience of the expert in relation to the subject-matter upon which he is permitted to give an opinion as evidence. It is the duty of expert witness is to furnish the judge with necessary scientific criteria for testing the accuracy of the conclusions so as to enable the judge to form his independent judgment by the application of these criteria to the fact of the case. The credibility of a witness depends on the reason stated in spot of his conclusion and the data and material furnished that forms the basis of his conclusion. It is also the duty that no expert can claim that he could be absolutely sure that his opinion was correct.

In Scots Law, Davie v. Magistrates of Edinburgh (1953)97 provides authority that where a witness has particular knowledge or skills in an area being examined by the court, and has been called to court in order to elaborate on that area for the benefit of the court, that witness may give evidence of his opinion on that area.

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95. Subodh Kumar v. Soshi Kumar AIR 1958 Cal. 264.
97. 1953 SLT 54, 1953 SC 3.
Law Commission recommends that after Sec. 45 of the principal Act, the following section shall be inserted, namely Sec. 45A in which law commission recommends that:

It is the duty of an expert that an expert’s report shall be addressed to the Court and not to the party on whose behalf he is examined and he shall owe a duty to help the Court and this duty shall override any obligation to the party on whose behalf he is examined. An expert’s report must:

(a) Give details of the expert’s qualifications;
(b) Give details of any literature or other material which the expert has relied on, in asking the report;
(c) state who carried out any test or experiment which the expert has used for the report and whether or not the test or experiment has been carried out under the expert’s supervision and the reasons if any, given by the person who conducted the test;
(d) give the qualifications of the person who carried out any such test or experiment;
(e) where there is a range of opinion on the matters dealt with in the report–
   (i) summarise the range of opinion, and
   (ii) give reasons for his own opinion;
(f) contain a summary of conclusions reached;
(g) contain a statement that the expert understood his duty to the Court and has complied with that duty;
(h) contain a statement setting out the substance of all material instructions (whether written or oral) of the party on whose behalf he is examined;
(i) be verified by a statement of truth as follows: “I believe that the facts I have stated in the report are true and that the opinion I have expressed are correct”;

(j) contain a statement that the expert is conscious that if the report contained any false statement without an honest belief about its truth, proceedings may be brought for prosecution or for contempt of Court, with the permission and under the directions of Court.

In *Davie v. Magistrates of Edinburgh*99 an expert witness, however skilled or eminent, can give no more than evidence. The expert cannot usurp the functions of the jury or judge sitting as a jury; any more than a technical assessor can substitute his advice for the judgment of the Court, and provides authority that where a witness has particular knowledge or skills in an area being examined by the court, and has been called to court in order to elaborate on that area for the benefit of the court, that witness may give evidence of his opinion on that area, Duties of expert was discussed by Lord President Copper in this case as:-

> *Is to furnish the Judge or jury with the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the Judge or jury to form their own independent judgment by the application of these criteria to the facts proved in evidence. The scientific opinion evidence, if intelligible, convincing and tested, becomes a factor (and often an important factor) for consideration along with the whole other evidence in the case, but the decision is for the Judge or jury. In particular the bare ipse dixit of a scientist, however eminent, upon the issue in controversy, will normally carry little weight, for it cannot be tested by cross-examination nor independently appraised, and the parties have invoked the decision of judicial tribunal and not an oracular pronouncement by an expert.*

In *National Justice Compania Naviera S.A. v. Prudential Assurance Co Ltd.* (“The Ikarian Reefer”)100 Mr. Justice Cresswell laid down the duties of expert evidence as:-

1. **Expert evidence presented to the Court should be and should be seen to be the independent product of the expert uninfluenced as to form or content by exigencies of litigation.**

2. **An expert witness should provide independent assistance to the Court by way of objective unbiased opinion in relation to matters within his**

99. *Supra note 97.*
100. Queen’s Bench Division (Commercial Court). (1993) 2 Lloyd’s Rep 68.
expertise. An expert witness in the High Court should never assume the role of advocate.

3. An expert witness should state the facts or assumption upon which his opinion is based. He should not omit to consider material facts which could detract from his concluded opinion.

4. An expert witness should make it clear when a particular question or issue falls outside his expertise.

5. If an expert’s opinion is not properly researched because he considers that insufficient data is available then this must be stated with as indication that the opinion is no more than a provisional one.

6. If after exchange of reports, an expert witness changes his view on a material matter, such change should be communicated to the other side without delay and when appropriate to the Court.

7. Where expert evidence refers to photographs plans, calculations, analyses, measurements, survey reports or other similar documents, these must be provided to the opposite party at the same time as the exchange of reports.

Expert first and foremost duty is towards the court, he/she is to put the facts before the court and court uses as an evidence and can lay the decision on it. The Criminal Procedure Rules Rule 33.2\textsuperscript{101} states expert’s duty to the court as:-

(a) An expert must help the court to achieve the overriding objective by giving opinion which is:
   • Objective and unbiased; and
   • Within the expert’s area or areas of expertise

(b) This duty overrides any obligation to the person from whom the expert receives instructions or by whom

(c) This duty includes obligations
   • To define the expert’s area or areas of expertise-

\[\text{(i) in the expert’s report, and}\]

\textsuperscript{101} The Criminal Procedure Rules, Part 33, 2014.
• When giving evidence in person, to draw the court’s attention to any question to which the answer would be outside the expert’s area or areas of expertise and

• To inform all parties and the court if the expert’s opinion changes from that contained in a report served as evidence or given in a statement.

In Pora v. The Queen,102 the Judicial Committee of the Privy Council in an appeal from New Zealand, stated:-

‘It is the duty of an expert witness to provide material on which a court can form its own conclusions on relevant issues. On occasions that may involve the witness expressing an opinion about whether, for instance, an individual suffered from a particular condition or vulnerability. The expert witness should be careful to recognise, however, the need to avoid supplanting the court’s role as the ultimate decision-maker on matters that are central to the outcome of the case.’

The Scottish courts have adopted the guidance of Cresswell J on an expert’s duties in National Justice Compania Naviera SA v. Prudential Assurance Company Limited,103 also known as the Ikarian Reefer case which are: expert evidence presented by the expert should be uninfluenced and independent. He should provide unbiased and independent assistance to the court. An expert witness should state the facts or assumption upon which his opinion is based.

We can say, that primary obligation of the expert witness is towards court; he is to assist the court in giving justice so he should be independent, impartial and objective so he should have a high standard of knowledge and practical experience in his field. The duty of the expert witness as Lord President Cooper says is to furnish the Judge or jury with the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the Judge or jury to form their own independent judgement by the application of these criteria to the facts proved in evidence.

Day by day, there are the rapid growth in technological and scientific advances that make it very difficult for the judges and jury to understand the complex information

presented by the expert evidence. So, it is for that expert has to explain the point at a level of ordinary prudence man. As work of expert is to seek the truth and put that before the judiciary and the judge or jury is to justice. Science is descriptive and law is prescriptive, science emphasizes progress, whereas the law emphasizes process.

It is the duty of an expert to furnish the judges with the necessary criteria for testing the accuracy of his conclusion, so as to enable the judge to form his own independent judgement by application of the criteria to the facts proved in evidence and to come to an independent conclusion, though he may give his opinion in certain cases but such an opinion is not binding on the court.

As expert is such a class of persons who is to assist the court whenever court thinks such a question is to be answered by expert. For that law imposes specific obligation upon persons holding themselves out as qualified to express expert views. And that obligation as Lord Copper in Davie v. Magistrates of Edinburgh, defines is to furnish the judge or jury with necessary scientific criteria for testing the accuracy of their conclusions so as to enable the Judge or jury to form their own independent judgement by the application of these criteria to the facts proved in evidence.

In R v. Harris and others 'the duty of an expert witness is to provide independent assistance to the court by way of objective, unbiased opinion in relation to matters within their expertise. This is a duty that is owed to the court and overrides any obligation to the party from whom the expert is receiving instructions.'

The expert must be impartial and unbiased. An expert must be independent of the parties to the proceedings and he should not usurp the role of the advocate or judge in proceedings. In case R v. Cleobury, a DNA expert sought in his report, prepared for the purpose of an appeal, to criticise the judge’s summing-up in the original trial and commented on the importance of the forensic evidence to the case as a whole.

Chamkaur Singh v. Mithu Singh 'the expert’s overriding duty is to the Court, not to who call him. The opinion of the expert is very important and the court has to
determine the lis keeping in view his opinion. Any lapse or mistake due to lack of skill by the expert can lead to grave and manifest injustice to a party. Keeping this in view, this Court is of the opinion that since the opinions of handwriting and fingerprint expert who examine the questioned documents, thumb impressions, signatures, forged documents etc. is very important and has a direct bearing on the credibility of evidence.

As in this case there was a objection on the documents that the questioned documents were forged and fabricated and material alterations and additions had been made therein.

*V. Kishan Rao v. Nikhil Super Speciality Hospital & Another*\(^1\) ‘the duty Expert witness is to explain the technical issues as clearly as possible so that it can be understood by a common man.’

Justice H.Dattu stated that *an expert is not a witness of fact. His evidence is really of an advisory character. The duty of an expert witness is to furnish the Judge with the necessary scientific criteria for testing the accuracy of the conclusion so as to enable the judge to form his independent judgement by the application of this criterion to the facts proved by the evidence of the case.*\(^2\)

Expert is to not take the role of court; the opinion of an expert may not have binding effect on the court. The court does not become functus officio because of an expert opinion the ultimate opinion has to be formulated by the court.\(^3\) So, the duty of an expert is only to depose and not to decide.

In *White Burgess Langille Inman v. Abbott and Haliburton Co.*\(^4\) case speaking on behalf of court Justice Cromwell noted that experts have a duty to the court to give fair, objective and non-partisan opinion evidence.

### 2.9.2 FUNCTIONS:

The purpose of the expert witness is to help the finder of fact as to a judge or jury, so that they for example come to a right conclusion. The analysis of the expert witness may shed light on facts that might not otherwise have been demonstrated by witnesses without specialized knowledge, and the analysis may corroborate or discredit the prior testimony of previous witnesses. Expert witnesses are permitted to offer

\(^{111}\) Ramesh Chandra Agarwal v. Regency Hospital Ltd. & Ors Civil Appeal No. 5991 of 2002 (SC).
\(^{112}\) Thyssen Stahlunion GmbH v. Sail, AIR 2002, Delhi 255.
\(^{113}\) Supra note 93.
scientific, technical and other specialized information that will assist the trier of fact. The skilled witness must demonstrate to the court that he or she has relevant knowledge and experience to give either factual evidence, which is not based exclusively on personal observation or sensation, or opinion evidence. Where the skilled witness establishes such knowledge and experience, he or she can draw on the general body of knowledge and understanding of the relevant expertise.

The job of the expert witness is not simply to articulate their client’s position; it is to assist the decision maker with the information about the specialist area which is necessary before a decision can be made. Expert has not to usurp the function of the court; he has to inform the court on the aspect for which he is hired.

Dr. B. R. Sharma while exploring the function of expert says that the chief performer in the presentation of the expert evidence is the expert. He must see that:-

1. He is thorough in his examination, has prepared the notes and the illustrations properly, consulted literature and discussed the evidence with his subordinates, colleagues and superiors.

2. He does not allow his imagination to go beyond the realm of observed facts. He does not bluff, does not lose temper, does not hasten with his opinion of the incomplete data, and does not have a bias or the dishonest intentions.

3. He does not profound and maintain complicated and unintelligible theories dogmatically, by using his sounding words and jargons.

4. He takes sufficient time to consider all the factors and utilize the available sources of information to solve the problem put to him.

5. His conclusions are clear, unambiguous, definite and brief. He knows their degree of accuracy or probability.

6. He is conversant with the latest development in the field.

7. His language is that of the layman. If technical terms have to be used they are kept to the minimum and they are fully explained, if

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116. Sutherland Robert, Expert Evidence - The Role, Duties And Responsibilities of The Expert Witness In Litigation, April, 2009, Pg. 1.
117. Supra note 52.
necessary, with diagrams, sketches and photographs. If the expert cannot bring the technical evidence to the level of the educated layman, he is not doing his function properly.

In *People v. Chapple*\(^{118}\) 'the purpose of expert testimony is to provide an opinion beyond the common experience, dictates that the witness possess uncommon, specialized knowledge.'

Mr. Justice Barr in the year 1999 observed that the function of expert witness is to assist the Court in arriving at the truth by providing a skilled expert assessment which is objective and fair of matters requiring a specialized appreciation of the particular problem at issue.\(^{119}\)

The function of a witness is to testify as to his or her knowledge of facts as he or she perceives them, but not to express opinions or draw inferences from those facts.\(^{120}\)

Lawton L.J.\(^{121}\) laid down expert evidence function as *their function is to provide the court with information about a point at issue or to help tribunal of fact to interpret information about a point at issue, which is out with the knowledge and experience of that tribunal.*

Expert is to furnish the court with the basic scientific and technical data and to present inferences on point. By assisting the lawyers in the preparation of the case an by giving him advise he plays the role advisor and the case reaches the court he by giving opinion he assist the court in reaching to the conclusion and help the court in giving right decision.

*Dickson J. in R v. Abbey*\(^{122}\) stated: 'With respect to matters calling for special knowledge, an expert I the field may draw inferences and state his opinion. An expert’s function is precisely this to provide the judge and jury with a ready-made inference which the judge and jury, due to the technical nature of the facts are unable to formulate. An expert’s opinion is admissible to furnish the Court with scientific information which is likely to be outside the experience and knowledge of a judge or

120. McGrath Evidence (2005) para. 6-01 and 6-02.
121. Regina v. Turner (1975)1 Q B 834.
jury. If, on the proven facts a judge or jury can form their own conclusion without help, then the opinion of the expert is unnecessary.'

Basically, expert witness performs two primary functions or role firstly he/she plays the scientific or forensic function by collecting, testing, evaluating the evidence that either collected by him/her or either sent to him/her and after forming opinion, communicate it to judge or jury, play the role of educating expert witness who explain the scientific criteria to the judge and jury, explains the methods and reason for reaching to such an opinion.