

# The Role of Forensic Biology in Realising Maqāsid al-Shariah (The Objectives of Islamic Law)

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## Abstract

*Maqāsid al-Shari'ah* preserves every *masālih* or *al-Daruriyyāt* (essential), followed by the *al-Hajjiyyāt* (complementary benefits) and the *al-Tahsiniyyāt* (embellishments) hierarchically. The most famous *al-Daruriyyāt* discussed in *usūl al-fiqh* (Islamic Jurisprudence) by Islamic scholars are *Hifz al-Din* (the preservation of religion/faith), *Hifz al-Nafs* (the preservation of life), *Hifz al-'Aql* (the preservation of intellect), *Hifz al-Nasl/nasb* (the preservation of life age) and *Hifz al-Māl* (the preservation of property). Hence, it is absolutely necessary to preserve these values for the sake of maintaining tranquillity and calmness. Consequently, forensic biology has been proven consistently has its own role in order to preserve the *al-Daruriyyāt al-Khamsah*. Contributing towards tranquillity and calmness through the priority of justice for example, forensic biology has shown its function years by years with the advanced development and rapid evolution of technology, has helped a lot in convicting crimes. This indicates that forensics itself is an important part in bringing the element of justice in *Hifz al-Nafs*. As an illustration, DNA typing, fingerprint analysis, odontology, serology and others play important role towards realising *maqāsid al-Shari'ah*. Yet, researches have to be conducted to correlate on all these items mentioned. As a pioneer, this article aims to demonstrate on how forensic biology could realise *maqāsid al-Shari'ah*. The objectives are to highlight the relations between *al-Bayyinah* and *maqāsid al-Shari'ah*, to highlight the relations of *al-Qarinah* and forensic biology, to analyse on cases that solve by forensic biology which under the theme of *al-Daruriyyāt al-Khamsah*. As a significant, research uses content analysis on selected cases of study and document analysis by literature review as the methodology. At the end, research found that forensic biology can be classified under the topic of *al-Qarinah* in *al-Bayyinah*, *al-Bayyinah* is one of prior means to achieve *maqāsid al-Shari'ah* in Islamic criminal law, DNA profiling, fingerprint analysis and serology play vital role in realising *maqāsid al-Shari'ah* and forensic biology helps in realising *maqāsid al-Shari'ah* through the preservation of *al-Daruriyyāt al-Khamsah*.

**Keywords:** Forensic biology; DNA profiling; fingerprint analysis; serology; *maqāsid al-Shari'ah*; *al-Qarinah*

## Abstrak

*Maqāsid al-Shari'ah* memelihara setiap *masālih* atau *al-Daruriyyāt* (keperluan asas), diikuti dengan *al-Hajjiyyāt* (keperluan biasa) dan *al-Tahsiniyyāt* (kesempurnaan) secara berturutan. Nilai-nilai *al-Daruriyyāt* yang terkenal dibicarakan dalam bidang *usūl al-fiqh* oleh ulama' Islam adalah *Hifz al-Din* (pemeliharaan kepada agama), *Hifz al-Nafs* (pemeliharaan nyawa), *Hifz al-'Aql* (pemeliharaan akal), *Hifz al-Nasl/nasb* (pemeliharaan keturunan) and *Hifz al-Māl* (pemeliharaan harta benda). Adalah menjadi suatu kepentingan untuk menjaga nilai-nilai ini untuk memastikan keamanan dan kesejahteraan. Bertitik-tolak kepada itu, forensik biologi telah terbukti mempunyai peranan tersendiri dalam memelihara *al-Daruriyyāt al-Khamsah*. Sumbangan kepada kesejahteraan dan keamanan dengan memberi keutamaan kepada keadilan sebagai contoh, telah menunjukkan peranannya dari setahun ke setahun beserta dengan perkembangan pesat dan evolusi dalam teknologi, telah banyak membantu dalam mensabitkan sesuatu jenayah. Justeru kajian perlu dilakukan untuk mengaitkan semua elemen tersebut. Sebagai rintis, artikel cuba menunjukkan bagaimana forensik biologi boleh merealisasikan *maqāsid al-Shari'ah*. Objektif kajian adalah untuk menentengahkan perkaitan antara *al-Bayyinah* dengan *maqāsid al-Shari'ah*, menentengahkan perkaitan antara *al-Qarinah* dengan forensik biologi, menganalisis kes-kes yang diselesaikan dengan menggunakan forensik biologi yang mempunyai berada di bawa tema *al-Daruriyyāt al-Khamsah*. Sebagai sat signifikan, kajian menggunakan analisis kandungan terhadap kes-kes terpilih dan analisis dokumen melalui kejian kepustakaan sebagai metodologi kajian. Akhir kajian, ditemukan bahawa forensik biologi diklasifikasikan di bawah tajuk *al-Qarinah* dalam *al-Bayyinah*, *al-Bayyinah* adalah salah satu sumber bagi mencapai *maqāsid al-Shari'ah* dalam undang-undang Islam, pengprofilan DNA, analisis cap jari dan serologi memainkan peranan besar dalam merealisasikan *maqāsid al-Shari'ah* melalui pemeliharaan *al-Daruriyyāt al-Khamsah*.

**Kata kunci:** Forensik biologi; pengprofilan DNA; analisis cap jari; serologi; *maqāsid al-Shari'ah*; *al-Qarinah*

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## 1.0 INTRODUCTION

Constant evolution in human society nowadays brings out life into more sophisticated and completely advanced days by days. The influences of technology in human daily life cannot be doubted as it eases and make the daily task to become more efficient thus resulted to settle up on problems beyond the expectation. As human need technology in order to stipulate and maintain an effortless life, world need the advancement of technology to improve on human essential values. Forensics for example, is one of the most rapidly developed fields in science and technology. As time passed, everyone knows that forensics merely gives benefits in judicial aspect in the help of

solving cases and convict crimes. Moreover forensics has shaped the world of justice setting up its prior to be in higher level in court. Without forensic biology for example, the truth behind some of the most criminal actions would still remain a mystery. In the same time, *Shari'ah* (Islamic law) is generally predicated on benefits to the individual and the community, and it is aimed to keep, protect, and preserve benefits in order providing towards a better condition of human life on earth. *Maqāsid al-Shari'ah* is the knowledge of the objectives or the purposes that Allah (s.w.t) has taken into account in creating the laws of Islam discussing on why of the particular legislation legislative (Ibn 'Ashur, 2001).

Consequently in Islam, *al-Qarinah* (circumstantial evidence) has been used to prior justice in first place. In a short glimpse, there is a correlation between forensic biology and *al-Qarinah* in preserving human essential values give a general hypothesis that forensic biology has its own role in preserving the five essential values in *maqāsid al-Shari'ah* namely faith, life, lineage, intellect and property. Hence, researches must be conducted to discover more about the relationship between forensic biology and *maqāsid al-Shari'ah*. Certainly, with the advancement of technology and the development of new methods and techniques in this forensic study will precise and increase the accuracy of solving crimes. The question is how does the forensic field preserve human essential values? What does the forensic biology provides in the preservation of human essential values from the view of *maqāsid al-Shari'ah*? How forensic biology can realize the *maqāsid al-Shari'ah*? Yet those questions need to be answered.

## ■ 2.0 AL-BAYYINAH (EVIDENCE) AND MAQĀSID AL-SHARI'AH

As an equally significant aspect of evidence Islam with the 'conventional' evidence, the importance of evidence in Islam proved to be absolutely necessary as it is an evergreen topic discussed in Islamic law through the scripts of al-Qur'an and al-Sunnah. Islamic law seeks for a number of goals and aims, and it is including to provide and pursuit justice in first place (Anwarullah, 1999). In the era of Caliph Harun al-Rashid, Qadhi Abu Yusuf at that time advised the caliph that he should consider the presence of evidence in judging any cases related the complaint made by a plaintiff (Hallaq, 2004). In a discussion on the topic of *al-Bayyinah* here, there are three different views which conclude on the definition of *al-Bayyinah*. The first view is entitled by the Shafii (al-Khatib, 1994), Hanafi (al-Sarkhasi, 1993) and Hanbali schools (Qudamah, 1968) which consider *al-Bayyinah* as the testimony of witnesses (*al-Shahadah*). Ibn Hazm adds '*ilm Qadhi* (knowledge of judge) as a part of *al-Bayyinah* definition and considered as the strongest type of *al-Bayyinah* (Ibn Hazm, n.d.). While the third view is represented by the jurists of the seventh century of *Hijrah*, namely; Ibn Taimiyyah (Ibn Taymiyyah, 1995), Ibn Qayyim (Ibn Qayyim, n.d.), Ibn Farhun (Ibn Farhun, 1986), Abi al- Hasan al-Tarabulsi (al-Tarablusi), and Ibn Gharas (Ibn Nujaym) which after a long elaboration come to an end that *al-Bayyinah* is a name for anything that can demonstrate the truth which extent the meaning more than the testimony of witnesses (Ibn Qayyim, n.d.). This study uses the third opinion as it could lead to justice including *al-Qarinah* (al-Zuhayli, 2006: 586). As for this study, *al-Qarinah* will be considered as a part of *al-Bayyinah* referring to the third opinion.

Verily, the *maqāsid al-Shari'ah* (refer Figure 1 for the classification) in the implementation of Islamic law is to help in placing the justice and eliminate the unjust (Ibn 'Ashur, 2001). One of the biggest *maqāsid* is to preserve the human institutional system which cannot be achieved without any emphasise on the human institutional law. For a clearer view, the focus of Islamic law namely; *al-Hudud*, *al-Qisas*, *al-Diyat* and *al-Ta'zir* are to educate wrongdoer, to give satisfaction towards the victim and the family and provide instruction (model) to the people as not to do the same crimes or wrongdoings (al-Sulami, 1991; Ibn 'Ashur, 2001; Ibn Qayyim, 1991). These prior elements of Islamic law are contributing to preserve *al-Darūriyyāt al-Khamsah* within the topic of *al-Darūriyyāt* in *maqāsid al-Shari'ah* (al-Shātībī, 1997). Significantly, *al-Bayyinah* is one of the means of proof to help the judge come into a correct decision (al-Zuhayli, 1982). Barakat Ahmad (2005) says that *al-Bayyinah* has a big role in the preservation of *al-Darūriyyāt al-Khamsah* in every matters related such as in the preservation of *al-mal* (property) (Mulhim, 2005: 71), human rights (Mulhim, 2005: 84), *al-Nasl* (lineage) (Mulhim, 2005: 117). Generally the classifications stated are basically linear to overall concept of *maqāsid al-Shari'ah* as mentioned in Surah *al-An'am* from verse 151 until 154 and in Surah *al-Isra'* from verse 23 until 26. In a simple way, *al-Bayyinah* is a vital part of the realization of *maqāsid al-Shari'ah*. (please refer to Figure 2).

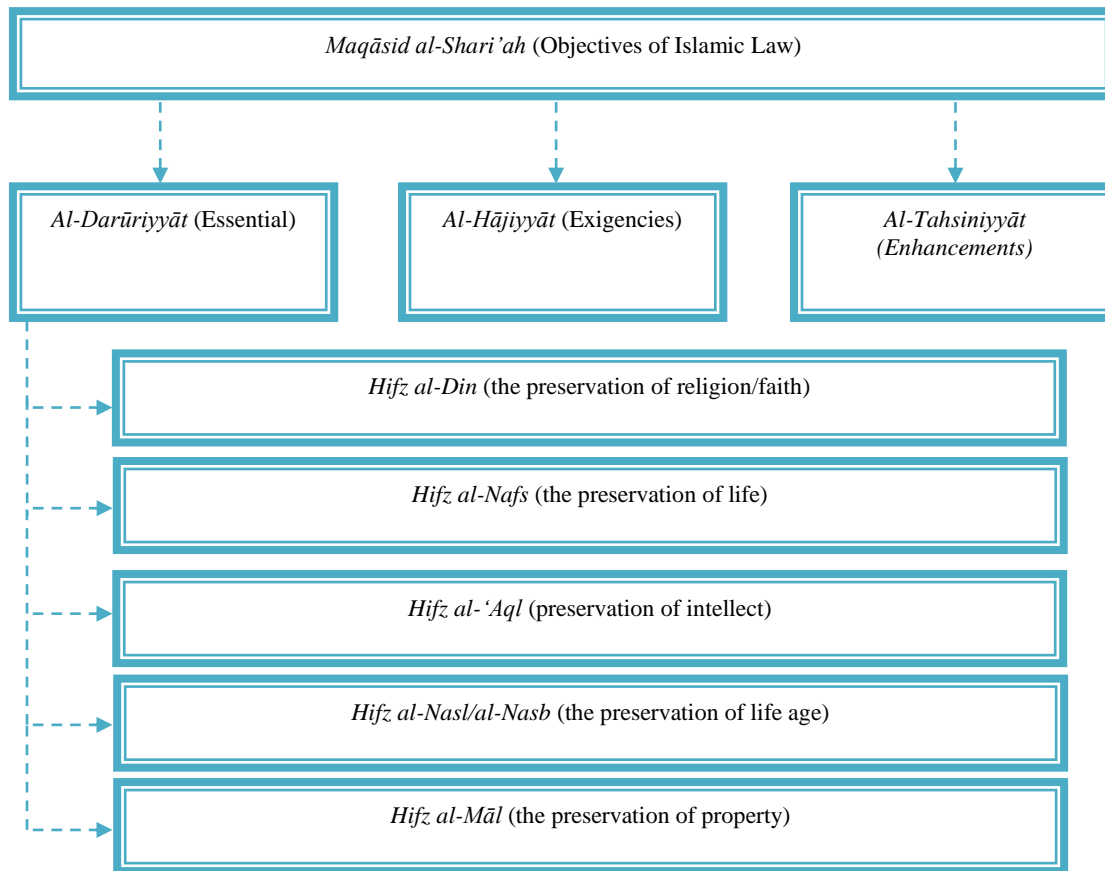


Figure 1 Hierarchy of the objectives of Islamic law (dimension of levels of essential) adapted from (Auda, 2010: 3; al-Shātībī, 1997)

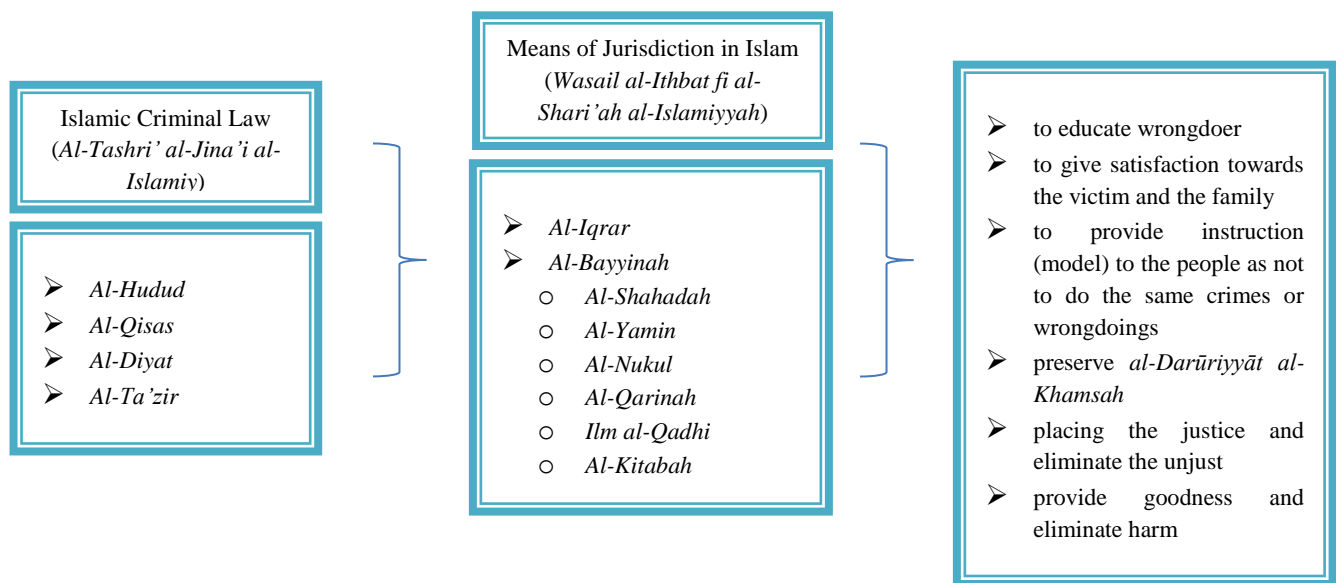


Figure 2 Relations between *al-Bayyinah* and *maqāsid al-Shari'ah* adapted from: (al-Shātībī, 1997; al-Sulami, 1991; al-Zuhayli, 1982; Ibn 'Ashur, 2001; Ibn Qayyim, 1991, n.d.; Mulhim, 2005)

### ■3.0 FORENSIC BIOLOGY AND ISLAM

Etymologically, the noun *forensic* derived from *Latin* word '*forensis*' which means 'of the forum' which '*forum*' here as recorded in the ancient time of Roman Empire, the Senate used to openly has public discussion and conduct its meeting in place called 'forum' (Alfonso R. Gennaro, 1935; Inman, 2001; Siegel, 2007). As in Webster's Dictionary (1996), it can be defined as solving legal problem through scientific analysis of physical evidence. Meanwhile biology strictly refers to study of living creature which consists of various aspects of science such as structure, origins, reproduction, function, development, growth and behaviour, including taxonomy (the categorization of organisms into certain groups), physiology (the investigation of function of the organism), immunology (focussing on immune system), genetics (the study of inheritance), and ecology and evolution (Couch, 2014). Epistemologically, forensic biology covers on the application of biological analysis and serological methods in legal investigations which includes many branches of biology such as pathology, anthropology, entomology, odontology serology, and fingerprint analysis (*Encyclopedia of Science And Technology*, 2007). It is recorded that forensic biology (fingerprints) has been discovered to be used in the as early as in 700s A.D. by Chinese to establish identity of documents and clay sculptures (Pass, 2009; Sharma, 1989).

In the light of the perfection of Islam, it is easy to see that forensic biology has been discovered since the earlier presence of this religion. There are few cases mentioned in al-Qur'an and al-Hadith explaining about forensic biology historically. In the earlier period of Islamic history, as told by the al-Quran in many verses that there are many cases and stories related with the forensic biology in general. For an example, at least three stories related with forensic evidence and investigation mentioned in the story of Prophet Yusuf in the Surah Yusuf verses number 18 (al-Suyuti, 1993; Sha'rawi, 1997; Sayyid Qutub, 1993), in verse 27 (Sha'rawi, 1997: 6924; al-Suyuti: vol. 1, 107) and also in verse 94 (al-Suyuti, 1993: 317). Those verses are all about fume and smells detection, torn shirt (construct of crime scene investigation) and fake blood of lamb used in a tragic event of throwing Prophet Yusuf down to the bottom of the well.

Moreover, the forensic biology appears to be highlighted in the period of Prophet Muhammad (s.a.w.) in many cases such as the story of the death of Abu Jahal in the Battle of Badr by sons of 'Afra (al-Bukhari, 2001: Hadith no. 3141; Muslim, 1981: Hadith no. 1752), case of Hilal Bin Umayyah (al-Bukhari, 2001: Hadith no. 2671; Muslim, 1981: Hadith no. 1134). Regardless on few more cases in the period of the Prophet Muhammad (s.a.w.) such as a man claimed that his child is not from his blood (*Al-Mausu'ah al-Fiqhiyyah al-Kuwaytiyyah*, 1995; Ibn Rajab, 1996). Also to be recalled in the case of a woman and an Ansar man that the case shows that there were forensics analysis on semen marks further investigation on the case. This case was happened in the period of Sayyidina 'Umar al-Khattab when he became a *Khalifah* (Islamic leader) (al-Najdi, 1970; Bahnasi, 1989; Ibn Qayyim, n.d.). The use of hot water as reagent to analyse on semen marks was remarkable. Next, forensic biology once again become famous in the same period when there was a case that a woman claimed that she was being raped and accused for fornication due to the evidence that she was pregnant without marriage at that time (Ibn Qayyim, n.d.). These are few cases that make senses in the Islamic history of forensics.

### ■4.0 DNA PROFILING, FINGERPRINT ANALYSIS, SEROLOGY AND AL-QARINAH

As mentioned before, it is believed that forensic biology (fingerprints) has been discovered to be used in the as earlier human civilisation until recent ages (Bailey, 2013; Hamlin, 2013; Sharma, 1989). Setting up the scope of this study to three most used, important and famous area of forensic biology (Ate Kloosterman, 2014): Deoxyribonucleic Acid (DNA) profiling, fingerprint analysis, and serology that indicate the importance of biology in forensic science thus to be correlated with the concept of *al-Qarinah* in Islam.

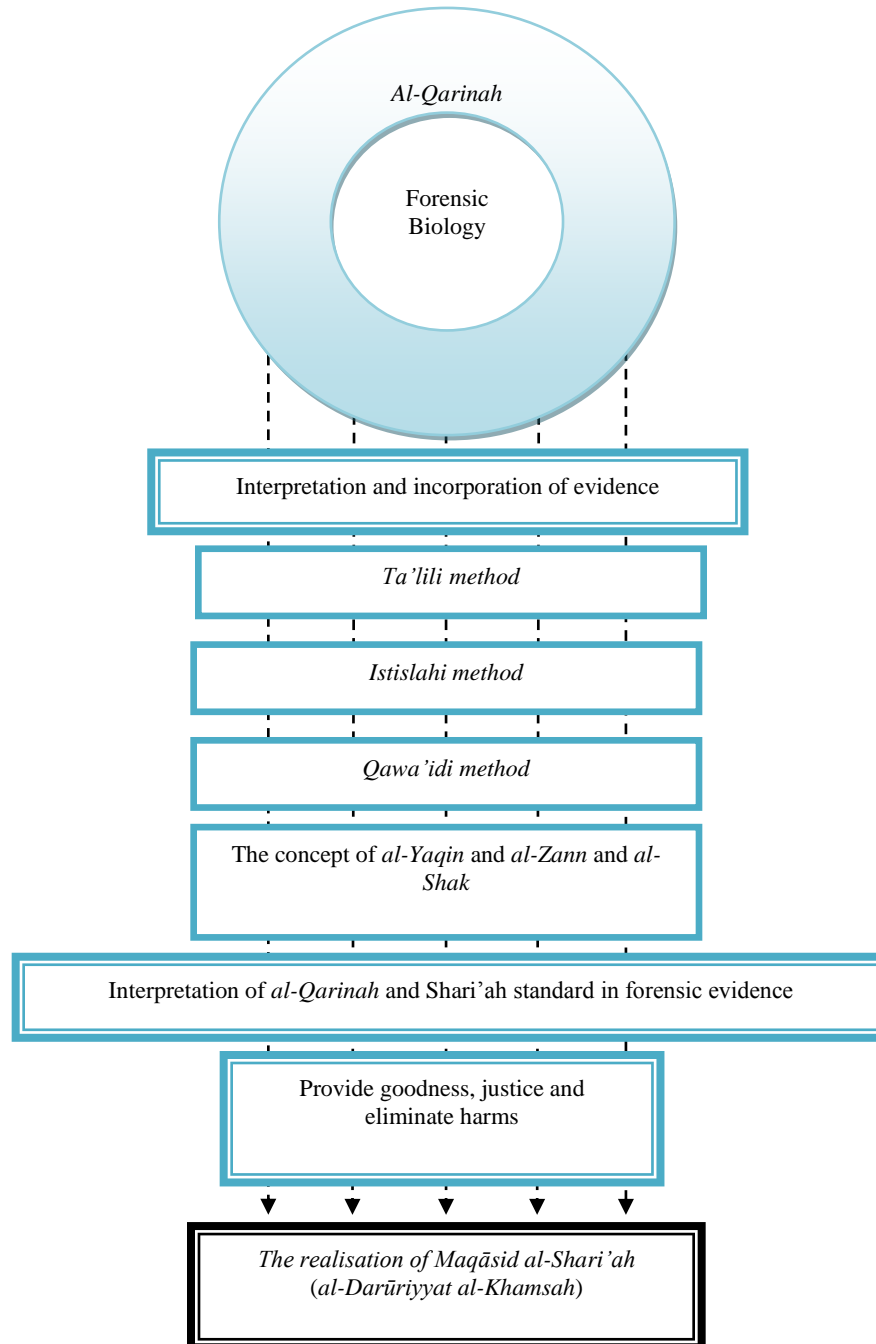
In brief, DNA carries genetic information, chain of sugar and phosphate elements in organic bases that present in nearly all living organisms DNA profiling also known as DNA typing, DNA testing, or fingerprinting genetic) assists to identify and provide enough information of individuals by their respective DNA profiles. DNA profiles outlines sets of numbers that represent a person's DNA makeup, which is an identification of the person. It is widely used in parental testing and criminal investigation (Pass, 2009). As in Malaysia, it has been used widely in civil court as supportive evidence and in less than ten cases in Shari'ah court (Daud, 2003). Fingerprint analysis analyses on fingerprint classification, patterns, and everything related in order to solve crime through fingerprint left at crime scene (*Encyclopedia of Science And Technology*, 2007). Furthermore it is a great significance in forensic science that also can be a benchmark of the advancement in the world forensic science (Siegel, 2007). As B. Sharma (1989) stated that fingerprint analysis complied with major principles forensic science such as the Law of Individuality and The Principle of Exchange. In addition, serology includes the investigation of bodily fluids, particularly the likes of saliva, semen, blood, all of which are commonly found at certain crime scenes (*Encyclopedia of Science And Technology*, 2007). Actions required in defining and visualising the stain when it first discovered because some of the samples are hard to be perceived by the naked eye, and need special types of light or chemical reagent to disclose their presence (Pass, 2009).

*Al-Qarinah* basically has not been defined precisely in the classical books of Islamic penal law as the definition of other methods of proofs (Ramli, 1997: 46). Perhaps, al-Jurjani was the person who could be considered as the first jurist who made an effort to define *al-Qarinah* in the juridical sense. According to him *al-Qarinah* means: A matter that indicates to what is searched for (al-Jurjani, 2000: 175). Having considered that the definition given by Zaydan (2002) is more in-line and consistent with overall view of Islamic jurisprudence, *al-Qarinah* defined as: whatever signs or attributes which show or indicate the existence or non-existence of something. Daud (2003) in his research says that this definition is supported, agreed and approved by numerous scholars to be complied with. It can be seen from the above definition that forensics, inclusively forensic biology can also be defined under this broad definition of *al-Qarinah*. In this manner, every guidelines and Shari'ah standards must be applied in order to comply forensic biology with *al-Qarinah*. It could also be said that this forensic biology have to be read together with the *Qawā'id al-Fiqhiyah* (legal maxims) related, (*usul al-Fiqh*) basic principle of Islamic jurisprudence within the consideration of the concept of *al-Yaqin* (certainty) and *al-Zhann* (presumption) and *al-Shak* (doubt) and in a careful thought of realising *maqāsid al-Shari'ah*. Moreover in a famous al-Hadith that always be used as indicator in the Islamic crimes matter as narrated by Muslim in his Sahīh on the authority of Ibn Abbās that the Prophet (s.a.w) said (Muslim, 1981):

"If people were granted what they claim some would claim the blood and the property of certain people, but taking an oath is on the part of the defendant."

(Muslim: Hadith no.1711)

Correspondingly, this al-Hadith brings out an interpretation of a maxim that related to the field of *al-Qarinah* that is the maxim of *al-Bayyinah 'ala al-Mudda'i wa al-Yamīn 'ala man ankara* (Evidence is for the claimant and the oath for him who denies) (al-Suyuti, 1990). This maxim begins to be a standard maxim in Shari'ah law which simply means 'the claimant must present evidence and the one who denies the charge must swear an oath' (al-Hamawi, 1985). Legal maxims related such as *al-Bayyinat li ithbāti khilāf al-Zāhir wa al-Yamīn li ibqā'i al-asl* (Evidence is to prove what is not an evident and an oath to affirm the original state), *la 'ibrata li al-tawahhum* (no attention must be given to delusion) and few more should be applied for this basis. Moreover, the opinions from both *manhaj* (method) Shafi'iyyah and al-Ahnaḥ in *usul al-Fiqh* regarding the matter of *al-Qarinah* are worth to be retrieved. In the final analysis, it must be determined that the output that derived from the forensic biology analysis match the concept of *al-Yaqin* and *al-Zann* and *al-Shak* in Islam to decide the evidentiary weight (Haneef, 2006). Therefore to be able to assimilate to the Islamic way of life, major things discussed in *maqāsid al-Shari'ah* namely *Sadd al-Dharai'* and *al-Masālih al-Mursalah* (Unregulated Benefits) have to be taken into consideration (al-Sulami, 1991; Auda, 2010). This kind of application uses *ta'lili* (reasoning), *istislahi* (beneficial) and *qawa'idi* (maxims) method in the determination of any evidence interpretation (Abu Zahrah, 1958; al-Amidi, n.d.). All of these mentioned are crucial part of *al-Ijtihad al-Maqasidi* (Auda, 2011). (Please refer to Figure 3).



**Figure 3** Theoretical flowchart in the acceptance of output derived from forensic biology analysis in Islam. Source: (Abu Zahrah, 1958; al-Sulami, 1991; Auda, 2010, 2011; Haneef, 2006)

## ■5.0 FORENSIC BIOLOGY AND THE PRESERVATION OF LIFE, DIGNITY AND PROPERTY IN *MAQĀSID AL-SHARI'AH*: A CASE STUDY

Let us take a look on different cases of study related to the three types of forensic biology as mentioned before. First and foremost on March 1990 in West Virginia where the case of Robert Knight took place (Thiller, 2013). In this case, the body of a young 22 years old female Dawn Bruce who had been sexually harmed and stabbed to death was discovered in her home. Crime scene provides less informative evidence. Blood stain was found on a pillow near to victim's body. Even though many persons were investigated thoroughly throughout the inquiry, however the main suspect was the next door neighbour, Robert Knight. During the post-mortem examination, semen was found on the victim's leg which matches the suspect's initial serological report that had a relatively rare blood type. Not long after that, on August 7th of the same year, his original full set of inked fingerprints were compared with the latent print from the crime scene. The left thumb of Knight was considered to resemble the crime scene print. Moreover, results from the DNA analysis then revealed the identity of the suspect to be Knight. Ridge details had been expressed by a faint stain upon the examination of the bloodstains. Hence, some of the stains seemed to have been moved to crime scene from a knife, even though no knife had been found at crime scene. In relation to this case, the use of serology, fingerprint analysis, and DNA profiling has been proven to provide enough evidence in order to find the real killer (Central, 2013).

Secondly is the case of 'The Mad Carpenter' in 1901 (Central, 2013) that involves the analysis of serology in the case. As for this case, Ludwig Tessnow, a carpenter from Baabe, Germany was charged, accused, convicted, and executed based on the evidence came from serology analysis at that time. It was the savagely violent murder and dismembering of two young boys on the island of Rugen, in Germany. At once, there was lack of evidence to convict on the crime made by Tessnow even though there was a high presumption from investigator that Tessnow killed those boys. Until the local prosecutor then used the test that recently developed by a biologist, Paul Uhlenhuth that could recognize and eliminate blood from other particular substances, as well as mark the difference between animal and human blood. Tessnow had claimed that the stains found on his cloth were from wood dye. Later, Tessnow's clothing was given to Uhlenhuth for further in depth examination and his conclusions found dye and also detected traces of both sheep and human blood.

Let us jump to the case study of John Dillinger (Cummins, 1934) a criminal that committed to his first bank robbery at the age of 22 years old. He killed 10 men, wounded 7 others, robbed numerous banks and police arsenals, and committed 3 jail breaks in less than a year during 1933 and 1934 in Midwestern United States. Dillinger was released from prison 8.5 years after he was sentenced for 20 years sentence. Very soon, he robbed a bank in Ohio, escaped from prison, killed the sheriff, robbed many banks in several states, stole weapons from two police arsenals in Indiana, freed captured gang members from two different police stations, and killed several police officers. Police in Arizona intercept John shortly after he killed a police officer during a bank robbery in Indiana. After escaping for the fifth time from jail, while in Chicago, Dillinger decided to have plastic surgery to change his facial features and his fingerprints with the use of strong acid applied to the tips of Dillinger's fingers to destroy the ridge patterns. Despite his attempts to alter his fingerprints Dillinger's prints were still successfully identified because each print still had individual ridge characteristics that matched his original fingerprints (Central, 2013). In fact, it is likely that with time all the skin damaged on Dillinger's fingertips would have regrown to restore his original fingerprints.

These three cases demonstrate on forensic biology plays a great significant towards solving cases related to human life, dignity and property. As for the Robert Knight case, semen, fingerprint and blood stain found in the case gives appropriate evidence to reconstruct the crime. By that time, the initial serological report provided a match with the suspect, who had a relatively rare blood type and the analysis of blood stain assumed that Robert Knight was at the scene within the consideration of marks from fingerprint left at crime scene. The case of 'The Mad Carpenter' used the blood stain test and analysis to support the presumption of real killer. Meanwhile for the case of John Dillinger, forensic biology heavily 'busy' as this case was very complicated. At the end, fingerprint analysis once again proved to link every crime related to John Dillinger as time passed. Robert Knight case involved the essential value of human life and dignity, Tessnow's involved the value of human life while the case of John Dillinger involved the three essential values those are human life, dignity, and property. In general, *maqāsid al-Shari'ah* preserves these three essential values as it is classified under the purposes of Islamic law. The presence of biology in forensic indicates that the thorough the investigation, the criminal can be executed with beyond reasonable evidence thus preventing crimes rate. In this case, the probability to eliminate harm and provide goodness to society can be realised by the accusation of criminal. In this case, the maxim of *al-Aslu fi al-Bara'at al-Zimmah* (The original state is freedom from liability) and *al-Shak mufassar limaslahti al-Mutaham* (Doubt shall be interpreted for the defendant's interest) can no longer be applied because of the evidence from forensic biology (al-Suyuti, 1990). From the beginning, defendant has freedom until it is certainty proven that he is the criminal. Hence forensic evidence determined the probability crime made by suspect authority must arrest this suspect in advance to prevent more crimes. Regardless the acceptance issue of *al-Qarinah* in Hudud and Qisas cases, it is proven here forensic biology plays the most important role to provide goodness and eliminate harm which is the main purposes in *maqāsid al-Shari'ah* (al-Shātībī, 1997). This study found that through cases of study and content analysis made, biology in forensic science can help in realizing *maqāsid al-Shari'ah* and has great significant to Islamic world. Research found that:

## ■6.0 CONCLUSION

Given, the role of forensic biology outlined in the previous paragraph, it is quite certain to conclude that in the preservation of life, serology, DNA analysis and fingerprint test help in preserving life, dignity and property which is parts of *maqāsid al-Shari'ah*. In line with this brief analysis, further research has to be conducted to discover in depth the relationship between forensic science, *al-Qarinah* and *maqāsid al-Shari'ah* as there are much question to be answered. Moreover, forensic science evolves rapidly and very fast, to be linear to the development of technology Islamic law must adapt into this field to avoid being label as out dated and irrelevant as time passed. Consequently, as an implication to Islamic research field, this study will be just an eye opener towards better researches. Having the consideration to suggest on the research related to other field of forensic science such as forensic chemistry, physics, crime scene investigation, and other subarea in forensic biology field namely odontology and entomology to be correlated with Islamic law and

jurisprudence. In addition, further critical studies can be conducted to review and revised on some classic opinions regarding the acceptance of *al-Qarinah* in Islamic criminal law need to be done due to the changing of time and era. Allah knows best.

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