## LITERATURE SURVEY

[1] Denuis O'Neil (1999). "Plasma component" Archived from the original on June 5, 2013. Normally, certain amount of human body weight comes from blood. For adults, it is 4-6 litresof blood.Blood contains plasma. This essential liquid plays an important role in transporting oxygen and nutrients to cells and removing carbon dioxide, ammonia and other waste products. Blood is a very common tissue composed of over 4000 different types of components. Blood provides lot of plasma.

[2] ways to keep your plasma healthy, Original Archived November 1, 2013, Accessed November 11, 2011. Plasma donation is one of the most accepted practices for saving lives, While earning a few dollars. The whole process can take some time, but it's well worth it once you experience it a few times. Accepting money in exchange for plasma is welcome. It's a move when you feel like you're not just a hero, but you're adding value to yourself. The term "healthy" does not mean only in the absence of disease. It also means that you are healthy enough.

[3] Ripathis S, Kumar V, Prabhakar A, Joshi S, Agarwal A (2015). "Microscale Passive Plasma Separation: A Review of Design Principles and Microdevices," J. Micromech Micro 25 (8): 083001; Plasma separation is of great importance in the fields of diagnosis and healthcare. Due to the lagging transition to microscale, these recent trends are a rapid shift towards shrinking complex macro processes.

In "Short message service (SMS) based plasma" by G. Muddu Krishna & S. Nagaraju(2016)[1]. They proposed a system in which services of blood bank will be accessed via SMS. If someone needed blood then they have to request for blood via SMS and then packet count module of their system will check for availability of blood and response will be given by data processing module.

b. In "Automated online plasma database" by Muhammad Arif; S. Sreevas; K. Nafseer; R. Rahul(2012)[2]. They come up with direct call routing technique by

using asterisk. In this every blood bank consist of a database and that will be managed by central server. When someone in need of blood call on their tollfree no. they will directly get connected to a donor and after receiving blood from that donor name of that donor will be kept on hold for 8 weeks.

- c. In "Benefits of management information system in plasma" by Dr. Sharad Maheshwari and Vikas Kulshreshtha [3]. They discusses about the beneficiaries of the blood bank management information system. They show advantages and benefits of these systems.
- d. In "MBB: A life saving application" by Ramakant Gawande; Narendra Gupta; Nikhil Thengadi [4]. They come up with a system to link all donors and help in controlling blood transfusion process. Their system will also maintain database which hold data of donors and blood according to their city and further by their locality.
- e. In "plasma donation and life saver: plasma donation app" by Anish Hamlin M R; Albert Mayan J [5]. They introduced a system where when someone wants blood they login into their app and by GIS they can get details of near by blood donors. They also can donate blood by registering themselves.
- f. In "Android plasma" by professor Snigdha, Pratiksha Lokhande, Siddhi Kesar and Pranita More[6] . came up with an android app in which updates information about donors time to time and also it shows all the blood banks near to user location. In this admin controls and have all information of the app.
- g. In "A study on plasma management system" by A. Clemen Teena, k. Sankar, S. Kannan[7]. They made a system through which they can manage information about donors and patients. So that whenever blood is needed they can use this information as blood bank authorized officers have access to this information.

Pah Essah and Said Ab Rahman (2011) developed a plasma management system based on information about the donor, the recipient, and the blood. We propose that the system hasthree modules: However, one crucial issue is left out in this approach, such as who should be responsible for administrating the system.

Their system has three modules: the donor module, the patient module, and the blood module

Wimaladharma (2015) developed a Plasma Bank Management System that can collect all the plasma donors in one place and inform them constantly about the opportunity for plasam donation by SMS to their mobile phones

[4]A patient who has fully recovered from COVID-19 can help patients currently fighting infection by donating plasma. Because it is aninfection killer, the plasma now contains antibodies against COVID-19. These antibodies provided the immune system with one way to fight the virus when it was sick, so plasma can be used to fight diseases. Therefore this paper monitoring recovering patients based on the clustering of data and classifying them using fuzzy hierarchical clustering to reach the plasma as soon as possible.

**Reference:** H. Hao, S. Cheng, D. Wu et al., "Reconstructing the Complete Dynamics of COVID-19 Transmission in Wuhan", Nature, 2020.