

# [Assignment example](https://assignbuster.com/assignment-example-essay-samples-24/)

[Health & Medicine](https://assignbuster.com/essay-subjects/health-n-medicine/)

[Teacher’s Health sciences and Medicine Assignment Arteries Veins Capillaries Take blood away from the heart Carry oxygenated blood except pulmonary artery
Blood under high pressure
No valves
Thick muscular wall
Lumen smaller than veins
Take blood to the heart
Carry deoxygenated blood except pulmonary veins
Blood under low pressure
Valves
Thin muscular wall
Wide lumen
No valves
One cell thick
Smaller than veins and arteries
No muscular layer

Labels
On the right side from top to bottom:
1. Superior vena cava
2. Tricuspid valves
3. Inferior Vena Cava
On the left side:
1. Arch of aorta
2. Pulmonary artery
3. Pulmonary vein
4. Bicuspid Valve
5. Inter ventricular septum
Functions of Blood
Oxygen transport from lungs to body
Carbon dioxide transport from body to lungs
Transport of waste products (lactic acid and urea)
Transport of nutrients
Maintaining homeostatic conditions such as temperature
Immune reaction (transports white blood cells to sites of injury)
Risk factors
Substance abuse (alcohol and tobacco)
Hypertension
High cholesterol
Obesity
Physical inactivity
Poor diet
Metabolic syndrome components
Atherogenic dyslipidemia is a disease associated with raised triglycerides and low concentration of HDL cholesterol.
Abdominal obesity, an increased waist circumference associated with metabolic syndrome.
Prothrombotic state is an increased amount of fibrinogen and plasminogen inhibitor/activator in the plasma.
Proinflammatory state, in this disorder there is an elevated amount of C- reactive protein.
Insulin resistance is associated with metabolic disorder and is considered a risk factor for cardiovascular disease.
Definitions
Atherosclerosis: is a polyetiological disease which has an effect on the intima of the elastic arteries. The major characteristics of the disease include intramural deposits of lipid molecules, proliferation of both fibroblasts and smooth muscles of the vessels. It is also associated with the accumulation of microphages in the vascular walls.
Myocardial Infarction: This is an obstruction of blood flow to the heart which leads to a heart attack. The obstruction occurs for a prolonged period of time leading to dystrophy of the heart muscles.
Angina Pectoris: is a disease associated with a symptom complex of IHD that involves paroxysmal attacks localized in the substernal region caused myocardial ischemia, which is insufficient too cause necrosis that need to myocardial infarction.
Arrhythmia: is a disease which is associated with asymmetrical time between each heartbeat. The beating can either be too fast or too slow at an irregular rhythm.
Bradycardia: is a condition associated with a decelerated heart rate. The heart beats slower than normal.
Tachycardia: is a condition associated with an elevated heart rate. The heart beats faster than normal.
The person is hypertensive.
Difference between percutaneous coronary intervention and coronary artery bypass
Percutaneous coronary intervention is a non surgical procedure that involves treatment of stenotic arteries. It is usually referred to as a coronary angioplasty. Whilst a coronary artery bypass is a surgical procedure. It involves the grafting of other arteries to supply blood to the heart muscle. Percutaneous coronary intervention involves removal of blockage on the same artery.
Ways to prevent and treat hypertension
1. An individual must monitor and maintain a healthy body weight. Obese patients are predisposed to hypertension.
2. An individual should try to maintain his stress levels.
3. An individual should stop any bad habits such as smoking as nicotine causes an increase in high blood pressure.
4. Regular exercise could reduce the chances of an individual getting hypertension.
5. An individual should reduce the amount of salt consumption
6. Olive oil reduces blood pressure
Definitions
1. Hemorrhage is the discharge of blood to the exterior part of the circulatory system from the vascular compartment.
2. Aneurysm is the abnormal increase in diameter of the vessels due to the weakening of the walls.
3. Occlusion is the obstruction or blockage inhibiting the normal passage of blood in the case of coronary arteries.
4. Thrombus is a stationery blood clot formed in the blood vessels and remains in its area of formation.
5. Embolus is the obstruction of circulation by a blood clot or any foreign material.
6. Transicient Ischemic attack is the brief stoppage of blood flow to a certain part of the brain.
7. Rheumatic heart disease is chronic valve damage as a result of rheumatic fever. This can lead to heart failure.
8. Peripheral artery disease is a circulatory artery disease that results in a reduction of blood flow to the limbs.
9. Pericarditis is inflammation of the sac covering the heart.
10. Endocarditis is a condition associated with inflammation of the interior part of the heart chambers and valves.
11. Phlebitis is the inflammation of the vein caused by a blood clot.
12. Hypertrophic cardiomyopathy is the thickening of heart muscle. This thickening is usually local.