



**B.A. PART - II DEFENCE & STRATEGIC STUDIES
SEMESTER-III**

UNIT - 2

**Department of Distance Education
Punjabi University, Patiala**

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LESSON Nos. :

- 2.1 : INDUSTRIAL REVOLUTION
- 2.2 : NAPOLEON'S ART OF WARFARE
- 2.3 : BATTLE OF TRAFALGAR - 1805 A.D.
- 2.4 : AMERICAN CIVIL WAR - 1861-65 A.D.

**Note:- Students can download the syllabus from
departmental website www.dccpbi.com**

Lesson No. 2.1

Industrial Revolution

Introduction:-

The peace in Europe between 1815 to 1848 had brought in opportunities for peaceful pursuits. The state governments of the time were led by conservative statesmen who believed in nationalism, liberalism and social changes. Their attention thus was focussed for the development of trade and industry. Free trade replaced the mercantilist system in economic affairs. Interdependence as much as competition in trade characterised the economic relations amongst states. In real terms, England came out as a stronger power, having emerged victorious from Napoleonic wars besides being the leader of industrial revolution. Towards this end, English trade in world flourished.

The second half of the 18th century saw the inventions and discoveries like a typhoon, which witnessed the arrival of steam-driven machinery, the single horsepower of which was estimated to do the work of 15 men. Thus, the Industrial revolution was born and the man emerged from his caterpillar stage, from his life on the surface of the soil, to rise like a mechanised dragon, into a hitherto undreamt of industrial empyrean.... a way of life so suddenly thrust on him that it could not fail to have cataclysmic impacts on peace and war. It transcended all previous revolutions, including those of the great religious teachers, whose influence, however far-reaching, was limited in radius and before the 19th century had its course. The legions of the industrial revolution lorded the tributes from all non-industrialised people. Lewi's Mumford wrote, "Mechanics became the new religion, and gave the world a new messiah; the machine; 'or atleast' a new Moses that was to lead a barbarous humanity into a promised land."

But what really is industrial revolution? It is the transformation of the domestic system of production to the industrial system of manufacturing, where the method of production corresponds to machinery and mass production of items as compared to domestic system of production. The industrial revolution besides bringing mass production in industries also brought in the improvements in agriculture, defence from the animals and insects, improved quality of seeds, implements etc. As a result of increase in the agriculture production, the economic condition of the man improved. The

struggle for earning more wealth increased many fold. It also increased the urge and jealousy for war domination. This resulted in the invention and discoveries of weapons and equipment as a result of industrial revolution. The large quantities of weapons and equipment were required to replace the old and obsolete weapons. For mass production in industries, more raw material and machinery was required. In addition demand for power in the form of coal and later fuels, oils and lubricants, which were required to run the industries, increased manifold which necessitated the requirements improve communications. The industrial revolution though started in Britain spread in other parts of world within a short span of time.

(a) Impact of the Revolution on Society:-

The most important impact of the industrial revolution was the emergence of a class of permanent wage earners. Before this permanent wage-earners were known as in the domestic system but as individuals and not as a class. The wages they earned were as low as those of the industrial workers. Their hours of work were longer. They were free human beings who possessed humble status in the society of their day. Industrial workers were forced to live in insanitary houses amid sordid surroundings. Their work was repetitive and monotonous and they were subject to strict and frequently harsh factory discipline. The factory owners, in order to earn much profit, forced the workers to live in rotten slums which became hot bed of discontent and class hatred. The rich became more richer and the poor became more poorer. Thus, as industrialisation spread, it created a class of malcontents in every industrialised society.

(b) Impact on weapons of land and naval warfare:-

In 1816, Thomas shaw of Philadelphia invented the copper percussion cap. Before this the discovery of fulminate of mercury was made, an explosive which detonates on concussion, but was not used till 1800. Seven years later, the Revd A Forsyth patented a percussion priming powder composed of chlorate of potash. But the invention of copper percussion cap in 1816 led to the introduction of the percussion operated sporting gun, which reduces the misfires and could be fired in windy and rainy weather.

Cylindro conoidal bullet was invented by captain Norton of the British 34th regiment in 1823. This bullet had a hollow base, which used to expand and seal the base to increase accuracy and give extra range to the bullet. In 1836, Mr Greener, a London Goldsmith improved on cylindro-conoidal bullet by inserting a conoidal wooden plug into the base of this bullet. The British

ordinance department did not approve it and these ideas were taken up in France in 1849 when M. Minnie of France adopted Greeness design and produced the deadly minnie bullet. Ultimately, British govt, approved the minnie bullet in 1851. This was the most deadly weapon of 19th century.

In 1841, Prussia took a bold step forward and issued the Dreyse breech loading rifles to some of its regiments, while the other European Nations were still discussing and disputing the efficiency of flintlock and percussion cap muzzle loaders. The Dreyse breech loading gun is also known as the Needle gun, which is a breech operated weapon firing a paper cartridge. Because of escape of gas at the breech, its range was less than Minnie rifle but could fire seven shots per minute as against two by the Minnie Rifles. The main advantage of these rifles was that these breech loading rifles could be easily and freely loaded even in lying position.

Due to heavy costs, the development of artillery went slow than that of the rifle. Though breech loading and rifling of cannon were replete and old ideas, but the combined experiments were carried out in 1745 in England. It took exactly hundred years for the invention of an effective breech loading. 6.5" rifled artillery gun was developed by Maj. Covally. In 1784 Lt. Henry Sharpnell introduced the spherical case as called by him, which is better known as the 'Sharpnell shell'. This shell was of fragmentation type 'firing high explosive (HE) shell: it was a very lethal shell. The British adopted this in 1803. In the last quarter of 1803, Mercier invented Anti-ship shell. This was known as Merciers operative gun shell; This was a 5.5 inch mortar shell which was adapted to be fired from a 24 pounder gun.

Rocket is an explosive propelled projectile which has been in use in Asia since the 13th century. Col. Sir William Congreve made rockets from 2 ounces (a species of self-motive musket ball) to three hundred weights. These rockets were used by the British for the first time in 1806 at the seizure of Boulogne. Perkin invented a steam operated gun, which was called 'steam gun'. This gun could discharge 1000 rounds per minute which could penetrate ¼ inch thick iron plate.

James Cowan invented another novel weapon in 1855. He took out a patent for a steam driven 'Locomotive land battery fitted with scythes' to mow down infantry. It was a four wheeled armoured vehicle armed with guns and looked like a huge dish-cover on wheels. A steam driven road-vehicle was invented by Cugnot of France in 1769 by bolting a steam boiler to a wagon frame. This was the first steam driven road vehicle. In 1783, Montgolfier brother built the first man lifting balloon which made its maiden flight on 15

oct,1788. Its military usefulness was at once appreciated for reconnaissance purposes. Application of steam propulsion of ships was also experimented in 1775 when James Rumsey a Virginian, constructed a steam boat. It was driven by water jet propulsion. In 1813, Robert Foulton built the first steam propelled armoured ship (the Foulton). In 1836, the steam propeller was changed to screw-propeller. America was the first country to launch the first screw war ship in 1843 having 400 hp engine and giving the speed of 13 knots. The British navy's first screw ship, Dauntless was launched in 1844. In 1776, David Bushnell an American built the first sub-marine which had a one man crew. In 1801 Robert Foulton another American, built a plunging boat called 'Nautilus' which remained under water for half an hour in the Pearl Harbour.

In 1812, Dundonald suggested the use of burning sulphur as an suffocating gas to kill or incapacitate the enemy.

The first locomotive was built by Richard Trevithick, an English engineer, in 1801. In 1812 a travelling engine was made for a tram-road at coillery and shipping port. In 1825, the first true railway came into existence. In 1855, in the Baltic sea, the Russians developed and used mines as floating mines. An entirely new weapon of naval warfare first made its appearance in 1855, though Col. Samuel Colt had carried out an underwater charge in New York harbour earlier on 4 June, 1847. In 1832 Col. Colt patented his design for a revolver in which multi chamber cylinder rotated by cocking the hammer, the upper chamber being auto-matically locked in line with the barrel of the revolver.

(c) Impact on the means of communications-

Another feature of the industrial revolution was the development of communications. When we talk about communications, it has many facets and each facet is as important a part of the communications as the other. The development, growth and impact of communication on civil life and on military is discussed in succeeding paragraphs.

(I) Sea communication

In 1813 Robert Foulton built the first steam propelled armoured ship. Prior to this, the ships had sails to power them. Robert Foulton's ship called 'Foulton' had twin hulls with a paddle-wheel between the hulls and this ship was protected by 58 inches thick timber on all sides. In 1836, John Ericsson was successful. The application of the screw propellers for propulsion of ship and the use of iron instead of wood to provide protection to ships. But, initially the British Admiralty was not in favour of introduction of steam ships. During

the creamean war, except for a few warships having auxilary engines and a number of tug boats were running with steam engine. The entire British naval fleet consisted of wooden sailing ships. Even the introduction of shell gun (by other navies) which made the wooden ships so vulnerable for destruction by the shell gun fire did not deter the British for some strange rea-sons to adopt the steam propulsion system and iron cladding of ships. However, Napolean on the other hand ordered the construction of French Flotila of floating batteries protected by aromour to resist the solid shots and explosive shells. This French move to provide armour protection was very successful. It proved beyond doubt the efficacy of armour protection. So the requirement for more propulsion power for ships arose and they switched over to steam ships. Besides the war ships the cargo ships for transportation also got steam propulsion over a period of time, thus making communication more vital and thus increasing the speedof transport vessels.

(ii) Inland Water Communication

Canal construction was carried out by the British to connect towns with the canal system for shipment of iron, steel,coal and other material.

(iii) Road Construction

The improvement in the road construction which had began at the end of the 18th century continued. In order to carry troops,coal,machinery and iron from one place to an-other especially from harbours to the interior especially to the factories and also from factory to factory and from factories to the markets new roads came up. Old roads were repaired widened pucca roads with coal tar and concrete (made of small pebbles and stone) was first made by Macadam. Thus the pucca roads were also called 'Macadam roads'. Other who contributed to the spread and improvement of road communications besides Macadam were Telford and Metcalf. The first steam driver road vehicle appeared in 1769 a tricycle which was invented by a Frenchman Cugnot which ran for 20 minutes at a speed of 3.6 kmph with a load of four passengers. Thus,with availability of roads&vehicles more and more material was transported by road and more and more people travelled for business and pleasure due to the development of roads and road vehicles as a result of industrial revoultion.

(iv) Rail Communications:-

The first locomotive was built by Richar Trevithick an English engineer, in 1801 it was designed to work on a colliery tramways and it did so with great success. In 1812, one of his locomotive was at work at the Wylon Colliery, New cap castle. George stephenson was so impressed that he authorized the

construction of a "travelling engine" for a tram road between the colliery and the shipping port. On 25 September 1825 the first true railway came into existence. This development had a major influence in the movement of troops from one place to another place, from one theatre of war to another theatre of war very quickly. The railways was a cheaper mode of communications than the road communications and also the quickest mode of transportation. It changed the complete tactics and strategies of warfare in Europe as well as in other countries where the railway was fully developed. In 1846 the Prussians executed the first full scale rail movement of a corps of 12,000 men including their horses and guns and other equipment of Cracow. During the revolution of 1848 railway transport was widely used for troop movement in Austria, France and Russia. By the middle of the 19th century railways were constructed very fast in Europe and America. Most of trunk railway lines under the strict state planning. In America 30,000 miles of railroad were between 1830 and 1860.

(v) Telegraphic Communications:-

Use of Morse in telegraph was invented in 1837. But the telegraphic communication was first demonstrated in 1838 by KA Von Steinheil. This telegraphic communication rapidly developed into land network communication system which linked political and military systems in close contact. The land telegraph system made possible intimate command and control of lower and higher formations as also in the railways and postal departments later on.

(vi) Telephone:-

In 1869 Philip Reis a German demonstrated the use of telephone a sound transmitting instrument activated by electricity. But till 1875 telephone was not patented. In 1875 the first practical telephone was patented by Alexander Graham Bell and Elisha Gray. Development of telephone then on was very rapid and immediately it was recognized an important aid in military communications both for command and control particularly for long range gun fire by forward observation officers for the artillery. The Germans were the first to use the telephone in the control of artillery fire through the Forward Observation officer in 1885.

(vii) Wireless Communications:-

In 1892 Sir William Preece carried the first wireless transmission over a range of 400 meters in 1895 Guglielmo Marconi sent a message 1.6 kms, and in 1901 a transmission of 4800 km was achieved. Thus, the wireless communications ushered in an era of command, control and communication

from the lowest unit to the highest formation. It made ease of passing information and messages from front to the rear and from rear to front units and formations possible.

(viii) Impact of Industrial Revolution on Military Tactics:-

Though the effect of industrial revolution on Military initially due to their inertia nevertheless the spirit of invention had awakened and the progress in military inventions continued steadily which later weevilled its way through the 'military carapace'.

In this industrial revolution especially the development of railway system, had a profound influence on the future of war and peace. Railways started playing strategic and tactical roles in the transportation of troops from one theater of war to another within the country and in other countries where the railways had been developed. Also within the theatre the troops could be moved with speed within the theatre of war. So. The strategic and tactical thinking of the military underwent a sea change from the inception, preparation conduct and aftermath of military operations whether it were small scale or large scale operations.

The introduction of minnie rifle and colt pistol revolver and the steam gun changed the tactics of the armies. The enemy could now be engaged at longer ranges (than the previous close quarter battle ranges) with much more accuracy and could engage the enemy even under adverse weather conditions. The role of infantry especially in the trench warfare became paramount and important and infantry regained its glory in the modern warfare besides the cavalry and later armour. The infantry tactics underwent major tactical changes in the warfare.

The artillery made major progress in the tactical concepts. With the improvements in the guns, breech loading system developments, cannon rifling, improvement in gun shell incendiary shells and the gun traversing facility, the artillery improved its range accuracy and destructive power. Later the use of wireless telephone between the forward observes and the gun to bring down accurate fire on the enemy also the types of fire changed the tactical settings of the army. Supporting fire while attacking pre-bombardments of enemy strong holds and naval fire on enemy hips as well as the ground changed the tactics of the army and navy completely. Use of rockets, multibarrel rockets changed the tactics in warfare.

Mass production of arms, ammunition and other equipment made the availability of these weapons systems easier. Military thinkers like Clausewitz and Jomini

and later mohan and many others wrote volumes on the new strategy and tactics in warfare due to the effect of industrial revolution in the warfare in the middle of the 19th century posed certain basic questions for the warfare and tactics which required practical answers with the great increases in number of men, what principles of recruitment and their training were to be adopted? Should all these men be equipped with new weapons ? and if so what will be tactical role of infantry armed ;with rifles and what will be the new role of artillery"? what was the role of cavalry? How are new communications particular road and railways going to affect strategic planning and tactical mobility of the forces. With the increase of speed of ships and their iron cladding, what new strategic and tactical role navy is to play? The military leaders of Europe and other countries moved in the Modern age of warfare slowly and reluctantly. However the armies were kept small well equipped professionally sound. The armies were kept small in view of danger of armies not resorting to revolutions themselves.

As per Oswald Spengler the industrial Revolution brought a time of "war without war" a war of overbidding inequipment and preparedness a war of figures and temporary techniques" In the 19th century and of course during the twentieth century a military arms race had started.

With the improvement in rifle the infantry now opened fire on the attacking enemy at 500 yards instead of 100 yards due to flint lock musket being withdrawn and re-equipping of the army with Minnie rifle. This brought out two tactical changes in fighting. First the futility of frontal attacks and second the demand for field emplacements i.e trench warfare by the defender. With the improvement in artillery fire the cavalry charge reduced considerably. In fact the cavalry charged died out in the American civil war(1861-65). The rifled cannon came out more and more in the open and the bayonet was dethroned completely. Iron clad ships using steam(later diesel) propulsion engines led to many changes of naval tactics. Development of rotating guns mounted on ships, mines under the surface of water and torpedoes brought in many tactical and strategic changes in the naval warfare. Field telephone hand held signalling equipment, wireless and later telegraphy further brought changes in army as well as in the navy due to the ease of command and control as also speedy passage of intelligence and messages made the warfare more complex and interesting.

In 1836 Jomini wrote in his summary of the "Art of War" that the generation of the last twenty years seem to threaten a great revolution in army organization armament and tactics.....The means of destruction are

approaching perfection with frightful rapidity".

Siege warfare continue to dominate the warfare scenario though improvements in fortresses were made and the method of sieze warfare were improved. Artillery firing solid shots,explosive shots and incendiary shots gained prominence.

The military organizations were streamlined. The corps and Divisions were organized on all arms concept with command and control infrastructure and on the principles of self sustainability and self-sufficiency in all arms. Specialized units and formations were raised for the specialized roles.

Conclusion

With the effect of spread of communications, the areas of war theatres of operations became larger. Wireless telephone telegraphs made the command and control easier.The war became more swift and frequent. The number of combatants increased and so does the number of casualties also increased due to deadly operations of deadly weapons. Mobility of forces and their flexibility increased. With this the element of surprise also increased. Improved naval ships with steam power and later with oil fuels, improved the shapes sizes iron cladding with new cannons and other weapons effected the tactics of the navy too. Radius of operation of the navy increased many fold.

In the beginning of 20th century and onwards added the 3rd dimension to the military i.e airforce which completely changed the concept, strategy and tactics on land, sea and air warfare.

The industrial revolution set in motion the developments in all spheres of life whether civil or military. In the military sphere, though the beginning was slow as far as the improvements in weapons and equipments were concerned. But slowly and slowly the impact of industrial revolution completely changed the concept of tactical and strategic warfare and ushered in the era of modern warfare with more lethal effects.

Books For Furher Reading

| | | |
|-----------------|---|--|
| Pokrovsky | : | Science and Technology in Contemporary War |
| Liddell Hart | : | Thoughts on War |
| J.F.C. Fuller | : | Machine War Fare |
| Maj. D.K. Palit | : | Essentials of Military Knowledge |

Lesson No. 2.2

Napoleon's Art of Warfare

Introduction:-

Napoleon Bonaparte was born on 1769 in Corsica. Between 1779 and 1785 he attended military college in France and after that he served as a lieutenant of Artillery at Auxonne and Valence. He was greatly indebted to Guibert for his ideas on the military significance of nationalist feeling, on mobility, on column tactics and many other matters. Napoleon was an enthusiastic student of military history and a firm believer in the value of its study. He also read the works of Rousseau and supported the most radical party in the revolution. His first military distinction was at the chief of Toulon in 1793, where he attacked a battery occupied by the English and received a battle wound in his thigh. After spending some time in Italy, he went to Paris, making the right friends and avoiding wrong jobs.

In 1796 he left to command the army in Italy. He was then 26 only. In that campaign, Napoleon had 38,000 ill-equipped and inferior troops to face 47,000 Austrians and Sardinians. The Austrians were driven out of Central and Northern Italy and Napoleon had marched in 80 miles to Vienna before the peace negotiations began. He won twelve battles in a period of 12 months in Italy. Thereafter in 1798 he went to France to become the first consul. There he toned up the civil administrations, law of the Church. Maneval says that, "Napoleon took not only the initiative in thought, but also attended personally to the detail of every piece of business..... His genius, super human in its activity, carried him away; he felt he possessed the 'means' and the time to manage every thing in reality. It was he who did everything".

The Elements of Napoleonic Warfare:-

The elements to be considered here as the more typical of Napoleonic warfare are:-

- 1. Unity of Command**
- 2. Generalship and Soldiership;and**
- 3. Napoleon's system of Planning**

1. Unity of Command- :

He felt that first necessity of war was the unity of command. It is only possible

when political and military directions are in the hands of a single man as they were in Napoleon's hand when he became the first counsel. This type of unity of command is generally not available and obtained though desirable, because in war the political decisions are divorced from military actions. When he took over the command of the army of Italy, he wrote to the directory, "The government must have entire confidence in its general; allow him great latitude and only provide him with the aim he should attain". On military singleness of command, he says, "In military operations, I only consult myself; In diplomatic, I consult everybody."

Unity of command was the foundation of Napoleon's many victorious campaigns. He believed that as far as circumstances permit, unity of command demands the assembly of all available forces under a single general in the theatre of operations. His maxims, "In war men are nothing, it is the one man who is all and, one bad general, in command is worth two good ones".

2. Generalship and Soldiership:-

As regards his men, he never failed to stimulate their vanity. He used to say, "An army of lions led by a stag will never be an army of lions". A man who is willing to sacrifice his life for a cause he frequently does not understand. Bravery, he wrote, cannot be bought with money". The power of words on men is astonishing he says, "We were always one against three in Italy but the man had confidence in me. It is not the numbers of troops that gives strength to an army it is loyalty and good humour". Personal touch between officers and soldiers was the secret of his successful leadership. He wrote "a battalion commander should not rest until he has become acquainted with every detail; after six months in command he should even know the names and abilities of all the officers and men of his battalion"

The health of his men deeply concerned him, "Sickness is the most dangerous of enemies and it would be better to fight the most bloody of battles than to place the troops in an unhealthy locality."

3. Napoleons system of Planning:-

Napoleons success as a planner of campaigns derived directly from his position as autocrat. With planning he was able to combine his power in the political and strategical conduct of war. To him the planning of a campaign was an exacting work of art. His planning used to start there or four months in advance with his calculations based on to face the worst situations. He left nothing to chance. He said, "Nothing is gained in war except by calculationsIt is my habit to take so many precautions, that nothing is left to chance." and "It is only when plans

are deeply thought out that one succeeds in war".

Once a plan was activated his problem became one of exploration. The use of exploration (Which included spies,agents,letters received in post offices besides the cavalry and other troops in contact with the enemy) was to seek out the enemy's forces and eliminate them. Field Marshall Montgomery had mentioned the following elements of Napoleons success:

- (a) Rapid marches
- (b) Flexibility in Manoeuvres
- (c) Ability to concentrate forces and
- (d) Make minimum thrust at the weakest point of enemy.

(b) The principles of Napoleonic Warfare:-

Although Napoleon frequently wrote as talked about principles of war but he could never enumerate them. Once he said," If one day I can find the time,I will write a book in which I will describe the principles of war in so precise a manner that they will be at the disposal of all soldiers, so that war can be learnt as easily as a science". But unfortunately he never did so

"Napoleon was a master of strategy; the range, the speed and the coordination of his operations were unique" Montgomery .A study of his campaigns reveal;
(1) his invariable reliance on the offensive; (2) his trust in speed to economize time;(3) strategic surprises;(4) his ability to concentrate forces at decisive point of attack; and (5) his carefully thought out protective system

(1) Offensive Actions:-

Napoleon believed that one should always be the first to attack. He said,"It is a very great mistake to allow oneself to be attacked..... Make war offensively like Alexander, Hannibal,Ceasar,Turenne, Eugene and Fredrick and model yourself on them". Again once one had decided to invade a country, one must not be afraid to deliver battle, and should seek out the enemy everywhere to fight him'.

Although Napoleon did not invent the pursuit, he systematised it because he riveted it to the battle and made it an essential feature in his tactics. In the ulm campaign in 1805, he sent the message to Murat," I congratulate you on the success you have gained. But not rest; pursue the enemy with your sword in his back,and cut all communications".

2. Mobility:-

Commandant Colin says,"Rapidity i.e mobility is an essential and primordial factor in Napoleonic war" . Comte de dervieu writes,"Movement is the soul of

Napoleonic war, just as the decisive battle forms it means. Bonaparte makes his troops move with a calculated rapidity..... Multiply themselves by speed..... make up for numbers by the quickness of marches, are maxims continually on his lips. Marches are war..... aptitude for war is aptitude for movement.....victory is to the armies which manoeuvre".

Napoleon himself said that," in the art of war as in mechanics,time is a grand element between weight and force.... The loss of time is irreparable in war" on the other hand, in the ulm campaign his men said," The emperor has discovered a new way of waging war, he makes use of our legs instead of bayonets".

3. Surprise in attack, in weapon and in strategy) :-

Other than the unexpected concentrations of his forces on the battlefield, Napoleon's surprises were seldom tactical ones. Nearly all his surprises were strategic. Most noticeable surprises of his are in the battles of Morengo(1800), Ulm (1805) and Jena (1806). On strategy he says," strategy is the art of making use of time and space. I am less chary of the latter than the former. Space we can recover but the lost time never".

4. Concentration of Forces:-

For the decisive battles,Napoleon cut down all subsidiary operations in order to concentrate the greatest possible numbers. Colin quoted him saying," The army must be assembled and the greatest force possible concentrated on the battle field". There is a difference between 'assembled' and 'concentrated' In 1806 Napoleon wrote to the king of Naples," The art of disposing of troops is the art of war. Distributes your troops in such a way that whatever the enemy does,you will be able to unite your forces with in few days." On 14th February 1806, he wrote to his brother Joseph,"Your army is too dispersed; it should always march in such a way that it is able to unite in a single day on the battlefield," According to him. The first principle of war is that one should only engage in battle when all troops can be united on the battlefield". An inferior force(In numbers) if correctly assembled, will generally defeat a superior force(over all superior numbers) that is not superior at a particular point and at a particular time.

5. Protection/Security:-

Before the battle of Waterloo, Napoleon never had engaged in the defensive battles. It is also true that he had to fight defensively in the battles of Leipzig (1813) and La Rothiere(1814). But through out these campaigns he assumed a strategic defensive which consisted of a series of rapid marches and of

furious attacks. As he defines, "The whole art of war consists in a will reasoned and circumspect defensive, followed by rapid and audacious attack."

Once he wrote in a paper that, "In the art of war it is an axiom that he who remains in his trenches will be beaten," strategic warfare was anathema to Napoleon. He said, "Defensive warfare does not exclude the attack any more than offensive warfare exclude the defence Basically his protective system was based on establishing, in rear of his army, a fortress or a fortified town in which army magazines, park, hospitals etc. were assembled.

The Defects of Napoleonic Warfare:-

Napoleon's failure to achieve final victory, and through it a peace, not only profitable to France but also acceptable to her opponents. This failure of Napoleon can be traced to three defects in Napoleon's conduct of war as follows:-

- 1. Centralisation of command/powers**
- 2. Unrealistic policies**
- 3. Napoleon's Grand strategy**

1. Centralisation of command/powers :

Although Napoleon's insistence on the unity of command in his person led to many successes, ultimately it became an element of his downfall. There were two reasons; Firstly as the war lengthened, it became so widespread, so complex and the forces became so considerable that without a well organised General staff, it was not possible for a single man i.e. Napoleon to manage it efficiently. Secondly, The enemies of Napoleon gradually understood that it was the lack of unity in the allies which continued to defeat them in detail by Napoleon. Ultimately in the mid of Leipzig campaign unity was established by the opponents of France in which armies of the allied powers-Russia, Austria, Prussia and Sweden agreed not to fight single-handed. Though Napoleon had good staff, but he never took them into confidence. His staff foresaw nothing and on the other hand Napoleon wanted to do everything himself. "Keep strictly to the orders which I give you; I alone know what I must do," Napoleon later admitted that he made so much use of his marshals and they had become useless and war weary.

2. Unrealistic Policies- :

Napoleon followed unrealistic policies. He declared England as his number one enemy and all his policies and actions were based on achieving this end in view. On the other hand, England had the mastery of the seas and was a great exporter of manufactured goods as a result of industrial revolution as

compared to the infancy industry of France. Napoleon wanted to create United Europe on the pattern of USA. The only country which he could not subdue was England, all his policies stemmed out of this, thus, these policies were the unrealistic policies of Napoleon.

2. Grand Strategy:-

A federated Europe as visualised by Napoleon was detested by England because England could not survive without being the dominant power. Therefore, the clash between England and France was to the death. No sooner Napoleon destroyed one coalition than another arose from its ashes. To accomplish his aim, it was necessary to subjugate England without antagonising the continental powers. However, Napoleon's continental system deprived the continental powers from supplies which only England could supply. Thus, his grand strategy was at fault. It was no more than a make-shift substitute for the fleet he had lost at Trafalgar in 1805. The Berlin decree could not prevent British shipping operations. Britishers were still the masters of the seas and Napoleon could do nothing to conquer the sea power by his land power. The Grand -strategy of Napoleon proved counter productive.

Napoleon was a missionary with the canon and sword. He preached the gospel of the Nation in Arms throughout the length and breadth of Europe. Napoleon gave the French army its soul. He was a great military genius of the world. But he was too ambitious which drove him to his final defeat. He will be remembered as one the 'greatest of the Captains'.

LESSON NO. : 2.3

THE BATTLE OF TRAFALGAR, 1805 A.D.

Introduction

The Battle of Trafalgar was fought in 1805 A.D. between the British Forces led by their Admiral Nelson, and French-Spanish forces led by Admiral Villeneuve of France. Under Admiral Villeneuve, the Spanish fleet led by Gravina, also took part in this battle. The battle took place at Trafalgar which lies between Cadiz and Gibraltar on the Atlantic Ocean. This battle i.e. the Battle of Trafalgar is considered to be the biggest major and last of sea battle with sails. This battle was fought with in the established naval tactics.

Causes of Battle

The reason for the battle of Trafalgar was the growing maritime struggle between England and France in Europe. This maritime struggle had started during the Napoleonic era in 1792 as Napoleon wanted to rule the world. Whereas, the British had established their colonies all over the world and they also wanted to extend and maintain their influence further in the world. For that, dominance of seas by Britain was a precondition. As it is, Britain is located on the Western edge of European continent, yet separated from the continent through the English Channel. British is an isle country surrounded in the South and East by the English Channel, on the North by North sea and towards West by the Atlantic Ocean. The geo-strategic position of Britain demanded it to be naturally strong in naval power in order to survive and dominate the continent and the world due to her possession-spread of colonies. On the other hand, France which is land locked as well as having openings in the West by English Channel, and in the South is the Mediterranean Sea also wanted to dominate the continent by becoming a strong naval power besides being a land power nation. Due to the Industrial Revolution, whereas the British industry had started a mass production and trade, the French industry was still in its infancy. France wanted to spread her trade in the continent as well as in the world markets, but was prevented by the British industry and trade. So the conflict of same economic interests was but natural. British due to their dominant naval power prevented the French trade through blockade of seas. The preparations had started between France

and England to settle scores through the naval struggle. In the meantime, Spain allied herself with France in December 1804. Napoleon had wanted to attack England but his plans did not bore fruit. On the other hand, Nelson, the British Commander of her naval forces wanted to attack the French Naval forces to crush the French Naval strength. This led to the Battle of Trafalgar on 21 October 1805.

Relative Strength

The relative strength of the British fleet under Nelson, and the French-Spanish fleets under Villeneuve was as under:-

a) British

British had 27 ships of line having a total of 2148 guns mounted on these ships. Total of 16,820 officers and men were on board the British fleet for the battle.

b) French

French-Spanish Fleet had 18 French and 15 Spanish ships of line having a total of 2826 guns mounted on their ships. Total of 21,580 officers and men were on board these ships for the battle.

Battle formation

The position on the morning of 21 October, 1805 when the battle started was as follows:-

a) British Admiral had formed the British fleet of 27 ships of the line having 2148 guns on board with two divisions. His flagship 'Victory' led the 'Northerly column' with 12 ships, while his second-in-command Admiral Collingwood led the Southern column called the 'Lee Column' (Sheltered Column) on his flagship 'Royal Sovereign' with the remainder ships. Task given to Collingwood was to destroy the rear of the enemy ships.

b) French-Spanish naval forces Admiral Villeneuve with his allied fleet of 33 ships of the line having 2626 guns on board, having come to know that he can no longer avoid the battle, drew up his ships in a single line more in the crescent formation. All his ships were mixed up with the Spanish ships. He headed North off the Coast of Cadiz some 20 miles in the North North-West. A light wind was blowing from North-West to South-East. Villeneuve was flying his flag on his ship 'Bucentaure'. He had 11 ships ahead of him and the rest of his fleet including Admiral Gravina's reserve naval

squadron behind. The French and Spanish ships were arbitrarily mixed together as a precaution against the danger of jealousy and recrimination.

Battle Plans

a) British Battle Plan

Admiral Nelson was obsessed by the belief that he must (1) Bring French navy to battle and then (2) destroy the enemy. Merely to beat French would not satisfy him. (3) He must have at least 20 French ships captured and rest destroyed and sunk. His plans included the command of the wind-war-ships under him and leeward ships under his second in command, and the attack was to go simultaneously. Refer to the sketch, the British policy of attack was offensive throughout.

b) French Battle Plan

Villeneuve did not want not give fight to the British navy. He had said, "I do not propose to go in search of the enemy. I even wish to avoid him in order to arrive at my destination. If we should meet him. Let there be no shameful manoeuvring". Thus, the French followed the defensive policy of wait and watch.

British observation on the night 20-21 October, 1805

During the night 20-21 October 1805, the allied fleet (French and Spanish) was scrupulously observed by the British frigate ship. As the day dawned, the horizon in the East was covered with ships of French and Spaniards in line ahead formation. The distance between British and French was 9 miles in the morning. The French had no intention to attack the British navy. The line formation about 3 miles long with 33 ships. French and Spanish ships was to sail to Cadiz.

ships engaged by 'Royal Sovereign' and the follow up ships of the British navy, 10 ships were captured, 1 blown up and 4 ships escaped which included the ship of Spanish Admiral Gravina in which Gravina was wounded and escaped.

'Victory' ship led by Nelson personally which was five minutes behind 'Royal Sovereign' also pierced the line of French Commander Villeneuve flag ship. The British ship caused great disorder in the French ships. This gave British naval commander to take up a brisk course by plunging into the French ship lines. Then the French ship 'Redoubtable' tried to fill in the gap of French lines and its shots caused heavy damage to 'Victory' in which Nelson was on board and was commanding and controlling the battle. Nelson became victim of enemy musket fire and later died at 4:30 PM. But before he succumbed to his injuries, he had said, "England expects everyone to do his duty."

The battle however, continued under Admiral Collinwood's direction whose ship also got damaged from the attack of French ship "Santa Anna". In the meantime, French Ship 'Fougueux' surrendered while the two French ships 'Trinidad' and 'Becantaure' kept on fighting the British ships side by side. At about 5 PM French naval Commander Villeneuve handed down his flag from his ship Bucentaure which was about to sink with more than 400 killed or wounded on board. French ship Trinidad commanded by Spanish commander Cisneros had lost 254 killed and 173 wounded by then before he also struck her 'Colours'.

Five more Spanish ships also surrendered while the French ship 'Neptune' was captured when the battle was practically over around 4:30 to 5:30 PM. There were disabled and discarded ships scattered all over the sea. Out of the 7 French and 12 Spanish ships captured, only 4 prized ships could be brought to Gibraltar while the rest were destroyed. This ended the last great battle fought with the sails at Trafalgar with a resounding victory to the British, thus, ending Napoleon's grand designs of defeating England. This battle once again made England, the master of the sea. In this battle, French Admiral Dumanoir did not join battle at all and slipped away with 4 ships, while the Spanish naval commander Gravina also escaped with ships.

Casualties

- a) French - 4445 killed and drowned (out of the above 3373 were the French killed and the remainder 1072 were the Spanish).
Wounded - 2538 (1155 French and 1383 Spanish)
Prisoners - 3000-4000
Ship losses - French and Spanish- 22 Ships

- b) British killed - 449 including her Commander Lord Nelson.
Wounded - 1214

Reasons of British Success in the Battle of Trafalgar

The reasons of British Success of Trafalgar under the able Command of Lord Nelson are given below:-

1. High spirits, superior self confidence and the fighting prowess of the British seamen was apparent. Nelson had full trust in his officers and men and also in the righteousness of their cause. The dying statement of Nelson that, "England expects that every man will do his duty", reflects the confidence he had in his forces.
2. The victory of Trafalgar represented the triumph of the British Admiralty and their higher professionalism.
3. The British soldiers and sailors were experienced, well trained and ruthless fighters as compared to the French and Spaniards.
4. The British Sailors and gunners were very good shooters.
5. The British displayed superior plans and tactics against the French.
6. The victory of Trafalgar was due to the culminating triumph of the British admiralty in its mature experience and its comprehension of the meaning of seas power to and isolated nation.
7. The freedom of action amongst the commanders of Nelson helped them in taking the spot decisions.
8. Nelson's words that, "England expects every one to do his duty", spirited the British with the feeling of nationalism and made them enthusiastic to do their best.
9. The Spanish Commander Gravina fought half-heartedly whereas the French Admiral Dumanoir did not joining the battle at all and slipped out of the battle.
10. French Commander Villeneuve wanted to avoid the battle. In contrast, the British sought out the French ships to attack them and destroy them instead of driving them off.
11. The British force was inferior in even men and ship number but their superior guns had then made up. Also the British generalship was superior.
12. Nelson had used the established naval tactics with great coordination in this battle.
13. The British plan was offensive whereas the French plan was evasive

and Defensive.

Causes of French Defeat

The battle of Trafalgar in 1805 gave a resounding victory to the British and a humiliating defeat to the French-Spanish combined forces. It shattered Napoleon's dream of grand design of defeating England and creating the dominant French Empire in the European continent. The causes of the French defeat in the battle of Trafalgar are given below:-

1. French plans for the battle were inferior and defensive by nature. In fact, Villeneuve never wanted to face and confront the British navals force. He wanted to avoid battle.
2. A large number of French and Spanish Senior high Officers were lacking in zeal. Spanish Naval commander, Gravina fought this battle half-heartedly and fled from the battle.
3. A majority of French men were recently recruited, were disaffected peasants without much seas going and fighting experience.
4. Defection of Spanish commander Gravina with 11 ships in the thick of battle reduced the French ships by 1/3. Also joining the battle and slipping away with 4 ships attributed to the defeat of French, when the French overall Commander needed re-enforcement's for counter-attacking the British.
5. The French navy with its commanders lacked initiative.
6. French wanted to avoid battle as a matter of their strategy, thus their fight was half-hearted.
7. Poor generalship of the French Commander Villeneuve and the Spanish Commander Gravina led to the failure of the French and Spaniard in the battle of Trafalgar.
8. Inferior fighting spirit of the French and Spaniards.
9. The French did not make a plan to fight the British attack. They just stood in one line. No coordination was possible amongst the ships and its crews.
10. The 'cause' was lacking in the French and Spanish fight. Though a coalition was formed between France and Spain in December 1804, but it was more of a deterrent than any thing else. The common strategy to fight the British Navy was missing. Otherwise with superior number of ships, having more guns on board and more men on board their ships should have given French the win, but because of lack of a common cause and half-heartedness, the French

lost the battle with humiliating defeat.

Impact of the Battle of Trafalgar

The battle of Trafalgar had wide ranging impact on the warfare especially on the European theatre as far as sea warfare was concerned. The impact of the battle has been given below:-

1. The battle of Trafalgar ended the French sea-power for the next quarter of a century.
2. It ended the Spanish sea power for ever.
3. Napoleon's dream of invasion of England which he so desperately needed, fell through. Instead of his sea ventures, he now onwards concentrated on the land battles.
4. Due to the British sea dominance, Napoleon after the Battle of Trafalgar compelled her neighbouring states to carry out the economic and commercial boycott of England.
5. The Battle of Trafalgar established the British supremacy of the seas in the world. England, thus became able to protect her colonies in the world.
6. Trafalgar was the last battle of the medieval era which was fought with sails. After this battle due to Industrial Revolution and innovations/developments, Steam shipping started ushering in the era of modern warfare.
7. This battle proved the fearful power of the gun powder and the efficacy of naval guns. The British had a total of 2148 guns fitted on their 27 ships and the French had a total of 2626 guns fitted on their 33 ships. The calibre of the guns ranged from 12 pounders to 32 pounders in the British ships. And the number of guns per ship ranged from 64 to 100 guns per ship in British ships and from 74 to 130 guns per ship in the French ships. Such was the devastating fire power of these guns. It was the destruction of men rather than destruction of ships which decided the outcome of the battle.
8. Grenades and Muskets proved to be very effective in this battle. Nelson was killed by the fire of musket from the French ship 'Redoubtable'.
9. This battle led to the discovery of steam propelled ships in place of ships with sails. Armoured shells, rifling of gun barrels and armoured plating of ships started some 50 years later.

10. With the Steam propelled ship being introduced, the speed and manoeuvring capability of the ships increase many fold. The ships no longer had to depend on favourable wind for manoeuvres.
11. New designs in ship manufacture started. Modification of the bow hastened up in order to facilitate firing at point blank range with the naval guns.
12. Development of anti-ship munitions i.e. mine, torpedoes took place.
13. Early development of sub-marine against the ships started and developed by early 1800 AD. Though the American used the submarine called 'Turtle' for the first time against the British ship 'Eagle' commanded by Lord Howe on 6/7 September 1776.
14. This battle started ringing the doom of Napoleon, which was certain sooner or later, as Napoleon got stranded and was now confined to the land strategy only. The Battle of Trafalgar gave complete dominance to the British at sea, not only then, but also for the rest of the 19th century. This led to the increase in the British commerce and trade. This battle showed the professional competence of British naval commanders and the British Sailors.

Conclusion

The battle of Trafalgar in 1805 proved that it is not the superior number of ships or guns or men which decides the battle, it is the generalship, qualities of men and their sharp shooting instincts which gives them the victory. The fight for the 'cause' is another aspect of War. Without a just and reasonable 'cause', no battle can be won. High morale and high sense of duty, before, during, and after the battle is the key to success. The men have to be encouraged throughout the course of war and even after it. Men have to be well trained, rehearsed in their roles to achieve success. And finally, the sense of responsibility has to be there to achieve success, which Nelson had filled in his British troops and, which was found lacking in the French and Spaniards. Careful consideration is required about the role of coalitions (which can remain fragile) for war.

Questions

1. Give a full account of the Battle of Trafalgar, 1805 with the help of a sketch.
2. What were the causes of British success and French failure in the Battle of Trafalgar?

AMERICAN CIVIL WAR (1861-65)
(Causes, Events and Effects)

Introduction

A great modern 'Modern War' took place in North America in 1861. This was the first major war fought with modern methods of warfare. This was the "American Civil War" which had started in 1861 and lasted four years till 1865. **The origin of the American Civil War** lay in the growing tension between two completely different type of societies of America which were bound together under one Government, and the issue of slavery had sharpened hatred during the 1850's. In the Presidential election of 1860, the victory was won by the Republicans, whose programmes were tied more to the economic interest of Northern States than the Southern States of America. Eleven Southern states in consequence to the elections in 1860, and victory by Republicans of North States of America had ceded from the Union and formed their own 'Confederation of America'. In February 1861, Jefferson David was elected the first 'President' of the new "Confederate States of America of the South" representing these eleven southern states. These eleven southern states were North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida, Louisiana, Texas, Tennessee, Arkansas, and Virginia. The capital of these Southern States Confederation was initially made at Montgomery in the Alabama State, but when Virginia joined the Confederacy, Jefferson David made Richmond as the Capital of South. While in the North, Abraham Lincoln took office as the 'President of United States of America' in March 1861 with its capital being as always at Washington.

The Northern States had a population of over 128 millions to face the Southern States who had a population of 9 millions only, and out of these 9 millions, 1/3 were the Negro slaves. The North possessed 90 per cent of the country's manufacturing capacity, two third of its railway mileage, control of seas, and most of the country's mineral resources. The South was badly off for weapons. Out of 1,35,000 hand guns seized by South from the Government arsenal, only 10,000 were rifles, and the rest being old fashioned Smooth-bore rifles, and some of them were the flint-locks. However, with the passage of time, the Southernns were able to capture and improvise more modern weapons. But

still the Southern remained at a great disadvantage as far as good weapons were concerned. But what was important was that the South was fighting to protect its way of life and its homes from the so-called northern invaders. On the other hand, the troops of the North were fighting only for an abstraction the principle of the Union. For this reason, the South found it easier to raise many enthusiastic fighters for the war. Moreover, much higher proportions of Southerners were countrymen who were good horsemen and they were used to an open air life.

Certain facts worth mentioning of the Civil War:-

- (a) Abraham Lincoln considered that slavery was an issue which time and common-sense would solve.
- (b) But, once the Union was split in twain, unity to America would never return. North America would become the Europe, a continent torn with disunity, jealousy, economic rivalry and war.
- (c) Lincoln fought to preserve the Union and after he had assumed office as President, he delayed the issue of slavery as long as possible.
- (d) The war broke out in April 1861, when United States garrison at Fort Sumter in South Carolina was attacked by troops of the 'Confederate States of America' under Jefferson David.
- (e) The American Union Flag, 'the stars and stripes' was fired upon, and then hauled down and a white flag was hoisted, and the garrison surrendered. That probably was the culminating point to the start of Civil War.
- (f) The North sprang to arms and the south followed suit. The 'American Civil War' or, as many prefer to call it in America "The War Between the States" had begun in 1861.

EVENTS LEADING TO AND THE CAUSES OF AMERICAN CIVIL WAR

**1. Impact of Industrial Revolution on the United States
(Democrats Vs. Aristocrats)**

The American Civil War was the first great conflict of steam age, and its origins were intimately related to the impact of Industrial Revolution on what Karl Marx call the "productive forces" prevalent in the United States. The Industrial Revolution brought many changes in "productive relations" and ultimately to war between two variant economic societies - the inhabitants of the Northern States and those of Southern. While the Northern were

aristocratically minded people who were feudal in outlook, and their plantations were cultivated by the slave labour of Negroes.

2. Abolition of Slavery

During the war of independence from 1775 to 1783, or immediately after it, the founding fathers of the union reprobated slavery, when in 1787 the Constitution was drafted. On the insistence of South Carolina and Georgia States slavery was retained. As the things then stood, slavery was on decline, and, had the 'productive forces' as called by Karl Marx remained as they were, it was expected that with in a generation or two, slavery would have withered away from the Southern States on its own.

3. Requirement of More Slaves by the Southern States

But this was not to be, because from years after the ratification of the constitution in 1788, a new invention appeared, which was enormous to stimulate the cultivation of cotton in the Southern States. This invention was the 'Saw-gin' invented by Eliwhitney in 1792 which separates the cotton from the seed, and it made cotton so profitable that between 1815 and 1861, it became known as the "king of the Southern States". Coincidentally, this placed the slaves labour on a highly profitable footing, with the result that, instead of slave (labour) being a drudge on the market, their supply fell short of demand. Prior to the introduction of 'Saw-gin', tobacco, more than cotton had been the staple crop of the South. But by 1820, the cotton crop which had a production of 160 million pounds, rose to 1000 million pounds mark per year in 1850, and 1860 the cotton production stood at 2300 million pounds. Concurrently, the price of a 'primitive field land' rose from \$ 500 in 1830 to \$ 1300 in 1860, which showed how vital (i. e. slaves) supply had become for the prosperity of the Southern States.

4 Industrial Production of Fabric

On the other hand, rapid economic changes were also taking place in Northern States. Two trade embargoes which were imposed, the first between 1807-1812 during the Napoleonic Wars, and the second between 1812-1815 in the war with England, had compelled the Northern States to rely on and extend their own industries. Thus, it came about that while the Southerners were represented by the slaves, the North increasingly became represented by factories. By 1812, the factories were so firmly established in the Union that the textile machinery made America independent of foreign importation of cotton fabrics. In 1840, there were 1200 cotton fabrics manufacturing factories in America and by 1860, the American cotton fabric and other goods were reaching the remotest corner of the West.

5. Iron Production

The iron industry located in Pennsylvania developed slowly and to protect it and also their other infant industries (which were coming up) tariffs were introduced. The tariffs were essential for the Northern foundry and oil mill owners, but in South California, these tariffs were pronounced to be the unconstitutional devices to tax the South for the benefit of North. The dispute over the tariffs became so violent, that in 1832, South Carolina declared the Tariff Act of 1824 - as the 'Tariff Abomination' as 'null and void', ultimately, a compromise was reached and the first phase in the struggle for State rights terminated.

6. Addition of New Territories in the United States

Another cause, but very intractable cause of discussion took place in America. In 1803, the big region of Louisiana was purchased by America from France (it was a French Colony). In 1819, State of Florida was purchased by America from Spain (it was a Spanish Colony). These two states of Louisiana and Florida added to the size of United States. It almost doubled her size, when Mexico broke away from Spain in 1822, then friction between her and the State led to the Texan war in 1836 and the Mexican War in 1846. The outcome of the war was that it added to the United States new territories as extensive as Louisiana. These new added territories to the United were New Mexico, Arizona, California, Nevada, Utah and Part of Colorado. This vast acquisition of land bordering the Southern States became the bone of contention. The Southern planters insisted in the extension of slavery to these new acquired states too and wanted the repeal of the Federal law of 1807 which prohibits traffic in slaves. This was an impossible demand for the Union led by Northerners. It was not the slavery which was the main issue, it basically was the addition of New States which reached its climax in 1860 when Lincoln became President.

7. The Unity Appeal by Lincoln

Abraham Lincoln contested for the sensational seat of Illinois, which he had won. He was the ears of his fellow country-men and cautioned when he proclaimed that:-

"A house divided (the Government divided by North and South) against itself cannot stand, I believe this government cannot endure, permanently half-slave and half-free. I do not expect the Union to be dissolved - I do not expect the house to fall, but I do expect that it will cease to be divided. It will become all one thing, or all the other".

8. Seizure of Arsenal

The approaching war crisis was hastened up, when one John Brown, a fanatical Abolitionist, at the head of 22 followers, seized the arsenal at Harper's Ferry in Virginia on 16 October 1859. His aim was to set a foot on slavish insurrection. This initiated the quarrel, also though he was just speedily hanged till death as his purpose was just massacre, therefore, the Union or no Union, anti-slavery had to be fought to the death.

9. Election of Abraham Lincoln as President of United States of America:

On 6 November 1860 Abraham Lincoln was elected as President of the Union. This verdict announced to the South that after his election the South's dream of slavery extension must come to an end soon.

10. Succession of South Carolina and followed by other South States to Form Own Confederation of States

On 20 December 1860, South Carolina State passed an Ordinance of Succession and by 1 February 1861 States of Georgia, Alabama, Mississippi, Florida, Louisiana and Texas followed suit. The militaries (i.e. Army and Navy) were called out. All Federal forts and arsenal in the Southern State were captured and occupied. On 4 February 1861, these Southern States formed a provisional government, known as the "Confederate State of America, with Jefferson Davis as its President with its headquarter (capital) at Montgomery in Alabama State.

11. Bombardment of Fort Summer-Started the War (Immediate Cause)

Finally all the above events and causes heralded the beginning of American Civil War on 12th April 1861, when contrary to instructions, in the early morning light when one could not see clearly what the day is going to bring, the Confederates in Charleston started bombing the Fort of Sumter and its garrison consisting of 83 US Army men and the thunder of these guns announced the beginning of war. A war which took place between two antagonistic political parties, but a struggle to bring death to one of the two divergent societies, two antagonist political parties each one championing a different civilization.

As per Stephen Benet,

"The pastoral rebellion of the earth against machines, against the Age of Steam"

This above first engagement, in an alarming struggle which eventually was to cost an estimated 6,18,000 soldiers lives. The U.S. regular forces in 1861 amounted to 16,000 only spread across the country and mostly in cavalry, engaged in

guerrilla-type anti-Red Indian operations. The U.S. Army, however, did contain a set of very good experienced officers, the majority of whom gave allegiance to Confederacy. Hence rapid expansion by both sides was possible while the quality of leadership and training was at first slightly in favour of Confederates. The rate of build up of force on both sides in the first two months of war was as follows:

| | April 1981 | June 1981 |
|--------------|-----------------------------|--|
| Confederates | 314 regulars(Officers only) | 1,12,000 On one year engagement |
| Federals | 15,000 regulars only | 1,52,000 On a three month engagement available for war |
| | 3,000 | |

Many of the volunteers could hardly shot straight, though naturally, countrymen from South had the advantage over townsmen from North. The leaders from both sides, with inherent bent for mobility learnt in the wide frontier space, instinctively sought a decision by manoeuvre in close combat. Yet in the end, all were compelled to employ conscripted masses to sustain the war of attrition. Notwithstanding, the American Civil War was to provide a splendid opportunity to both sides to see how some of the new ideas and inventions worked in actual practice in this first modern war of attrition.

Some Points of Interest on American Civil War

1. The scale on which the American Civil war was waged is perhaps its striking feature. As per Wood and General Edmonds, "No previous war has ever in the same time extorted upon the combatants such enormous sacrifices of life and wealth. The conquest of such a vast expanse of a territory (as of the South), held by a nation in arms has no parallel in history. In fact this civil war was a war of nations, the only true national conflict of its kind to confirm that resistance of a nation in arms is measured not in months, but in years". Wood, General Edmond and Lord Wolsley feel that "had the United States in 1861 been able to put into the field one army corps of regular troops, the war would have ended". Previous wars have brought out in that there is a point beyond which the best of training, the finest discipline, the widest war experience, and the highest perfection of armament cannot counter-balance the sheer weight of enormously superior numbers. The really effective weapon against the brave and determined people in arms, is

the slow but sure process of attrition, which reduced the power of resistance to fight any further.

2. The material resources of the North were vastly superior, as also the balance further tipped in favour of North by blockade of sea for South, and also by diplomatic means. Though food situation of the South was adequate, but declined in quality as the War progressed. To sustain a war of this magnitude, imports of weapons, munitions, and other war material was essential, but due to the blockade by the North made coming of supplies of this kind difficult for South. Moreover, South's supplies were dependent on the export of cotton which was entirely precluded.
3. South had anticipated that Great Britain would come to their rescue because of her interest in cotton goods, but due to skillful diplomacy of North, the Southern felt deceived by the Britishers in this case.
4. South continued to hold on and fight the war for four years, partly due to the mistakes committed by North and partly due to skill of Southern commanders as also the heroism displayed by the Southern army and people. The superiority of Southern defensive over the Northern offensive prolonged the war to four years.
5. Abraham Lincoln started commanding respect as fully right from the point of view of policy. On the other hand, Jefferson David endangered the cause because of his little knowledge, and he failed to get the best of his great generals.
6. Geographically, the strategic use of railways, tactics and generalship played a large part in war. Control of rivers was strategically very important.
7. Lastly, one cardinal error of the Confederacy was that it appeared to consider defensive strategy as a necessary corollary of defensive policy. The Confederacy professed the view that the Southern States in seceding had but exercised their undoubted legal and constitutional rights, and in resisting the aggression they were defending themselves against an unprovoked and illegal aggressor. The defensive strategy of the Southern to fight the Northern was good initially, but the initiative must be taken to go on the offensive for the ultimate victory, which the Southern failed to do in their four long years of struggle against the Northern.

Main Events of War

The main events of the American Civil War (1861-65), which may be considered

as the seize of the fortress formed by the Southern States led by Jefferson Davis, the President of Southern States. The Southerns were fighting the superior forces of the North. The operational events of the American Civil War falls into the following four phases (refer to sketch):-

1. Phase-I - Investment of the Fortress, 1861
2. Phase-II - Seizure of the Foremost lines, 1861
3. Phase-III- Effecting Breach, 1863
4. Phase-IV - Assault and the Fall of the Fortress-1864-65

1. Phase 1 : Investment of the Fortress, 1861

A. Force level at the beginning of war i.e. April 1861

- Confederates - 314 regular (Officers only)
- Federals - 15,000 regulars, spreading all over United States. For the Civil war only 3,000 were available initially.

B. Force Level in June 1861

- Confederates - 1,12,000 volunteers on one year engagement
- Federals - 1,52,000 volunteers on a 3 months engagement

The main events in the Phase I of the war were as follows:

(a) Bombardment & Capture of Fort Sumter

A series of events had taken place, which culminated into a bomb just to be ignited and the ignition was set by the bombardment of Fort Sumter and its garrison in the Charleston Harbour in South Carolina in the wee hour of 12 April 1861. This heralded the start of American Civil War between the Northern States represented by the Federals and the Southern States represented by the Confederates. The Confederates or the rebels were led by the troops of the "Confederates States of America. The Union flag of stars and strips hoisted on the fort was fired upon, hurled down and a white flag hoisted in its place to show that the garrison had surrendered. This was the sudden event which sprang North to its feet and took up arms, and so does South. The Civil war thus began.

(b) Battle of Bull Run, Blockade of Ports

The summer and autumn months of 1861 saw the completion of the investing lines, at sea by the North navy which established an effective blockage of the coasts, and on land by the establishment of the new raised Federal armies on the borders of Virginia, Kentucky and Tennessee, which formed the Confederacy's northern frontier. An attempt was made by the Federal forces to put a speedy end to the conflict by an advance on Richmond (Virginia), the Confederate capital, but the Federals were defeated at Bull Run by the Confederates. Refer to the sketch of main campaigns and principle battles of American Civil War from 1861 to 1865.

(c) Early Gains by North Forces

By the beginning of 1862, North Forces had captured two important outworks on either flank of the long line of battle i.e. in the east, the mountainous western area of Virginia, and in the west, the greater part of the State of Mississippi. Refer to the sketch.

2. Phase II : The Seizure of the Foremost Lines, 1862

(a) North's attempt to capture Richmond

The story of the next twelve months of the Civil War was one of stalemate of the Eastern front, but it was a story of steady and important Northern gains into the western front. McClellan, the Federal Commander (of North) in Virginia, attempted to avoid, the topographical and material difficulties of the direct route to Richmond by shipping his army to Yorktown and advanced on to the Capital of Confederates (Richmond) from there. But part of his expected reinforcements were detained to cover Washington by the reason of Jackson's

diversion in the Shenandoah Valley. Eventually, McClellan army had to fall back due to the counter-offensive of the Confederates under their commander Lee.

(b) Confederate Forces Offensive

Before all the forces of McClellan could re-embark at Yorktown, Confederate forces under Lee turned north, attacked and defeated the forces of North left in Virginia under Pope, and the Confederate forces were in a position to invade the Federal territory. In September 1862, the Confederates entered Maryland, but they were too weak to maintain themselves there. After an indecisive battle at Antietam, the Confederates recrossed the Potomac and came back into Virginia. Whereas at the end of 1862, they established themselves behind Rappahannock and successfully beat off the Federal attack at Fredericksburg. In the east, the year 1862 ended with both sides holding on to their original positions as they were holding at the beginning of the year.

(c) Federal's Offensive in the West

In the west, on the other hand the Federals (North forces) had made steady progress. The Confederates' first line of defence running through mid-Kentucky River to the Mississippi River at Columbus was broken through by a series of attacks carried out by the Federal Army and their River Flotillas in conjunction with each other. The Confederates were forced to fall back on the line of Chattanooga - Memphis railway line. The Federal victory gained by Grant at Shiloh had to be abandoned. By mid-summer of 1862, North (i.e. Federals) stood established in the Northern portion of Mississippi and Alabama and cleared the middle course of the great Mississippi River as far as Vicksburg. The Federals had also possessed themselves of its mouth (Mississippi's Southern end near Delta) near New Orleans.

(d) Confederates Counter-offensive in the West

Confederate forces under Bragg, however, conducted a counter offensive into Kentucky to recover the lost ground, but headed off on reaching Ohio and forced to retrace their steps. The Federal left wing under Rosecrans pursued Bragg and drove his forces South of Nashville and Murfreesborough. Though Grant's Federal attempt with right wing to secure Vicksburg and complete the occupation of Mississippi were unsuccessful for the moment, the year 1862 closed with rosy prospects for the northern cause. Federal armies stood well within the South's most northern important frontier, and her most important lateral railway as also the greater part of her most vital river artery were in the hands of Federal

forces. Refer to the sketch.

3. Phase III : The Breach Effects by North, 1883

(a) Confederate Losing the Chance of Victory

In 1863, the balance swung against the Confederates, whose defeat by year 1863 end was clearly seen. Notwithstanding, Lee in the east, after brilliantly repulsing a renewal Federal attack at Chancellor Ville (where his great Lieutenant Jackson was killed, once more crossed Potomac and entered hostile territory. He suffered a crushing defeat at Gettysburg over a three day battle in July 1863 and Lee was forced by the Federals to retreat. Thereafter, nothing much happened during the year 1883 in Virginia except minor operations. The Confederacy's inability in the east to force a decision enhanced the expected importance of Federals progress in west.

(b) Federals offence under Grant in the West: Capture of Vicksburg

After completing preparations in the spring of 1863, Grant of North Forces on the northern right wing took his army by Mississippi River past the Vicksburgh batteries of enemy i.e. southern forces, effected a landing on the eastern bank of Mississippi River below the city (Vicksburg), and cutting loose from his base, circled round north and west, drove off the Confederate field army, and laid the seige of the place i.e. Vicksburg. Vicksburg fell on 4 July 1863. Incidentally on the same lines, Lee was repulsed by he Federals in the east as mentioned above. The loss of Vicksburg gave North (i.e. Federals) control of the whole of Mississippi, cut off the Confederacy into two parts and completed the investment of Confederacy on her only open side.

(c) Attack on Chattanooga and Knoxville

In August 1863, Rosecrans of the North Forces on the Federals left, also advanced and forced Bragg with his Confederate forces out of the important town of Chattanooga and Knoxville on 25 November and 04 December 1863 respectively. But Rosecrans was forced to fall back to Knoxville and Vicksburg and take up defences on Chickamauga forcing Rosecrans to fall back to Knoxville and Vicksburg and take up defences.

(d) Grant's Advance

Grant of the North with his forces was now put in as the Chief Commander in the west, hurried up with reinforcements to restore the position at Knoxville and towards Chickmauga, whereas Bragg had weakened his position by sending a detachment to recover Knoxville, was at once attacked by Grant and was thus (Bragg) beaten back. This was Grant's last and the greatest victory in

the west, which placed North (i.e. Federals) in a very strong position to turn the whole western flank of Confederacy, break round the Allegheny Mountains into her central States and take her Confederacy's eastern armies from the flank and rear. Refer to the sketch.

4. Phase IV : The Assault of the Federals and the Fall of Fortress, 1864-65

(a) Grant's (Federals) Offensive in East:

The task of completing the overthrow of the South (i.e. Confederacy) was entrusted to Grant as Commander-in-Chief of all the Federal forces. After handing over the command of west to Sherman, Grant himself proceeded east to take charge of operations in Virginia. There he ensured a fierce duel with Lee, who was gradually driven back by forces of greater numbers of the North forces, though Lee was still covering Richmond to Petersburg, where he (i.e. Lee) was invested. The Confederates then stabilized the front by entrenching lines, which was maintained till Spring of 1865, Grant forced his way through the attenuated (Weakened) hostile lines of the Confederates at Petersburg and compelled his adversary (Lee) to abandon Richmond and break west for Lynchburg. On its way towards Lynchburg, Lee's tiny remnants were headed off and forced to surrender at Appomattox. The remnants of the other Southern i.e. Confederacy forces also followed suit.

(b) Sherman's (Federals) Offensive in the West

In the west, the tide of Federal success under Sherman had in the meanwhile reached the flood. Sherman with his Federal forces moving south-east from Chattanooga, made slow progress against Johnston's (Confederates) skillful defence, but by the end of summer of 1864, Atlanta was captured by Sherman. Confederates new commander, Hood was driven back who resorted to counter offensive into Tennessee as a desperate attempt to retrieve the situation. Sherman left a part of force under Thomas to deal with Hood. With the rest of Federal forces, Sherman struck through Georgia for the sea. Success followed one after another. By December, 1864, in the meanwhile Thomas had thoroughly defeated Hood at Nashville and by that time Sherman's forces had reached the Atlantic shore at Savannah unopposed. Lee with his forces had surrendered on 14 April 1865 to the Federal forces.

(c) The Final Triumph of the Northerns i.e. Federals

The first four months of 1865 saw the Confederacy's helpless struggle coming to an end. Sherman struck up the northeast through the Carolina's to clear the area between him and Grant's forces but before Sherman could arrive,

the area was already cleared by Grant. The Confederate forces were forced by the North forces to surrender at Appomattox.

By March 1865, the four year American Civil War came to an end and the United States, once more, and finally, got united.

Morison and Commanger had written about the American Civil War that, "Never before, had the American people exhibited greater vitality, never since has their vitality been accomplished by more reckless irresponsibility. To the generation that had saved the Union, everything seemed possible. There were no world, except the world of the spirit, that could not be conquered. Men hurled themselves upon the continent with ruthless abandon as if to ravish it of the wealth". Refer to sketch.

EFFECTS OF AMERICAN CIVIL WAR

1. Victory of Moral Values

As a result of American Civil War, slavery was abolished once for all in the United States. Abraham Lincoln, thus became the first U.S. President to usher in a new chapter in the history of USA. The victory of the North was a victory of nationalism, liberalism and industrialism.

2. Science and Technology

Science and Technology gained further importance and momentum. The American Civil War was the first modern war where the science and technology innovations had played a major role. Machines and steam locomotives were introduced and used for the mobility of men and material. The weapons, equipments and ammunition developed as a consequence of the industrial revolution were tested, used and caused heavier attrition in this war.

3. Communications

Communication was developed rapidly during the Civil War. Communications gained further momentum and speedy transportation due to the speed of locomotives. Steam locomotion was further developed and replaced by diesel and later by electric engines. Railway network was extended extensively. Road communications were further developed. Tarmac roads came into being on large scale. Mass movement of troops was carried out by railways during the war. River transportation was widely used for the transportation of troops.

4. Industries

Industries in the United States further developed and flourished. The

economy, thus, got a boost which further led to the prosperity of U.S.A. The civil war was in fact a powerful stimulus to economic growth in the Northern States.

5. Establishment of New Democracy

A new united democracy was established by the civil powers in the United State of America. Dissipation and indiscipline was removed from the administration. The United States of America became a super power and was united for ever.

6. New Method of Agriculture

As a result of Industrial Revolution, new methods of agriculture developed. Production of cotton, wheat and tobacco touched record high with continuous research in this field.

7. Inventions & Discoveries

New inventions and discoveries had started in U. S. A. as a result of civil war, as also due to the industrial revolution.

8. Since American industry and agriculture was vastly spread, immigration started for America in a big way from other parts of the world due to availability of jobs.

9. The war ravaged United States put additional tax burden on the population. It was estimated that over 20 millions US dollars were spent on the war, which had shattered the American economy, resulting into further fast progress which made America a big nation industrially and economically.

10. The war brought out many changes in political, economic, and social set up. Sherman's opinion was considered extremist about bringing upon total destruction of the enemy, burning their property completely. Sherman felt, it is not only the enemy, but also the organization and society of the enemy which should be destroyed and punished.

11. As a direct consequence of the civil war, was the development of new tactics and war strategies which were evolved during the four years long war. The failures as well as the successes brought about many lessons. New weapon systems were developed. Wars became more expensive, complicated and difficult, due to the increased mobility and battle weapons system. Offensive strategy came to be considered better than the defensive strategy.

12. Importance of cavalry once again increased due to its mobility cross-

country and over the mountainous terrain.

13. Importance of rifle, sub-machine carbine, machine gun, artillery, hand grenades, mines, booby-traps, rockets, explosives etc. increased. Bayonet once again got de-recognition and its importance decreased. Trench-war and barbed wire gained due importance for defensive operations. Split bullet was evolved. Chemical gas and torpedoes were further developed and used.
14. Telegraphs, telephones were developed and used during the civil war. Use of flags and lamp signaling got due importance.
15. Naval warfare went in for major changes in the ship building, armament and tactics. During the American Civil War new ships were designed, sub-marines invented and used in 1864. USS Houston was destroyed by sub-marine in 1864. Concept of blockade, investment, sea landing, tactical use of silent passage at night (stealth) and during poor visibility evolved and used. Sea landing of troops practiced and given due importance.
16. New changes in the Army tactics and strategies evolved. Army's value of manpower enhanced. Quality of manpower was given due importance. Professionalism in officers and men started. American army became a high professional and experienced army.
17. Since modern weapons of war were developed and used in the American Civil War which were much more lethal than before, there caused a very very large number of casualties. Thus, the modern wars were to get many more casualties than they were hitherto.
18. Within less than two generations after the war ended the United States of America had risen to become the greatest 'Capitalist' and the greatest industrial power' in the world. Stephen Vubcebt Benet had called them "The great metallic beast".

Conclusion

The American Civil War, 1861-65 was fought between the Federals (Northern States) and the Confederates (Southern States). This was a bloody war which lasted more than four years. This war resulted into a large number of soldiers and civilians killed with enormous loss to property and economy. The outcome of the war was the victory of Federals over the Confederates and the unification of the United States of America to become a super power in the years to come.

This war ended the slavery in the Southern States once for all.

Questions

1. What were the main causes of American Civil War (1861-65)?
2. Describe main events of the American Civil War (1861-65)?
3. What was the impact of American Civil War (1861-65)?