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Magnetism : A Study

A very common source of magnetic field found in nature is a dipole, with a "South pole" and a "North pole", terms dating back to the use of magnets as compasses, interacting with the Earth's magnetic field to indicate North and South on the globe. Since opposite ends of magnets are attracted, the north pole of a magnet is attracted to the south pole of another magnet. The Earth's North Magnetic Pole is physically a south pole, as it attracts the north pole of a compass. A magnetic field contains energy, and physical systems move toward configurations with lower energy. When diamagnetic material is placed in a magnetic field, a magnetic dipole tends to align itself in opposed polarity to that field, thereby lowering the net field strength. When ferromagnetic material is placed within a magnetic field, the magnetic dipoles align to the applied field, thus expanding the domain walls of the magnetic domains.

Sख. कअखऊऋ Sछअच

Magnetism is a class of physical phenomena that are mediated by magnetic fields. Electric currents and the magnetic moments of elementary particles give rise to a magnetic field, which acts on other currents and magnetic moments. The most familiar effects occur in ferromagnetic materials, which are strongly attracted by magnetic fields and can be magnetized to become permanent magnets, producing magnetic fields themselves. Only a few substances are ferromagnetic; the most common ones are iron, nickel and cobalt and their alloys. The prefix ferro- refers to iron, because permanent magnetism was first observed in lodestone, a form of natural iron ore called magnetite, Fe3O4.

Although ferromagnetism is responsible for most of the effects of magnetism encountered in everyday life, all other materials are influenced to some extent by a magnetic field, by several other types of magnetism. Paramagnetic substances such as aluminum and oxygen are weakly attracted to an applied magnetic field; diamagnetic substances such as copper and carbon are weakly repelled; while antiferromagnetic materials such as chromium and spin glasses have a more complex relationship with a magnetic field. The force of a magnet on paramagnetic, diamagnetic, antiferromagnetic materials is usually too weak to be felt, and can be detected only by laboratory instruments, so in everyday life these substances are often described as non-magnetic.

Magnetism, at its root, arises from two sources :

(1) Electric current.

(2) Spin magnetic moments of elementary particles. The magnetic moments of the nuclei of atoms are typically thousands of times smaller than the electrons' magnetic moments, so they are negligible in the context of the magnetization of materials. Nuclear magnetic moments are nevertheless very important in other contexts, particularly in nuclear magnetic resonance (NMR) and magnetic resonance imaging (MRI).

The enormous numbers of electrons in a material are arranged such that their magnetic moments cancel out. This is due, to some extent, to electrons combining into pairs with opposite intrinsic magnetic moments as a result of the Pauli exclusion principle , or combining into filled subshells with zero net orbital motion. In both cases, the electron arrangement is so as to exactly cancel the magnetic moments from each electron. Moreover, even when the electron configuration is such that there are unpaired electrons and/or non-filled subshells, it is often the case that the various electrons in the solid will contribute magnetic moments that point in different, random directions, so that the material will not be magnetic.

Diamagnetism appears in all materials, and is the tendency of a material to oppose an applied magnetic field, and therefore, to be repelled by a magnetic field. However, in a material with paramagnetic properties, the paramagnetic behavior dominates. Thus, despite its universal occurrence, diamagnetic behavior is observed only in a purely diamagnetic material. In a diamagnetic material, there are no unpaired electrons, so the intrinsic electron magnetic moments cannot produce any bulk effect.

When a material is put in a magnetic field, the electrons circling the nucleus will experience, in addition to their Coulomb attraction to the nucleus, a Lorentz force from the magnetic field. Depending on which direction the electron is

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orbiting, this force may increase the centripetal force on the electrons, pulling them in towards the nucleus, or it may decrease the force, pulling them away from the nucleus. This effect systematically increases the orbital magnetic moments that were aligned opposite the field, and decreases the ones aligned parallel to the field. This results in a small bulk magnetic moment, with an opposite direction to the applied field.

In a paramagnetic material there are unpaired electrons, i.e. atomic or molecular orbitals with exactly one electron in them. While paired electrons are required by the Pauli Exclusion Principle to have their intrinsic magnetic moments pointing in opposite directions, causing their magnetic fields to cancel out, an unpaired electron is free to align its magnetic moment in any direction. When an external magnetic field is applied, these magnetic moments will tend to align themselves in the same direction as the applied field, thus reinforcing it.

A ferromagnet, like a paramagnetic substance, has unpaired electrons. However, in addition to the electrons' intrinsic magnetic moment's tendency to be parallel to an applied field, there is also in these materials a tendency for these magnetic moments to orient parallel to each other to maintain a lowered-energy state. Thus, even in the absence of an applied field, the magnetic moments of the electrons in the material spontaneously line up parallel to one another.

Every ferromagnetic substance has its own individual temperature, called the Curie temperature, or Curie point, above which it loses its ferromagnetic properties. This is because the thermal tendency to disorder overwhelms the energy-lowering due to ferromagnetic order.

Ferromagnetism only occurs in a few substances; the common ones are iron, nickel, cobalt, their alloys, and some alloys of rare earth metals.

The magnetic moments of atoms in a ferromagnetic material cause them to behave something like tiny permanent magnets. They stick together and align themselves into small regions of more or less uniform alignment called magnetic domains or Weiss domains. Magnetic domains can be observed with a magnetic force microscope to reveal magnetic domain boundaries that resemble white lines in the sketch. There are many scientific experiments that can physically show magnetic fields.

When magnetized strongly enough that the prevailing domain overruns all others to result in only one single domain, the material is magnetically saturated. When a magnetized ferromagnetic material is heated to the Curie point temperature, the molecules are agitated to the point that the magnetic domains lose the organization and the magnetic properties they cause cease. When the material is cooled, this domain alignment structure spontaneously returns, in a manner roughly analogous to how a liquid can freeze into a crystalline solid.

In an antiferromagnet, unlike a ferromagnet, there is a tendency for the intrinsic magnetic moments of neighboring valence electrons to point in opposite directions. When all atoms are arranged in a substance so that each neighbor is 'anti-aligned', the substance is antiferromagnetic. Antiferromagnets have a zero net magnetic moment, meaning no field is produced by them. Antiferromagnets are less common compared to the other types of behaviors, and are mostly observed at low temperatures. In varying temperatures, antiferromagnets can be seen to exhibit diamagnetic and ferromagnetic properties.

Like ferromagnetism, ferrimagnets retain their magnetization in the absence of a field. However, like antiferromagnets, neighboring pairs of electron spins tend to point in opposite directions. These two properties are not contradictory, because in the optimal geometrical arrangement, there is more magnetic moment from the sublattice of electrons that point in one direction, than from the sublattice that points in the opposite direction.

Most ferrites are ferrimagnetic. The first discovered magnetic substance, magnetite, is a ferrite and was originally believed to be a ferromagnet; Louis Neel disproved this, however, after discovering ferrimagnetism.

When a ferromagnet or ferrimagnet is sufficiently small, it acts like a single magnetic spin that is subject to Brownian motion. Its response to a magnetic field is qualitatively similar to the response of a paramagnet, but much larger.

An electromagnet is a type of magnet in which the magnetic field is produced by an electric current. The magnetic field disappears when the current is turned off. Electromagnets usually consist of a large number of closely spaced turns of wire that create the magnetic field. The wire turns are often wound around a magnetic core made from a ferromagnetic or ferrimagnetic material such as iron; the magnetic core concentrates the magnetic flux and makes a more powerful magnet.

The main advantage of an electromagnet over a permanent magnet is that the magnetic field can be quickly changed by controlling the amount of electric current in the winding. However, unlike a permanent magnet that needs no power, an electromagnet requires a continuous supply of current to maintain the magnetic field.

As a consequence of Einstein's theory of special relativity, electricity and magnetism are fundamentally interlinked. Both magnetism lacking electricity, and electricity without magnetism, are inconsistent with special relativity, due to such effects as length contraction, time dilation, and the fact that the magnetic force is velocity-dependent. However, when both electricity and magnetism are taken into account, the resulting theory is fully consistent with special relativity. In particular, a phenomenon that appears purely electric or purely magnetic to one observer may be a mix of both to another, or more generally the relative contributions of electricity and magnetism is dependent on the frame of reference. Thus, special relativity "mixes" electricity and magnetism into a single, inseparable phenomenon called electromagnetism, analogous to how relativity "mixes" space and time into space time.

A very common source of magnetic field found in nature is a dipole, with a "South pole" and a "North pole", terms dating back to the use of magnets as compasses, interacting with the Earth's magnetic field to indicate North and South on the globe. Since opposite ends of magnets are attracted, the north pole of a magnet is attracted to the south pole of another magnet. The Earth's North Magnetic Pole is physically a south pole, as it attracts the north pole of a compass. A magnetic field contains energy, and physical systems move toward configurations with lower energy. When diamagnetic material is placed in a magnetic field, a magnetic dipole tends to align itself in opposed polarity to that field, thereby lowering the net field strength. When ferromagnetic material is placed within a magnetic field, the magnetic dipoles align to the applied field, thus expanding the domain walls of the magnetic domains.

Since a bar magnet gets its ferromagnetism from electrons distributed evenly throughout the bar, when a bar magnet is cut in half, each of the resulting pieces is a smaller bar magnet. Even though a magnet is said to have a north pole and a south pole, these two poles cannot be separated from each other. A monopoleif such a thing existswould be a new and fundamentally different kind of magnetic object. It would act as an isolated north pole, not attached to a south pole, or vice versa. Monopoles would carry "magnetic charge" analogous to electric charge. Despite systematic searches since 1931, as of 2010, they have never been observed, and could very well not exist.

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शोध-पत्र भेजने संबंधी नियम

(1) शोध-पत्र **1500-1700 शब्दों से अधिक नहीं** होना चाहिए।

(2) हिन्दी एवं मराठी माध्यम के शोधपत्रों को कृतिदेव 10 (Kruti Dev 010) में टाईप करवाकर 'पेजमेकर 6.5' में भेजें।

(3) पंजाबी माध्यम के शोधपत्रों को अनमोल लिपि (AnmolLipi) या **अमृत बोली** (Amritboli) या **जॉय** (Joy) में टाईप करवाकर 'पेजमेकर 6.5' में भेजें।

(4) अंग्रेजी माध्यम के शोधपत्र टाईम्स न्यू रोमन (Times New Roman), एरियल फोंट (Arial) में टाईप करवाकर 'पेजमेकर 6.5' या 'माइक्रोसाफ्ट वर्ड' में भेजे जा सकते हैं।

(4) शोधपत्र की विधि - **(1)** शीर्षक **(2)** एबस्ट्रेक्ट **(3)** की-वर्ड्स **(5)** प्रस्तावना/प्रवेश **(5)** उद्देश्य **(6)** शोध परिकल्पना **(7)** शोध प्रविधि एवं क्षेत्र **(8)** सांख्यिकीय तकनीक **(9)** विवेचन या विश्लेषण **(10)** सुझाव **(11)** निष्कर्ष एवं **(12)** संदर्भ ग्रंथ सूची।

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(7) गुजराती माध्यम के शोधपत्र **हरेकृष्णा (Harekrishna), टेराफोंट वरुण (Terafont Varun), टेराफोंट आकाश (Terafont Aaksah)** में टाईप करवाकर 'पेजमेकर 6.5' में भेजे जा सकते हैं।

(8) शोधपत्र की साफ्टकॉपी रिसर्च लिंक के ई-मेल आईडी researchlink@yahoo.co.in पर भेजने के बाद हॉर्डकॉपी, शोधपत्र के मौलिक होने के घोषणा पत्र के साथ हस्ताक्षर कर 'रिसर्च लिंक' के कार्यालय को प्रेषित करें।

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Artificial Intelligence and Its Applications in Associated Technologies

Artificial intelligence is the science of automating intelligent behaviors currently achievable by humans. Artificial intelligence is the intelligence exhibited by machines or software. It is becoming a popular field in computer science as it has enhanced the human life in many areas. This paper reviews the meaning of artificial intelligence and its various associated technologies. It creates revolutionized information technology. Key Words : Artificial intelligence, expert system, aviation, weather prediction, gaming industry.

ER.(MRS.) POOJA

Introduction :

Artificial Intelligence (AI) researches the intelligence exhibited by machines. It creates revolutionized information technology. The world famous companies like Google, yahoo, face book and so forth have spent millions of rupees to research on developing new algorithms on AI. Nevertheless, there are number of challenging issues in realistic applications due to fast-growing large and complex problems.

Artificial intelligence is the study and developments of intelligent machines and software that can reason, learn, gather knowledge, communicate, manipulate and perceive the objects. AI makes the machines smarter and more useful. It works with the help of artificial neurons and scientific theorems. AI technologies have matured to the point in offering real practical benefits in many of their applications. Major areas are expert systems, natural language processing, robotics and sensory systems, computer vision, speech recognition, neural computing etc.

Roots of AI : Artificial intelligence has identifiable roots in a number of order disciplines, particularly

(i) Philosophy **(ii)** Logic/mathematics
(iii) Computation **(iv)** Psychology/cognitive science
(v) Biology/ neuroscience

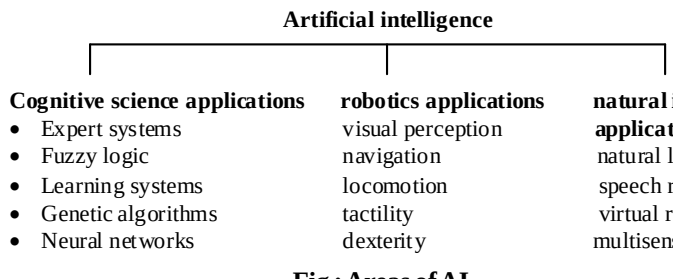

Fig : Areas of AI

There is inevitably much overlap example, between philosophy and logic, or between mathematics and computation. By looking at each of these in turn, we can gain a better understanding of their role in AI, and how these underlying disciplines have developed to play that role.

Current Progress : AI was created with sole aim of mimicking or even outperforming human minds. Thus, it is very important we question the fact whether it has actually been able to do so.

It cannot be ignored that the fact of AI is being used all around us especially, in the fields of medicines, robotics, law etc. it is being used in homes and big establishments, such as military basis, and the NASA space station. NASA has sent out artificial intelligent robots to planets so as to learn more about their habitat and atmosphere, with the intension of investigating if there is a possibility of human living on their planets.

Expert systems have been used by Mercedes Benz and other auto manufacturers in the design of vehicle components, subway systems in Washington, D.C. use expert system software controllers to cause subway trains to stop within 3 inches of right spot on the platform. These trains have motormen primarily to reassure passengers. AI has filtered into general applications in these fields and has become so common that it is not referred to AI anymore.

Latest technologies like xbox 360's kinect and iphone's siri use algorithm based on artificial intelligence, but it is a well known fact that these technologies are a long way from being perfect. Thus, we can conclude that though AI has made a lot of progress in

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the past few decades, it is not at a level where in one can confidently state that it is now ready to completely replace the human mind. That being said, large scale research is now being conducted into the field of proper simulation of the human brain. Cortex is a project by sponsored blue brain project, are two main ventures, whose goal is to simulate the human brain.

Areas of Artificial Intelligence :

(A) Cognitive Science Application : AI is the form of neural networks and expert systems has application in almost all human activities. The combination of high precision and low computation times makes AI a cutting edge technology. Robert expert systems are already taking over workshop level jobs in large industries, thus side lining human into a more supervisory role. Stock brokerage firms are now using AI to analyze data, make analysis and buy or sell stocks without the interference of any human being.

(i) Expert Systems : Expert systems are machines that are trained to have total expertise in specific areas of interest. These systems use statistical analysis and data mining to solve these problems by deducing the solutions through a logic flow of yes-no questions. An expert system is made up of 3 parts :

Knowledge base : it stores all the information rules, data and relationships that are needed by expert systems to have total expertise in its area of interest.

Inference Engine : it seeks information from the knowledge base on being represented with a query, analyses it and responds with a solution or recommendation in the way a human expert would.

Rule : it is a conditional portion statement that links the given condition to the final solution.

(b) Robotics Applications : A combination of most ability with the ability to more over terrain and manipulate object.

(i) Exploration

(ii) Transportation/navigation

(iii) Industrial Automation (eg. Process control, Assembly tasks, Executive tasks)

(iv) Security

(v) Other (Agriculture, fishing, mining, sanitation etc)

(vi) Military **(vii)** Household

Visual Perception : The ability to analyze a sensed scene by relating it to an internal model which represents the perceiving organism's "knowledge of the world". The result of this analysis is a structured set of relationships between entities in the scene.

(i) Pattern Recognition **(ii)** Scene analysis

(a)(ii) Learning System : The ability to adopt behavior based on previous experience and to develop general rules concering the world based on such experiences,

(i) Cybernetics **(ii)** Concept Formation

(c) Natural interface Application :

(i) Language understanding : The ability to "understand" and respond to the natural language, To translate from spoken language to written from or to translate from one natural language to another natural language

(i) Speech understanding **(ii)** Semantic information processing **(iii)** Question Answering **(iv)** Information Retrieval **(v)** Language Translation.

Future Aspects : The use of AI will lead to production of machines and computers, which are much more advanced than what we have today .Speech recognition system will reach much higher level of performance and will be able to communicate with humans ,using both text and voice in unstructured English.

There will be a great future some day for expert system applications in all aspects of health care in both clinical and administrative area, in improving patient care and in allocation of financial, social and other resources.

But when it comes to the question of question of AI creating machines, which are more intelligent than human beings, no one seems to have the answer. Also, even if it is possible, the amount of time it will take cannot be predicted. It is also expected to human brain features like learning from experience, cognition and perception. Whether human consciousness will be incorporated in these machines is still not known.

Robots in the future will be able to do everybody's work and will be faster and more efficient as compared to human being in doing it. It one is ill, they can have a robot nurse that will provide then with medicines at proper intervals. Thus it can be safely said that AI is still in its embryonic stage and its future depends only and only upon the scientists solving the mystery of human brain. Till that is done. on one can make a conclusion of whether our future will be affected positively or negatively by artificial intelligence

Conclusion :

The field of Ai gives the ability to machines to think analytically, using concepts. Tremendous contribution to the various areas has been made by AI techniques from the last 2 decades. AI will continue to play an increasingly important role in various fields. The computing world has a lot of gain or benefits from various AI techniques. Their ability to learn by examples makes them very flexible and powerful. Furthermore there is no need to devise an algorithm in order to perform specific task. i.e. no need to understand internal mechanism of that task. They are very well suited for real time systems because of their fast response and computational times which are due to their parallel architecture. The goal of AI is to create computers whose intelligence equals or surpasses humans. Achieving this goal is the famous AI problem from last decade's researchers is trying to close the gap between human intelligence and artificial intelligence.

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अम्बेडकरवाद और सामाजिक न्याय : एक अध्ययन

प्रस्तुत शोधपत्र, अम्बेडकरवाद और सामाजिक न्याय के अध्ययन पर आधारित है। डॉ.अम्बेडकर महान समाज सुधारक, न्यायविद्, दलितों के उद्धारक तथा भारतीय संविधान के प्रमुख निर्माताओं में से एक थे। संविधान सभा के सदस्यों द्वारा उन्हें आधुनिक मनु के नाम से पुकारा गया था। वह मौलिक अधिकारों तथा नीति-निर्देशक सिद्धांतों एवं धर्मनिरपेक्ष राज्य के प्रबल समर्थक थे। उनके प्रयत्नों के परिणामस्वरुप ही दलितों के उत्थान से समंधित अनेक प्रावधन को संविधान में स्थान दिया गया। नौरोजी, रानाडे तथा गोखले जैसे उदारपंथियों की भांति उन्होंने राजनीतिक स्वतंत्रता की अपेक्षाकृत सामाजिक सुधारों को प्राथमिकता दी। उनकी अभूतपूर्व सेवाओं व योगदान को मान्यता देते हुए उन्हें भारत सरकार द्वारा मरणोपरान्त सर्वोच्च नागरिक पुरस्कार भारत रत्न से सम्मानित किया गया। सामाजिक न्याय के क्षेत्र में प्रदान किए गए उनके विचार तथा व्यवहारिक योगदान अविस्मरणीय रहेंगे।

डॉ.विनिता वर्मा

डॉ. भीमराव अम्बेडकर (बाबा साहिब अम्बेडकर) 1891–1956 आधुनिक राजनीति चिंतक, बुद्धिजीवी, मानवतावादी, दलितों एवं अस्पृश्यों के मसीहा तथा सामाजिक न्याय के संघर्षशील योद्धा थे। वह भारतीय संविधान के प्रमुख निर्माता के रूप में भी जाने जाते हैं।

सामाजिक न्याय की संकल्पना बहुत व्यापक शब्द है, जिसके अन्तर्गत 'सामान्य हित' के मानक से सम्बन्धित सब कुछ आ जाता है, जो अल्पसंख्यकों के हितों की रक्षा से लेकर निर्धनता और निरक्षरता के उन्मूलन तक सब कुछ पहलुओं को इंगित करता है। यह न केवल विधि के समक्ष समानता के सिद्धांत का पालन करने और न्याय पालिका की स्वतंत्रता से संबंधित है, जैसे हम पश्चिम देशों में देखते हैं, बल्कि इसका संबंध उन कुत्सित सामाजिक कुरीतियों जैसे द्ररिद्रता, बीमारी, बेकारी और भूखमरी आदि के दूर करने से भी है, जिसकी तीसरी दुनिया के विकासशील देशों पर गहरी चोट हुई है।

डॉ. अम्बेडकर, सामाजिक न्याय का तात्पर्य सामाजिक समानता मनाते थे। अम्बेडकर का यह मानना था, कि सामाजिक न्याय का सिद्धांत यह माँग करता है कि सामाजिक जीवन में सभी मनुष्यों की गरिमा को स्वीकार किया जाए। लिंग, वर्ण, जाति, धर्म व स्थान के आधार पर न किया जाए तथा प्रत्येक व्यक्ति को आत्मविकास के सभी अवसर सुलभ कराए जाएँ।

सामाजिक न्याय किसी भी आधार पर किए गए शोषण को स्वीकार नहीं करता। वस्तुतः सामाजिक न्याय एक विस्तृत अवधारण है, जिसमें आर्थिक तथा राजनीतिक न्याय भी सम्मिलित हैं। भारतीय संविधान के अनुच्छेद 38 में कहा गया है, (सामाजिक न्याय) "एक ऐसी सामाजिक व्यवस्था है, जिसमें सामाजिक, आर्थिक तथा राजनीतिक न्याय राष्ट्रीय जीवन की सभी संस्थाओं को अनुप्राणित करें।

डॉ.अम्बेडकर जी का सम्पूर्ण जीवन भारतीय समाज में सुधार के लिए समर्पित था। दलितों एवं अस्पृश्यों के मसीहा कहे जानेवाले अम्बेडकर ने सदियों से पद–दलित वर्ग को सम्मानपूर्वक जीने के लिए एक सुस्पष्ट मार्ग दिया। उन्हें अपने विरूध होने वाले अत्याचारों, शोषण, अन्याय से संघर्ष करने की भाक्ति दी। उनके अनुसार सामाजिक प्रताडना राज्य द्वारा दिए जाने वाले दण्ड से भी कहीं अधिक दुःखदाई है। उन्होंने प्राचीन भारतीय ग्रन्थों का विशद अध्ययन कर यह बताने की चेष्टा भी की कि भारतीय समाज में वर्ण–व्यवस्था, जाति प्रथा तथा अस्पृश्यता का प्रचलन समाज में कालान्तर में आई विकृतियों के कारण उत्पन्न हुई है, न कि यह यहाँ के समाज में प्रारम्भ से ही विद्यमान थी।

डॉ. अम्बेडकर जी ने दलित वर्ग पर होने वाले अन्याय का ही विरोध नहीं किया, अपितु उनमें आत्मगौरव, स्वावलम्बन, आत्मविश्वास, आत्मसुधार के साथ ही साथ आत्म विश्लेषण करने और अपने अस्तित्व को स्थापित करने कि शक्ति प्रदान की। अम्बेडकर द्वारा दलितों के उद्धार के लिए किए गए प्रयासों को किसी भी दृष्टि से आधुनिक भारत के निर्माण में भूलाया नहीं जा सकता।

डॉ. अम्बेडकर जी ने भारतीय समाज में भारतीय आर्यों द्वारा बनायी गई चतुवर्ण–व्यवस्था को अवैज्ञानिक अत्याचारपूर्ण, संकीर्ण, गरिमाहीन बताते हुए इसका पुरजोर विरोध किया। डॉ. अम्बेडकर के अनुसार यह श्रम के विभाजन पर आधारित न होकर श्रमिकों कें विभाजन पर आधारित थी। डॉ. अम्बेडकर का मत था कि उन्नत तथा कमजोर वर्गों में जितना उग्र संघर्ष भारत में है, उतना विश्व के अन्य किसी देश में नहीं। ऐतिहासिक आधारों पर डॉ. अम्बेडकर ने यह स्पष्ट करने का भी प्रयास किया कि शुद्रों की उत्पत्ति तथा हीनता का कारण वे खुद नहीं, बल्कि ब्राह्मणों का जान बूझकर किया गया प्रयास था।

अतिथि विद्वान, रावटी शासकीय महाविद्यालय, रतलाम (मध्यप्रदेश)

डॉ. अम्बेडकर ने भारत में जाति–व्यवस्था की प्रमुख विशेषताओं और लक्षणों के आधार पर यह स्पष्ट करने का प्रयास किया, कि जाति–व्यवस्था भारतीय समाज की एक बहुत बड़ी विकृति है, जिसके दुखभाव समाज के लिए बहुत ही घातक है। जाति व्यवस्था के कारण लोगों में एकजुटता का अभाव है, अतः भारतीयों का किसी भी विषय पर जनमत तैयार होना मुमकिन नहीं होगा। समाज कई भागों में विभाजित हो गया। उनके अनुसार जाति व्यवस्था न केवल हिन्दू समाज कों ही दुष्प्रभावित नहीं किया, अपितु भारत के राजनीतिक, आर्थिक तथा नैतिक जीवन में भी जहर घोलने का काम किया है। डॉ. अम्बेडकर ने हिन्दू समाज में प्रचलित अस्पृश्यता को अन्यायपूर्वक मानते हुए इसका प्रबल विरोध किया। डॉ. अम्बेडकर ने अस्पृश्यता के निराकरण के लिए केवल सैद्वांतिक दृष्टिकोण ही प्रस्तुत नहीं किया, अपितु उन्होंने अपने विभिन्न आन्दालनों व कार्यों से लोगों में चेतना जाग्रत करने एवं इसके निराकरण के लिए विभिन्न सुझाव भी प्रेरित किए। उन्होंने अस्पृश्यता निराकरण के लिए सामाजिक, राजनीतिक, आर्थिक, नैतिक, शैक्षणिक आदि स्तरों पर रचनात्मक कार्यक्रम तथा संगठित अभियान का आग्रह किया। दलितों एवं अस्पृश्यों के उद्धार के लिए डॉ. अम्बेडकर के कुछ महत्वपूर्ण सुझावों को इस प्रकार परिलक्षित किया जा सकता है :

(1) हिन्दू समाज की मान्यताओं में परिवर्तन पर बल दिया जाए।

(2) दलितों की शिक्षा, संघर्ष और संगठन पर बल दिया जाए।

(3) अंतर्जातिय विवाह का समर्थन किया जाए।

(4) नारी गरिमा का समर्थन कर उसे सुरक्षा प्रदान की जाए।

(5) व्यवस्थापिका में दलित वर्ग के पर्याप्त प्रतिनिधित्व का समर्थन किया जाए।

(6) सेवाओं में पर्याप्त प्रतिनिधित्व की माँग की जाए।

(7) कार्यपालिका में पर्याप्त प्रतिनिधित्व की माँग की जाए।

वर्तमान में सामाजिक न्याय एवं अधिकार के तहत राज्य सरकार के विभिन्न विभागों में जनहित से संबंधित/सामूहिक लाभ की योजनाएँ कार्यरत् हैं, जिनका संक्षिप्त विवरण अग्रलिखित है :

(1) विशेष योग्यजन छात्रवृति योजना,

(2) आस्था योजना,

(3) विशेष योग्यजन सुखद दाम्पत्य योजना,

(4) संयुक्त सहायता अनुदान योजना,

(5) विशेष योग्यजन पेंशनधारियों को स्वयं का व्यवसाय आरम्भ करने हेतु एकमुश्त राशि प्रदान करने की योजना,

(6) अम्बेडकर सामाजिक सेवा पुरस्कार,

(7) अम्बेडकर महिला कल्याण पुरस्कार,

(8) अम्बेडकर शिक्षा पुरस्कार,

(9) अम्बेडकर सामाजिक न्याय पुरस्कार,

(10) पोलियो करैक्शन कैम्प योजना,

(11) विशेष योग्यजन हेतु राज्यस्तरीय पुरस्कार योजना,

(12) भिक्षावृत्ति व अवांछित वृत्तियों में लिप्त परिवारों के बालकों हेतु आवासीय विद्यालय,

(13) निष्क्रमणी पशुपालकों के बच्चों के लिए आवासीय विद्यालय,

(14) उत्तर मैट्रिक छात्रवृत्ति,

(15) विशेष पिछड़ा वर्ग उत्तर मैट्रिक छात्रवृत्ति योजना,

(16) अनुप्रति योजना–1 (संघ लोक सेवा आयोग द्वारा आयोजित सिविल सेवा परीक्षा हेतु),

(17) अनुप्रति योजना–2 (राजस्थान संघ लोक सेवा आयोग द्वारा आयोजित राज्य एवं अधीनस्थ सेवा (सीधी भर्ती)परीक्षा हेतु),

(18) अनुप्रति योजना–3 (IITs, IIMs एवं राष्ट्रीय स्तर के मेडिकल कॉलेजों में प्रवेश हेतु),

(19) अनुप्रति योजना–4 (राजकिय इंजीनियरिंग/मेडीकल कॉलेजों में प्रवेश हेतु),

(20) विशेष पिछडावर्ग अनुप्रति योजना,

(21) छात्रावास योजना,

(22) डॉ. सविता अम्बेडकर अंतर्जातीय विवाह योजना,

(23) गाडिया लोहारों को स्थाई रूप से बसाने हेतु महाराणा प्रताप मकान निर्माण हेतु अनुदान सहायता,

(24) गाडिया लोहारों को कच्चामाल क्रय करने हेतु अनुदान योजना,

(25) पालनहार योजना,

(26) कोढ़ पीड़ित/विकलांग माता–पिता के बच्चों को छात्रवृत्ति,

(27) अनु.जाति/अनु.जनजाति (अत्याचार निवारण) अधिनियम, 1989 व नियम 1995 अंतर्गत आर्थिक सहायता,

(28) विशेष योग्यजन खेलकुद योजना,

(29) विशेष योग्यजन अनुप्रति योजना,

(30) मुख्यमंत्री विशेष योग्यजन स्वरोजगार योजना।

निष्कर्ष :

डॉ. अम्बेडकर महान समाज सुधारक, न्यायविद्, दलितों के उद्वारक तथा भारतीय संविधान के प्रमुख निर्माताओं में से एक थे। संविधान सभा के सदस्यों द्वारा उन्हें आधुनिक मनु के नाम से पुकारा गया। वह मौलिक अधिकारों तथा नीति–निर्देशक सिद्वांतों एवं धर्मनिरपेक्ष राज्य के प्रबल समर्थक थे। उनके प्रयत्नों के परिणामस्वरूप ही दलितों के उत्थान के संबंधित अनेक प्रावधान को संविधान में स्थान दिया गया। नौरोजी, रानाडे तथा गोखले जैसे उदारपंथियों की भाँति उन्होंने राजनीतिक स्वतंत्रता की अपेक्षा सामाजिक सुधारों को प्राथमिकता दी। उनकी अभूतपूर्व सेवाओं व योगदान को मान्यता देते हुए उन्हें भारत सरकार द्वारा मरणोपरान्त भारत के सर्वोच्च नागरिक पुरस्कार 'भारत–रत्न' से सम्मानित किया गया। सामाजिक न्याय के क्षेत्र में दिए गए उनके विचार तथा व्यवहारिक योगदान अत्यन्त महत्वपूर्ण हैं।

संदर्भ :

(1) अम्बेडकर : सामाजिक दर्शन एवं प्रासंगिकता।

***(2)** सामाजिक न्याय की अवधारणा (एक निबंध)।*

***(3)** सामाजिक न्याय एवं अधिकार के तहत राज्य सरकार के विभिन्न विभागों में जनहित से संबंधित/सामूहिक लाभ की योजनाएँ।*

***(4)** विल, किमलिका (2009) : समकालीन राजनीति दर्शन : एक परिचय (अनु. कमल नयन चौबे), पियर्सन, नई दिल्ली।*

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