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SUBJECT:	Pr ESSAY		Test Code:	9	3	0
Name of Candidate	PRATEEK JAIN					
Medium Hindi/Eng.	ENGLISH	Registration Number	2	8	1	3
Center	ORN	Date	2	3	-	0

INDEX TABLE				INSTRUCTIONS
Q. No.	Page No.	Maximum Marks	Marks Obtained	
				1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code). उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
				2. All questions are compulsory. सभी प्रश्न अनिवार्य हैं।
				3. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
				4. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one. प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
				5. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
				6. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off. उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।
Total Marks Obtained:				

EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

RISE OF THE MACHINES :

AN OPPORTUNITY OR THREAT TO HUMANITY

The world has witnessed many technological innovations in the last two centuries. Industrial Revolution that first started in England in the late 18th century can be considered as a watermark in the history of mankind. Some early machines like the spinning jenny, powerloom, steam engine and the printing press significantly benefitted humanity by making manufacturing easier, efficient as well as by increasing precision and accuracy.

All these machines were man's innovation to make life simple and convenient. With further technological

advancements, machines has also advanced. The rise of machines like ~~robotics~~, presents a great opportunity for the humanity to progress. But in the course of time, ~~the~~ ~~one~~ while we have guided missiles, we have misguided men. The use of machines depends on how we intend to use it. We need to discuss ~~the~~ both the opportunities and threats that the rise of machines has for mankind.

Let's first look at the major benefits that machines have provided us. ~~Firstly~~, Machines have many physical uses. Automobiles have increased the reach of people to different places, shipping has fastened the trade. Almost all equipments we use today is a product of machine. The fan and Air conditioner, the tubelights and the bulbs,

the cooking stove and the microwave oven are useful machines without which life would become inconvenient.

Almost all products we use today are industrially manufactured and they reach us after passing through different machines in the assembly line and then transportation.

Machines ~~to~~ like computers, mobiles & satellites have improved communication and have reduced distances between human beings.

In the medical field, they are used for surgery, diagnosis as well as treatment. Cardiovascular stents, Magnetic Resonance Imaging (MRI) or organ transplantation would not have been possible without the use of machines.

Clearly, humanity has accrued many benefits from machines. Now

lets see how modern day machines create more opportunities for our development.

The scope of a machine has significantly broadened now. Earlier, we used to have machines either manually used or automated. But now we have machines that can learn. The digital revolution, rise of internet usage & cyberspace has ~~made~~ increased the data handling capacity of machines. Machines can now process a lot of data at tremendous speeds and can even learn through its experience.

Machine learning and Artificial Intelligence (AI) of machines have created many opportunities for us.

Apple's SIRI and Microsoft's Cortana have shown that AI can replace the presence of humans and can thus free humans to focus on more creative tasks like literature, paintings, music & performing arts.

The level of automation has also increased. The requirement of human labor is decreasing. Automated goods have less chances of human made errors, have higher levels of precision and are quickly manufactured.

The combination of Robotics or Automation with Artificial intelligence can do wonders by making these machines able to figure out the right way to work on their own without human involvement. This Self-correction capability will further

enhance accuracy.

We have developed machines for Biometric Identification like for correct identification of finger prints, retina scan and even face identification. In India, we have started Aadhar based identification for the beneficiary of many welfare schemes of the government which will reduce leakages and improve targeting, and thus will improve governance in India.

Digital India mission also aims to use e-governance as a platform to increase transparency & accountability of the government. PM Modi is using this platform as a great tool to enhance public participation by increased usage of machines like mobiles and computers.

Machines like Drones have opportunities for usage for security purpose. We can enhance our surveillance capabilities through Drone ~~was~~ based monitoring of areas affected by Left - Wing extremism or even in North East insurgent areas and at Border for enhanced vigilance.

At the global level, all countries are looking forward to avail more benefits from machines. Elon Musk, the owner of a private space Agency SpaceX has demonstrated that we can have immense opportunities if we develop machines ~~in~~ that are cost-effective as well as efficient. He is currently working on Hyperloop technology that works on Magnetic

levitation and ~~can~~ will help in further increasing the speeds of mobility using clean energy, which may be faster than the bullet trains as well.

Further, we have developed Driverless cars, 3D printing technology and are working on Internet of Things (IoT). These niche technologies will surely make lives more comfortable & convenient.

However, the rise of these machines have a dark-side as well. It was a machine in the form of a missile that dropped two nuclear bombs on Japanese cities of Hiroshima & Nagasaki and completely devastated the two cities,

effects of which is still visible. Just like the nuclear bombs, if any of these machines is used with wrong intentions, then it can pose a ~~to~~ great harm to humanity.

In the two world wars, we saw countries using missiles, ~~tanks~~ tanks, U-Boats and air-bombing to destroy other people and countries. Even today, if any of these war-machines becomes accessible to extremists and terrorists, then it can threaten the entire humanity.

In the economic sphere, the rise of automation has reduced labor requirements. World Bank recently reported that more than 15% of the labor requirement will be

reduced in the next 10 years, with respect to volume of goods produced in the industries. This can increase unemployment and can increase distress among labor. In fact, a form of Neo-Luddism movement is already shaping roots as many labor unions often call for strikes against the firing of many labor due to increased automation.

Machines have also altered our social lives to a great extent. For many people, their mobile phones and laptops are now a bigger necessity than their family and friends. Online games

and applications have replaced outdoor games & sports in the lives of many children, as a result of which fitness levels of an average child today is low in comparison to the earlier generations.

Also, these machines have increased use of online communication through facebook, Twitter & ~~facebo~~ whatsapp, leading to reduced sensitivities to other human beings and more addiction to these technology based machines.

We have seen that the rise of machines can threaten humanity if they are misused or if we become addicted to their use.

At any stage, the use of machines can be good as long as we do not become the slave of these machines. The need is to optimize the use of these machines by keeping the humanity within us intact.

Missile Man of India, Dr. A.P.J. Abdul Kalam was a firm believer in the power of machines but he always said that machines must not replace the bonds humans share with each other.

For us, it would be wise to limit the use of machines and accrue all the benefits that are possible. But at the same

time, we must have adequate checks and Balances to ensure that sensitive machines like missiles, drones or even cyber-systems are not misused.

EDUCATION SYSTEM IN INDIA :

A LEVELLER OR

A SOURCE OF INEQUALITY

Nelson Mandela once said that "Education is a great ~~to~~ weapon which you can use to change the world". Indian leaders too firmly believed in the power of education to uplift the poor and downtrodden, & to reduce inequalities based on caste, class, gender, religion and region. Our Constitution provides for Right to Education under Art 21A and also provides for Affirmative Action for women, Scheduled Castes & Tribes and backward classes by granting reservations in schools and colleges.

to reduce inequalities through education and to provide them opportunity to have lead a better life.

The design of the education system in India is adequate to reduce inequalities in social, political and economic sphere. However, the implementation of our education policy has not been up to the mark, due to which many barriers to equality still remain. Some successes of our education system show how it has acted as a leveler, but some loopholes indicate its failure as well. Let's examine.

National Education Policies of 1968 and 1986, both created a

roadmap for our education system to develop. Our focus has always been on improving primary education.

We have enacted Right to Free and Compulsory Education (RTE) Act 2009 to adopt a rights based approach for all children ~~of age~~ of 6-14 years of age to get opportunity to get educated.

We all know that a high level of gender inequality exists in India, particularly due to the patriarchal mindset in Indian society. Earlier, many families were reluctant to send their daughters to schools due to which women did not get any formal education, and remained subjugated to men.

However, it is the success of our education system that we have managed to increase the gross-enrollment ratio of girls in primary schools to ~~as~~ more than 95%, and also in decreasing the drop-out ratio of girls as they move from primary to secondary levels.

Initiatives like the ongoing Beti Bachao Beti Padhao have helped changed the mindset of society towards girl education and has helped reduce gender inequality.

Similarly, Sarva Shiksha Abhiyan has helped in creating schools in the remotest areas of the country. Although, there are

still many students who have to walk long distances to reach their schools, but we have managed to incentivize students by giving them free ~~to~~ books, clothes ~~and~~ and free meals (Mid-Day Meals). This has reduced inequalities between rural and urban areas, not completely, but to a certain extent.

The reservation system has acted as a boon for the marginalized groups like Dalits. Seats are reserved for SCs and STs proportional to their population in all government run schools and colleges. This has uplifted many Dalits & has made them economically stable. ~~Also, reservation~~

Due to free education at elementary levels, even the poor families can send their children to schools and they do not have to worry about financing school education for their children. The government also runs many scholarships for economically poor as well as ~~minorities~~ minorities, at the higher education level. These scholarships makes education affordable for many poor people and increases their capabilities to further excel in lives.

Despite these achievements, there are many concerns in our education system that widen inequalities rather than decreasing them.

Firstly, our failure to focus on higher education and research has caused many problems.

Although the government started premier institutes like IITs, NITs & AIIMS, the number of seats in these institutes is still not adequate. Merely 0.5% of students are able to get admission to these institutes. It shows that we have good arrangements for the highly meritorious students but not enough colleges to meet the needs of an average student.

Also, we have not encouraged research culture in India due to which we witness the phenomenon of BRAIN DRAIN, as many students go to foreign universities for

specialized courses. However, only rich families can afford sending their children abroad due to which inequalities are created between rich and middle class families and the economic gap further widens due to less opportunities to poor families.

Similarly, our education system has not been able to translate its vision to reality. Although it aims at reducing inequality through reservation and as earlier said, it has indeed created opportunities for marginalized groups. However, social inequalities are not reduced.

Even today, in many schools, Dalit students are seated separately from the so called "upper class"

students. This has only perpetuated social distances between them.

Values and philosophy of our Constitution ~~like~~ based on equality and brotherhood is not passed on properly through our education system due to poor ~~to~~ emphasis on Value-education.

Regional gaps have also widened as we have not created many schools and colleges in socially & economically backward regions like North East and Jammu & Kashmir.

Our education system fails to take care of many dimensions of inequalities. Language is another dimension. India ~~is~~ is a multi-lingual country. Although we

have tried to provide primary education in all languages but as we go higher up the ladder, the person student belonging to a linguistic minority faces difficulty due to language barriers. Most of higher education institutes are dominated by English & Hindi speaking students & not enough provisions are made for other students to accommodate them properly.

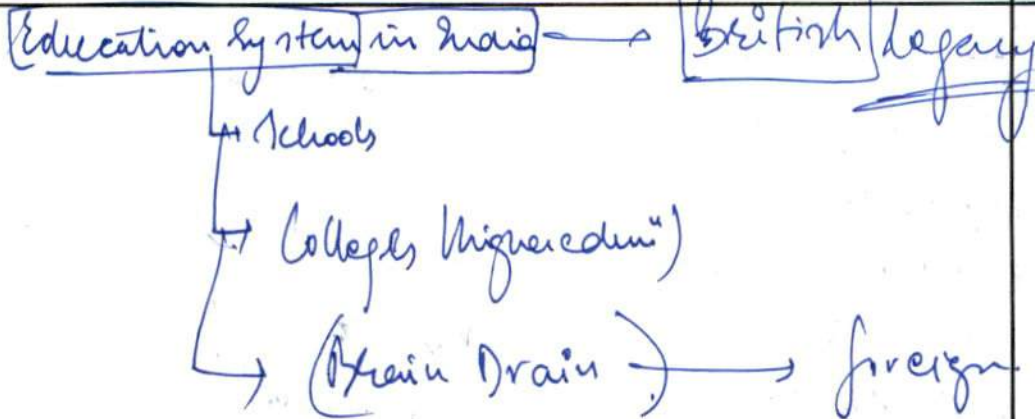
Clearly, there is a lot that we need to improve else our education system will fail to fulfil its objectives.

Administratively, we need to take inspiration from Ireland's education

system which has been constantly hailed as the best education system in the world due to its consistent high ranking as per PISA. Our teachers also need to get aligned with the goals of the system that we wish to fulfil.

Swami Vivekananda said that the goal of any good education system should be to build human character. For our education system to become a leveller, ~~it~~ ~~not~~ it is essential that all the students develop a sound character to recognize everyone as equals.

Also, as Nobel Laureate Amartya Sen has said that capability building of all students will ~~not~~ increase their potential to succeed in lives. Currently, only a few get the opportunity to build their capabilities in India. Others are merely spoon-fed or enroll in schools / colleges to get a qualification or ~~di~~ certificate. To make education a leveller, we must build capabilities of all so as to use this weapon of education for the upliftment of the entire country.



Leveler

- Reservation
- Mid Day Meal
- RTE
- RABP
- BBA

Child Labor

Rural vs Urban

Teachers

Inequality

→ Rich vs Poor

→ Caste

→ Gender

→ Science vs

Humanities

→ Regional

→ Literacy Rates

Value Education

→ Madhwas

Comparison

→ Finland

3:20

Technology

Social Political

Economic

Environment

Don't write anything this margin

Legal

Cultural

VISION IAS™

Mechanical

Software

Rise of Machines

- Ind. Rev. (IR)
- Art. Int. (AI)
- Robotics
- Automobiles
- Fourth IR

Tool for use to use

Machines

Machine Learning

- Intellect
- EI
- (Cortana)
- Siri



Guided missiles but misguided men

Machines

Automated

Manual

Investment

Precision

Solutions

Threat

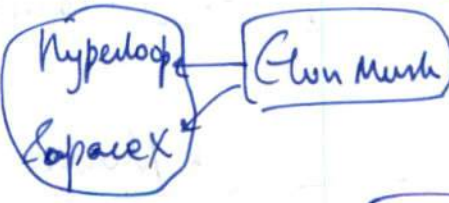
Opp.

- How has the world benefi (Part)
- Current Tech. → Benefits in future

Bullet Trains

- Transportation + Communication
- Data Analysis
- Stress ↓
- (Creative Task)
- Ships

Physical uses



Mobile

- Social life X
- Computer/social media

- Jobs/Unemployment
- Luddism
- Jobless growth

Security

Computer/Internet

Terrorism

Medicinal use

- Stents
- Bone surgery
- MRI
- AI Imaging

- Lifestyle ↑↑
- A.Cs / refrigerators
- Pollution

Threat to nature

(Irresponsible usage)

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