

**CHEMISTRY-11**  
**ASSIGNMENT**

**MOLE CONCEPT ( Fill In The Blanks)**

11. The force with which the earth attracts a body is called the \_\_\_\_\_ of the body.
12. A pure substance contains \_\_\_\_\_ kind of molecules.
13. The smallest indivisible particle of matter is called \_\_\_\_\_.
14. The atomic number is equal to the number of \_\_\_\_\_ in nucleus.
15. The atomic mass is the total number of protons and \_\_\_\_\_ in an atom of the element.
16. The average weight of atoms of an element as compared to the weight of one atom of \_\_\_\_\_ is called the atomic mass.
17. 1.0007 contains \_\_\_\_\_ significant figures.
18. The figure 24.75 will be rounded off to \_\_\_\_\_.
19. \_\_\_\_\_ means that the readings and measurements obtained in different experiments are very close to each other.
20. \_\_\_\_\_ means that the results obtained in different experiments are very close to the accepted value.
21. The degree of a measured quantity \_\_\_\_\_ with increasing number of significant figures in it.
22. The atomic mass of sodium is \_\_\_\_\_.
23. The symbolic representation of a molecule of a compound is called \_\_\_\_\_.
24. Molecular formula of  $\text{CHCl}_3$  and its Empirical formula is \_\_\_\_\_.
25. Molecular formula of benzene is  $\text{C}_6\text{H}_6$  and its empirical formula is \_\_\_\_\_.
26. 58.5 is the \_\_\_\_\_ of  $\text{NaCl}$ .
27. 4.5 gms of nitrogen will have \_\_\_\_\_ molecules.
28. 28 gms of nitrogen will have \_\_\_\_\_ molecules.
29. 2 moles of  $\text{SO}_2$  is equal to \_\_\_\_\_ gms.
30. 1000 gms of  $\text{H}_2\text{O}$  is equal to \_\_\_\_\_ moles.
31. The reactions, which proceed in both directions, are called \_\_\_\_\_.
32. The reactions, which proceed in forward directions only, are called \_\_\_\_\_ reactions.
33. The \_\_\_\_\_ reactions are completed after some time.
34. 0.0006 has \_\_\_\_\_ significant figures
35.  $7.40 \times 10^8$  has \_\_\_\_\_ significant figures.

**EAST POINT SCHOOL  
ECONOMICS ASSIGNMENT  
CLASS – XI ( 2020-2021 )**

1. \_\_\_\_\_ is a positional average . ( Mean / Median/ Mode )
2. The arithmetic mean of the following observation is 4, 8, 12, 16 is \_\_\_\_\_.
3. Cumulative frequency is needed while finding the \_\_\_\_\_ of the distribution. ( Mode/ Median/ average/ normal )
4. \_\_\_\_\_ is having the highest frequency . ( Mean / Median/ Mode )
5. The second quartile is known as \_\_\_\_\_. ( Lower quartile/ Median/ Upper quartile )
6. 25<sup>th</sup> percentile is equal to \_\_\_\_\_. ( 1<sup>st</sup> quartile / 25<sup>th</sup> quartile/ 2<sup>nd</sup> Quartile )
7. Find the Quartiles of the following data  
4, 6, 7, 8, 10, 23, 34.
8. Find the Quartiles of the following age of 8 students  
23, 13, 37, 16, 26, 35, 26, 35

**EAST POINT SCHOOL  
English ASSIGNMENT  
CLASS – XI ( 2020-2021 )**

1. Fill in the blanks using suitable articles. Put a (X) where none is required.  
One day (a) ..... certain gentleman went to meet Sir Isaac Newton just before (b) ..... lunchtime. When he asked for him, he was informed by (c) ..... servant that Sir Isaac was in his study, where nobody was allowed to disturb him. The visitor who really wished to speak to Sir Isaac, said he would wait till he came for lunch, and so sat down in (d) ..... dining room. (e) ..... short time later, (f) ..... food was brought in—(g) ..... boiled chicken under a cover. (h) ..... hour passed, and Sir Isaac did not appear. (i) ..... gentleman, feeling hungry, decided to eat (i) ..... chicken. When he had finished eating, he covered up the empty dish and told the servant to boil

another chicken for his master. But before that was ready, Sir Isaac came down to eat. When he found the gentleman in (k) ..... dining room, he said: "I beg your pardon, Sir, because you had to wait so long. But just allow me (l) ..... little time to take my lunch first, for I am quite hungry." Saying this, he picked up the cover, and finding (m) ..... dish empty, he remarked with a smile: "See, Sir, we learned people are really absent-minded! I quite forgot I had had (n) ..... lunch already."

**Fill in the blanks using suitable articles. Put a (X) where none is required.**

Though you can make (a) ..... decision purely on grounds of convenience, buying (b) ..... newspaper is often more like joining (c) ..... religious cult. Buy (d) ..... Hindustan Times, for example, and almost by default you join its chairman (e) ..... K.K. Birla in his crusade against The Times of India. Every newspaper has its 'users' groups' and (f) ..... band of loyal enthusiasts who tout its merits. That makes it all (g) ..... more difficult for (h) ..... uninitiated to decide what paper to read. (i) ..... students have (j) ..... huge advantage, however. (k) ..... newspaper companies are so eager for students' business (it builds "brand loyalty"), that many offer them huge discounts.

: Question 1: <https://youtu.be/Bw-0nJTqevA>

'अरे इन दोहून राह न पाई' से कबीर का क्या आशय है और वे किस राह की बात कर रहे हैं?

Question 2:

इस देश में अनेक धर्म, जाति, मज़हब और संप्रदाय के लोग रहते थे किंतु कबीर हिंदू और मुसलमान

: Question 3:

'हिंदुन की हिंदुवाई देखी तुरकन की तुरकाई' के माध्यम से कबीर क्या कहना चाहते हैं? वे उनकी किन विशेषताओं की बात करते हैं?

: Question 4:

'कौन राह है जाई' का प्रश्न कबीर के सामने भी था। क्या इस तरह का प्रश्न आज समाज में मौजूद है? उदाहरण सहित स्पष्ट कीजिए।

### Physics-11-Assignment for December month

#### Assignment-1

Link- <https://youtu.be/Pn5YEMwQb4Y>

Q1 In a car lift compressed air exerts a force  $F_1$  on a small piston having a radius of 5 cm. this pressure is transmitted to a second piston of radius 15 cm. if the mass of the car to be lifted 1350 kg, what is  $F_1$ ? What is the pressure necessary to accomplish this task?

Q2 Two syringes of different cross-section (without needles) filled with water are connected with tightly fitted rubber tube filled with water. Diameter of the smaller piston and larger piston are 1.0 cm and 3.0 cm respectively. (a) find the force exerted on the larger piston when a force of 10 N is applied to the smaller piston. (b) if the smaller piston is pushed in through 6.0 cm, how much does the larger piston move out?

Q3 The area of the smaller piston of a hydraulic press is 1 cm<sup>2</sup> and that of larger piston is 22 cm<sup>2</sup>. How much weight can be raised on the larger piston by a 200 kg f exerted on the smaller piston?

Q4 What is the absolute and gauge pressure of the gas above the liquid surface in the tank shown in fig.? density of oil = 820 kg m<sup>-3</sup>, density of mercury = 13.6 × 10<sup>3</sup> kg m<sup>-3</sup>.

Given 1 atmospheric pressure = 1.01 × 10<sup>5</sup> Pa.

Q5 A liquid stands at the same level in the U-tube when at rest. If A is the area of cross section and g the acceleration due to gravity, what will be the difference in height h of the liquid in the two limbs of U-tube, when the system is given an acceleration 'a' towards right, as shown in fig.

Q6 A vertical U-tube of uniform inner cross-section contains mercury in both of its arm. A glycerine (density 1.3 g cm<sup>-3</sup>) column of length 10 cm is introduced into one of the arms. Oil of density 0.8 g cm<sup>-3</sup> is poured in the other arm until the upper surfaces of the oil and glycerine are in the same horizontal level. Find the length of the oil column.

**CLASS XI**  
**BREATHING AND EXCHANGE OF GASES**  
**WORKSHEET- 2**

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- 1 Identify the types of respiratory organs in the following organisms.
  - a) Earthworms
  - b) Insects
  - c) Terrestrial organisms
- 2 Write the function of pleural fluid.
- 3 Explain how the process of inspiration take place.
- 4 Define the following:
  - a) Tidal volume
  - b) Residual volume
  - c) Vital capacity
  - d) Total lung capacity
- 5 What is partial pressure? Write down the partial pressure of oxygen and carbon dioxide at different parts involved in diffusion in comparison to those in atmosphere.

# **Weekly Assignment**

## **YOGA**

Q1 Explain Yogic Diet.

Q2 Differentiate between Satvic food, and Rajasic food.

Q3 Describe benefits of fasting.

# POLITICAL SCIENCE

## CHAPTER-2 ,FREEDOM

### introduction

you surely know that india fought for freedom of their country from foreign rule. many countries have fought for their independence too. we also argue with our parents to give us freedom to live our own lives. so freedom is a very important principle for individual and for society as well. so we require freedom so that we can control our own destinies and live according to our own rules. and also to have the opportunity to express ourselves and pursue our choices and activities.

but we cannot have absolute freedom. there need to be restrictions on freedom so that everybody can enjoy their freedom.

So, in this chapter we will read arguments from different thinkers on how much freedom should be given to individuals and what restrictions should be placed on them? remember we did importance of political theory in first chapter where i told you that various thinkers debate about various ideas and principles and give different definitions of values like freedom, equality and rights. we will do this here. Before we start with our freedom, we need to know that nelson mandela of south africa spent 28 years in jail to fight for independence movement. and aung san suu kyii of myanmar also spent years under house arrest to fight for independence.

### What is freedom?

freedom includes two aspects- one absence of external constraints and two, existence of conditions which expand freedom. what does this mean?

external constraints means the force or compulsions under which an individual has to work. and absence of external constraints means that an individual should not be forced to perform any actions which she/he does not want to perform.

for example: if a woman wants to drive, there should not be rules and regulations which deny her that. in iran women are not allowed to drive. So there should be absence of external constraints(restrictions) , so that she can enjoy her freedom. so a society should have minimum constraints to allow more freedom.

and second is conditions which expand her freedom. this means that there should be conditions available that make her enjoy her freedom more. for example: there should be educational opportunities available for women so that she can keep herself informed, she can get into employment, she can know her rights and in this way she will be having more opportunities to enjoy her freedom. and in this freedom she can develop her capabilities and creativity. so there should be freedom in sports, science, arts, music or exploration.

So, both these freedoms help individual to grow and develop his/her capabilities.

but there cannot be absolute freedom. and total absence of constraints. there need to be some social constraints so that freedom is not abused. social constraints means that restrictions to be imposed on the individual keeping in mind the benefit of society. for example: freedom of

speech and expression has restrictions that you cannot abuse anybody, their family or their religion. so there is a need to look at which freedom society allows.

## **Q&A**

### **Q1. What is freedom?**

**A1.** freedom can be defined in two aspects, that is, absence of constraints and existence of conditions which expand freedom.

### **Q2. Discuss the meaning of absence of constraints?**

**A2.** Absence of external constraints means that an individual should not be forced to perform any actions which she/he does not want to perform. for example: in burma, there is forced labor. people are forced to work there at low or no wages. so this restrict their freedom.

### **Q3. what is the meaning of presence of conditions which expand freedom?**

**A3.** Conditions which expand her freedom means that there should be conditions available that make an individual enjoy their freedom more. for example: there should be educational oppurtunities available for women so that she can keep herself informed, she can get into employment, she can know her rights and in this way she will be having more oppurtunities to enjoy her freedom. and in this freedom she can develop her capabilities and creativity. so there needs to be freedom in sports, science, arts, music or exploration.

## **Swaraj**

for gandhi, swaraj was same as freedom. He said that swaraj does not only means freedom from british rule and making india independent. but freedom has other aspects too. swa means self and raj means rule . so there needs to be self rule. it meant rule of the self and rule over self. rule of self means that india needs to be ruled by its own people. and rule over self means that every individual should live with respect and dignity. There should be removal of poverty and unemployment so that a person can earn his living respectfully and access minimum quality of life. he/she should have self responsibility to carry out his work rather than being forced to work. so freedom for gandhi was economic freedom meaning removal of pverty and having employment. social freedom where people from different castes and religion are not discriminated and everybody treated equally. and cultural freedom where all religions and cultures are equally respected. this was also freedom for Gandhi because if anybody is dicriminated on the basis of his caste or religion, then they will not be able to enjoy full rights. untouchability in india made backward community more backward and they were not allowed to enjoy their rights and freedom. backward communities likedalits were segregated from the main community.

## **Q&A**

### **Q1. what is swaraj?**

**A1.** swaraj means self and raj means rule. it means rule of self and rule over self.

### **Q2. Explain the concept of swaraj in detail.**

**A2.** swa means self and raj means rule. it means rule of self and rule over self. rule of self refers to freedom from british rule and attainment of freedom for india. and rule over self means not just political freedom but also economic, social and cultural freedom. economic freedom means removal

of poverty and having employment. social freedom means where people from different castes and religion are not discriminated and everybody is treated equally. and cultural freedom where all religions and cultures are equally respected. this type of freedom will help in gaining self respect and dignity for everybody.

### **from where does constraints come**

we have read previously that freedom can be realised when there is absence of constraints. but from where does constraints come. we have read an example where women are not allowed to drive in Iran. so, constraints come from law imposed by government. other example of constraints by law is the apartheid system in south africa. here the colonial rulers discriminated between black and white people and imposed harsher laws on blacks. blacks were treated as slaves of white people. that is why we want democracy where there is rule of representatives of people and they can draft laws in their favor.

other constraints mean economic constraints like economic inequality in the form of poverty, lower wages etc, social inequality in the form of untouchability and caste discrimination and exploitation of women. and cultural inequality in terms of discrimination on the basis of religion and culture. to understand this more, let us know what subash chandra bose said about freedom. bose said that there should be freedom of rich and poor, freedom for men and women, freedom for all classes and all individuals, freedom for individual and society. freedom does not only means independence of india from british rule but equal distribution of wealth, abolition of caste, destruction of communalism and religious intolerance.

### **Q&A**

**Q1.** what are the constraints on freedom?

**A1.** constraints on freedom come from domination and external controls. external controls in the form of law imposed by government. for example: apartheid rule in south africa. and other constraints is from inequality in the form of social, economic and cultural inequality.

**Q2.** what is subash chandra bose's view on freedom?

**A2.** bose shares the same view of freedom as gandhi. bose was also in favor of economic, social and cultural inequality. he said that there should be freedom of rich and poor, freedom for men and women, freedom for all classes and all individuals, freedom for individual and society. freedom does not only means independence of india from british rule but equal distribution of wealth, abolition of caste, destruction of communalism and religious intolerance.

### **Need for constraints**

we have read previously that social constraints are required on freedom so that it does not harm the society and individual can enjoy their freedom as well. like we read about that freedom of speech should not include abusing one's family, religion and culture. otherwise there will be violence and hatred in society. so we need to realise that everybody is different and we need to respect difference of opinions, culture, ideas and beliefs.

so what these constraints should be on individual? these constraints should be democratically decided by people. which area should be constrained and which area should be left free from constraints. this we will read in negative and positive liberty and the harm principle of john stuart mill.



## **Q&A**

**Q1.** why do we need constraints?

A1. we need constraints so that we can respect the difference of ideas, beliefs and opinions in society. this will lead to maintenance of order and peace in society.

## **HARM PRINCIPLE**

to answer the question how much constraints(restrictions) we need on our liberty, we will be discussing about liberal political thinker i.e. John Stuart Mill. Mill says that freedom can be restrained only for self protection. that means if somebody's freedom harm the other person then that person's freedom can be restricted.

for example: if 'x' person harms 'y' person, then only 'x' freedom should be restricted.

there are two types of actions- 'self regarding actions' and the 'other regarding actions'.

self regarding actions are those actions that have consequences only for the individual only and nobody else. it means actions which affect himself/herself only are self regarding actions. here the state has no business to interfere in the actions of those people. to put it simply "it is none of your business to interfere in my work". but actions which affect the other person, or harm him/her is called other regarding actions. if your action harms me then i need to protect myself.

JS Mill says that since freedom is very important for human life so it should be constrained only in special circumstances. the harm needs to be serious. If it is a minor harm then there can be a social disapproval but we cannot call law to interfere in that. because otherwise law will expand its area of interference and which will restrict freedom in the long run. for example: if somebody has played a loud music then we should not call police to interfere and stop the music. We should show society's disapproval to it. there cannot be legal punishment for it. law should be called only when there is a serious threat.

john mill calls for tolerance of different views, interests and principles of people. but if it harms the other people then it should be dealt by law. For example: hatred campaigns. but we cannot ask for life imprisonment for those people. there should be reasonable restrictions and reasonable punishment.

reasonable restrictions means that that punishment should not be in excess, not out of proportion of the action otherwise it would affect the general condition of freedom of society.

## **Q&A**

**Q1.** What is harm principle of JS Mill?

A1. John Stuart Mill says that there are two kinds of actions- self regarding actions and other regarding actions. self regarding actions are those actions which affect the individual only. and other regarding actions are those actions which affect the society. so harm principle means the actions of an individual which 'harms' other individual, should be restricted by law.

**Q2.** Give two kinds of action of JS Mill?

**A2.** John Stuart Mill says that there are two kinds of actions- self regarding actions and other regarding actions. self regarding actions are those actions which affect the individual only. and other regarding actions are those actions which affect the society.

**Q3. does JS Mill call for law to interfere in all kinds of other regarding actions?**

**A3.** No, JS Mill does not call for law to interfere in all kinds of other regarding actions. he says only when the harm is serious then only law needs to be called. for minor harm only social disapproval is sufficient.

**Q4. what are reasonable restrictions?**

**A4.** reasonable restrictions means that restrictions need to be reasonable on law. there needs to be justifiable constraints. it should not be out of proportion and excessive to the action being restricted. restrictions should be capable of being defended. otherwise it will lead to restrictions on the general freedom of individual.

## **LIBERALISM**

Liberalism has been identified with tolerance. it means the right of person to hold and express his/ her opinion and beliefs should be defended. and modern liberalism focus on individual. they emphasise on individual's choices and interests. family, society and community has no value. but only the individuals have value. for example: in terms of marriage, only the individuals will be heard not their parents or community. liberals give priority to individual liberty rather than equality.

classical liberalism used to focus on minimal state where state has only few roles to play as maintaining law and order. but now liberal state calls for welfare state where the individual is allowed to pursue its own activities but at the same time state take measures to reduce social and economic inequalities.

## **Q&A**

**Q1. what is modern liberalism?**

**A1.** Liberalism has been identified with tolerance. it means the right of person to hold and express his/ her opinion and beliefs should be defended. and modern liberalism focus on individual. they emphasise on individual's choices and interests. family, society and community have no value. modern liberals give priority to individual liberty rather than equality.

**Q2. what is the example of modern liberalism?**

**A2.** For example: in terms of marriage, only the individuals will be heard not their parents or community.

**Q3. what is the difference between classical and modern liberalism?**

**A3.** In classical liberalism, there was minimal state and only functions they used to carry out was to maintain their law and order. but in modern liberalism, role of state is emphasised to be that of welfare state where social and economic inequalities are emphasised.

## **NEGATIVE AND POSITIVE LIBERALISM**

now the important question which comes is what kind of freedom should be restricted? JSMill has answered this question by giving harm principle. he has divided actions into self regarding and other regarding actions. we should not only listen to one view point but other's viewpoint also.so what does other scholars say? let us read about this.

liberty has been divided into positive liberty and negative liberty.

Negative Liberty is an area where there cannot be any interference by anyone- whether it be state, family, community etc. and positive liberty is an area where the state can interfere in the lives of an individual to expand their liberty. for example: state can make education compulsory for all children. in this way state can help in making the lives of people better.

**negative liberty:** it explains the idea 'freedom from'. that means freedom from state, family, community, authority etc.

so this is the area where no authority can interfere is negative liberty. an individual can do whatever he /she wants to do. then how much area should be given. thinkers say that wide area should be given because this will enhance the dignity of an individual. for example: state should not interfere in what clothes to wear, what to read , where to go for travelling, and what to eat? etc.

**positive liberty:** it explains the idea "freedom to". it means freedom to work, freedom to write, read , learn, play. for this we need state because when state provides education then only we can write, read and learn. and when state provides health facilities, then only we can play and be fit.

so, this area is concerned where state can interfere. and state's interference here doesnot restrict freedom. it actually enhances freedom. for example: provision of positive conditions like education, health, employment etc. so these provisions help in development and fuller growth of his personality. positive liberty recognises that one can be free only in society. and hence state creates a society in such a way that it enlarges one's freedom.

however, negative liberty and positive liberty go hand in hand. we require negative liberty so that we can expand our freedom and develop our mental and physical faculties. and positive liberty is necessary so that we can expand our freedom by getting benefitted by education, health facilities and employment provided by state.

## **Q&A**

### **Q1. what are two kinds of liberty?**

**A1.** positive liberty and negative liberty

### **Q2. What is positive liberty?**

**A2.** It explains the idea "freedom to". this area is concerned where state can interfere. and state's interference here doesnot restrict freedom. it actually enhances freedom. for example: provision of positive conditions like education, health, employment etc. so these provisions help in fuller development of the personality of an individual. positive liberty recognises that one can be free only in society. and hence state creates a society in such a way that it enlarges one's freedom.

### **Q3. what is negative liberty?**

**A3.** negative liberty defines an area where no authority can interfere. An individual can do whatever he /she wants to do.

#### **Q4. Give an example of positive liberty?**

**A4.** provision of education, employment and health facilities by state.

#### **Q5. give an example of negative liberty?**

**A5.** listening music, wearing clothes, travelling any part of country or globe.

### **FREEDOM OF SPEECH AND EXPRESSION**

this is one area where there should be minimum interference. for free exchange of knowledge and free flow of ideas, there should be freedom to speak. This is a very important freedom considering that many films, books, movies, plays, paintings are banned. as we have read earlier that there should not be hatred campaigns and hatred speeches against anyone. yes, banning should be there, but the question which comes is how much banning should be there? banning should not be regularly, otherwise state gets into habit of banning everytime.

voltaire's famous statement reads that although i disapprove of whatever you say but i defend your right to speak till death. it means that i may not agree with whatever you say but then you have a right to speak.

JSMill gave for reasons of why freedom of speech and expression should be protected.

a. no idea is completely false. mill says that no idea in this world is false. for example: if your parents tell you to go for higher studies they are not wrong, because they know that it will brighten your future prospects. but if you do not want to go for higher studies, then you also not wrong because you are having interest in music and you think you can brighten your future prospects here. so no body is false. and nobody is at fault.

b. truth does not emerge by itself. it is only through debates and discussion that truth emerges. discussion between parents and a young child can lead to this conclusion that the child will go for higher studies in music. in this way, a child will be able to follow his passion in music and he will follow his parents dream of going for higher studies also

c. this conflict of ideas is important not only for past but for present and future also. only when truth is exposed to constant criticism, it (truth) then becomes trustworthy. for example: if higher studies has not helped the child in his music then constant discussion and debates will nullify the importance of higher studies in music.

d. we cannot be sure what we considered true is actually true. ideas which were true at one point of time are false at another point of time. for example: higher studies were important and now also it is important but children can make career in music by going to reality shows etc. and by not only going for higher studies.

mill says that society that completely suppresses the idea is not acceptable today. and it runs the danger of losing very valuable knowledge.

### **Q&A**

#### **Q1. what did voltaire said on freedom of expression?**

**a1. Voltaire said that** I may disapprove of whatever you say but i defend your right to speak till death. it means that i may not agree with whatever you say but then you have a right to speak.

**Q2. what are the four reasons given by mill for protecting freedom of speech and expression?**

**A2.** a. no idea is completely false. what appears as false has some element of truth.

b. truth does not emerge by itself. it is only through debates and discussion that truth emerges.

c. the conflict of ideas is important not only for past but for present and future also. only when truth is exposed to constant criticism , it (truth) then becomes trustworthy.

d. we cannot be sure what we considered true is actually true. ideas which were true at one point of time are false at another point of time.

<https://youtu.be/ogw54arLbNU>

## PSYCHOLOGY

**DURATION: 3HRS**

### **(VERY SHORT QUESTION: 1 MARK)**

1. Pavlov's initial interest in classical conditioning was stimulated when he observed his research dog salivating at the site of-----
2. In classical conditioning, an unlearned, inborn reaction to an unconditioned stimulus is called-----
3. Sunita was trying to operant condition her dog to roll over. Each time her dog rolled over she immediately said "Good Dog" however the dog did not roll over on command why?-----
4. Behaviour that is reinforced because it causes a negative event to stop-----  
-----
5. little Albert was conditioned to fear a white rat. He also displayed fear response to a white rabbit and a white coat. This is an example of-----
6. Rashid disruptive classroom behaviour stops because the teachers and other students no longer pay attention to the behaviour. The process is called-----  
-----
7. Those who are concerned about the effects that televised aggression has on children are likely to focus on-----
8. -----learning is a form of learning that is not immediately expressed in an overt response. It occurs with obvious reinforcement to be applied later.

### **(SHORT QUESTION: 3 MARKS)**

9. How learning is different from performance?
10. What do you mean by the S-S learning?
11. Differentiate between negative reinforcement and punishment.
12. Explain the process of a spontaneous recovery.
13. Differentiate between Generic transfer and Specific transfer.

### **(LONG QUESTION: 6 MARKS)**

14. According to psychologist 'one learns a lot through observation and social learning.'  
Explain
15. Simran is a five years old girl, studying in class one. She has difficulty in writing letters, understanding oral instructions, poor motor coordination and cannot sustain attention. What is the problem she is currently going to? Explain any other five symptoms in details.

**VIDEO LINK: <https://youtu.be/VYk6Ar189ZE>**



EAST POINTS PUBLIC SCHOOL  
VASUNDHARA ENCLAVE NEW DELHI 96

CLASS-11

SUBJECT: HISOTRY

## CHAPTER 9

### Industrial Revolution class 11 Notes History

#### Meaning & Background

- The term 'Industrial Revolution' was used by European scholars – George Michelet in France and Friedrich Engles in Germany.
- It refers to the great change in the field of industries when the production of goods by hand in the houses were replaced with the help of machines in factories.
- The transformation of industry and the economy in Britain between the 1780s and the 1850s is called the 'first industrial revolution'.
- It was used for the first time in English by the philosopher and economist Arnold Toynbee (1852-83), to describe the changes that occurred in British industrial development between 1760 and 1820. These dates coincided with those of the reign of George III.
- It revolutionised the techniques and organisation of production in the later half of the eighteenth century.

#### CAUSES

**(i) Economic** – There was remarkable economic growth from the 1780s to 1820 in the cotton and iron industries, in coal mining, in the building of roads and canals and in foreign trade.

**(ii) Political** – The series of incidents occurred in British industrial development between 1760 and 1820. These dates coincided with those of the reign of George III.

#### **\*\* Why Britain?:**

It had been politically stable since the seventeenth century, with England, Wales and Scotland unified under a monarchy. This meant that the kingdom had common laws, a single currency and a market that was not fragmented by local authorities. Besides, England had great domestic and international market under its control which helped in the growth of Industrial Revolution.

- Towns – From the eighteenth century, many towns in Europe were growing in area and in population. Population of most of the European cities doubled between 1750 and 1800. The largest of them was

London, which served as the hub of the country's markets, with the next largest ones located close to it. London had also acquired a global significance.

- Finance – The Bank of England was founded in 1694.
- Coal & Iron – Coal and Iron ore were important raw materials. Abraham Darby invented the blast furnace in 1709. World's first iron bridge was built during this period
- Agricultural Revolution – In the eighteenth century, England had been through a major economic change, later described as the 'agricultural revolution'. This was the process by which bigger landlords had bought up small farms near their own properties and enclosed the village common lands. The agricultural revolution laid down the foundation of the Industrial Revolution.

### **(iii) Geographical –**

- In the seventeenth century, Wales and Scotland were unified. London was the largest city as well as a city of global trade. England had a number of colonies in Asia, Africa and Europe. These helped in obtaining the raw material for industries.
- By the eighteenth century, the centre of global trade had shifted from the Mediterranean ports of Italy and France to the Atlantic ports of Holland and Britain.

## **CONSEQUENCES**

### **(i) Positive Effects**

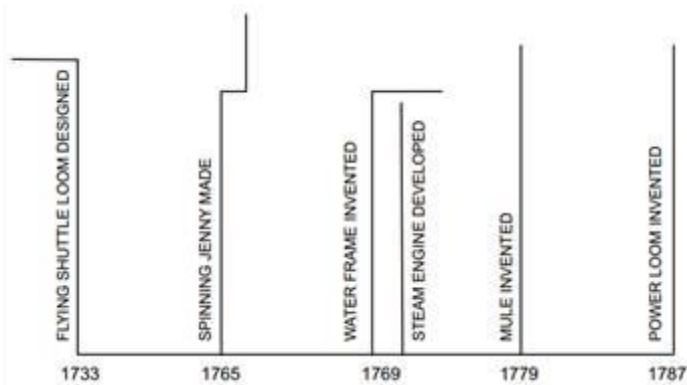
The onset of textile industry also helped in the emergence of Industrial Revolution.

#### **(a) Invention of Machines in Cotton Industry:**

- The flying shuttle loom invented by John Kay in 1733 revolutionised the textile industry.
- The spinning jenny
- The water frame
- The mule
- Powerloom

## **Road Map of Industrial Revolution**





### (b) Increase in Production

### (c) Introduction of Railways & Canals

Railways took the industrialization to the second stage.

- Thomas Savery built a model steam engine the Miner's Friend in 1698.
- Another steam engine was built by **Thomas Newcomen** in 1712. The steam engine had been used only in coal mines until **James Watt** developed a perfect steam engine in 1769 and established the Soho Foundry in Birmingham.
- James Brindley built the **First English Canal in 1761**. The 'canal mania' prevailed from 1788 to 1796.
- The first steam locomotive, **Stephenson's Rocket**, appeared in 1814.
- Richard Trevithick devised an engine – the 'Puffing Devil' in 1801 and a locomotive – **'The Blucher'** in 1814.
- The First railway line ran between Stockton and Darlington..
- The 'little railway mania' prevailed from 1833 to 1837 and the bigger 'mania' from 1844 to 1847.

**Advantages and Disadvantages** – In the 1830s, the use of canals revealed several problems. The congestion of vessels made movement slow on certain stretches of canals, and frost, flood or drought limited the time of their use. The railways now appeared as a convenient alternative. About 6,000 miles of railway was opened in Britain between 1830 and 1850, most of it in two short bursts. During the 'little railway mania' of 1833-37, 1400 miles of line was built, and during the bigger 'mania' of 1844-47, another 9,500 miles of line was sanctioned.

### (d) Changed life

- Profits: Some rich individuals who took risks and invested money in industries in the hope that profits could be made, and that their money would 'multiply'. In most cases this money – capital – did multiply. Wealth, in the form of goods, incomes, services, knowledge and productive efficiency, did increase dramatically.

- Huge population: The number of cities in England with a population of over 50,000 grew from two in 1750 to 29 in 1850. This pace of growth was not matched with the provision of adequate housing, sanitation or clean water for the rapidly growing urban population.

## **(ii) Negative Effects**

(a) Condition of workers: There was, at the same time, a massive negative human cost. This was evident in broken families, new addresses, degraded cities and appalling working conditions in factories. The condition of workers was quite miserable. They became victims of restlessness, epidemics and diseases.

(b) Employment of Women and Children in industries: The Industrial Revolution was a time of important changes in the way that children and women worked. The earnings of women and children were necessary to supplement men's meagre wages. Factory managers considered child labour to be important training for future factory work

## **(c) Protest Movement**

- **Meaning**: Industrialisation led to greater prosperity for some, but in the initial stages it was linked with poor living and working conditions of millions of people, including women and children. This sparked off protests, which forced the government to enact laws for regulating conditions of work.
- **Luddism** – Luddism (1811-17) fought for the workers affected by new machines. It was led by the charismatic General Ned Ludd. Its participants demanded a minimum wage, control over the labour of women and children, work for those who had lost their jobs because of the coming of machinery, and the right to form trade unions so that they could legally present these demands.
- **Result**: The government reacted by repression and by new laws that denied people the right to protest. For this reason they passed two Combination Acts and supported Corn Laws. Through the Act of 1833 more children were put to work in coal mines.

## **Reform laws**

- Laws were passed in 1819 prohibiting the employment of children under the age of nine in factories and limiting the hours of work of those between the ages of nine and sixteen to 12 hours a day
- The Mines and Collieries Act of 1842 banned children under 10 and women from working underground.

- The Ten Hours' Bill was introduced in 1847, after more than 30 years of agitation. It limited the hours of work for women and young people, and secured a 10-hour day for male workers.
- Fielder's Factory Act in 1847 prohibited children and women from working more than 10 hours a day.
- In eighteenth century, England witnessed the "Agricultural Revolution and the process of 'enclosure'".

## THE DEBATE

- Until the 1970s, historians used the term 'industrial revolution' for the changes that occurred in Britain from the 1780s to the 1820s. From then, it was challenged, on various grounds. Industrialisation had actually been too gradual to be considered a 'revolution'. It carried processes that already existed towards new levels. England had changed in a regional manner, prominently around the cities of London, Manchester, Birmingham or Newcastle, rather than throughout the country.
- Indicators of economic change occurring before and after 1815-20 suggest that sustained industrialisation was to be seen after rather than before these dates.
- The word 'industrial' used with the word 'revolution' is too limited. The transformation extended beyond the economic or industrial sphere and into society and gave prominence to two classes: the bourgeoisie and the new class of proletarian labourers in towns and in the countryside

**Timeline:** Refer to page 201

**Keywords:** Industrial Revolution, Luddism, protest movement, laws, steam engine, metallurgy, iron smelting, powerloom, canal.

## MODAL QUESTIONS

1. What do you understand by Industrial Revolution?
2. When and where did the Industrial Revolution begin?
3. Who was Abraham Darby?
4. Write the names of some new machineries and technologies.
5. Who coined the term Industrial Revolution first?
6. Who was Arnold Toynbee?
7. How did Britain become the father of Industrial Revolution?

8. What do you mean by Agricultural Revolution in England?
9. What was the effect of Agricultural Revolution?
10. Who designed flying shuttle loom?
11. What were the advantages of spinning jenny?
12. Who invented water frame?
13. What does rapid increase in the population of a city show?
14. What was the contribution of rivers to the proliferation of London as a centre of trade?
15. What do you mean by coasters?
16. Write the use of coaster.
17. Who was Thomas Newcomen?
18. What were the social effects of the Industrial Revolution on England?
19. How did industrialization change the farming technique?
20. What were the positive sides of the Industrial Revolution?

### Short Answer Type Questions

1. Industrial Revolution with its demand for raw material and markets made nations more dependent on one another. How?
2. The growth of trade union helped to put an end to the idea of Laissez faire. How?
3. Industrialisation was a natural step in the progress of mankind. Why?
  
4. What was the opinion of Karl Marx about socialism?
  
5. Industrialization has affected farming, transportation, communication and trade in many ways. How?
6. Explain the advantages that a socialist system can have over a society based on capitalism.
7. Why did Industrial Revolution first occur in England? Give reasons. [HOTS]
  
8. What were the main features of the Industrial Revolution in England?
9. Describe the conditions that denote industrialization.
  
10. The invention of steam engine revolutionized industry and transport. How?
11. What do you know about 'Luddism'? Explain.

### Read the following passages and answer the questions that follow:

Passage 1.

'The man of wealth and pride  
 Takes up a space that many poor supplied;  
 Space for his lake, his park's extended bounds,  
 Space for his horses, equipage, and hounds;  
 The robe that wraps his limbs in silken cloth  
 Has robbed the neighboring fields of half their growth.

— Oliver Goldsmith, The Deserted Village.

Questions

- (i) Who wrote this? Write the name of the book from which it was taken.
- (ii) What do you understand by the Enclosure Movement?
- (iii) Write any two effects of this movement.

Passage 2.

In his novel *Hard Times*, Charles Dickens (1812-70), perhaps the most severe contemporary critic of the horrors of industrialization for the poor, wrote a fictional account of an industrial town he aptly called Coketown. 'It was a town of red brick, or of brick that would have been red if the smoke and ashes had allowed it; but as matters stood it was a town of unnatural red and black like the painted face of a savage. It was a town of machinery and tall chimneys, out of which interminable serpents of smoke trailed themselves for ever and ever, and never got uncoiled. It had a black canal in it, and a river that ran purple with ill-smelling dye, and vast piles of building full of windows where there was a rattling and a trembling all day long, and where the piston of the steam-engine worked monotonously up and down, like the head of an elephant in a stare of melancholy madness.

Questions:

- (i) Who was Charles Dickens?
- (ii) About which period and the country he is talking about in this passage?
- (iii) Highlight any four social problems mentioned here.

Passage 3.

D.H.Lawrence (1885-1930), British essayist and novelist, writing seventy years after Dickens, described the change in a village in the coal-belt, change which he had not experienced, but about which he had heard from older people. 'Eastwood... must have been a tiny village at the beginning of the nineteenth century, a small place of cottages and fragmentary rows of little four-roomed miners' dwellings, the homes of the old colliers...But somewhere about 1820 the company must have sunk the first big shaft...and installed the first machinery of the real industrial colliery...Most of the little rows of dwellings were pulled down, and dull little shops began to rise along the Nottingham Road, while on the down-slope...the company erected what is still known as the New Buildings...little four-room houses looking outward into the grim, blank street, and the back looking into the desert of the square, shut in like a barracks enclosure, very strange.

Questions:

- (i) What do you know about D.H. Lawrence? What did he describe?
- (ii) Which particular class is he referring to?
- (iii) Write a few effects of early industrialization on villages and towns.

## **Class 11 History Chapter 3 Map Skills**

Question 1.

On the given map of Britain, mark and locate the following iron and coal manufacturing areas.

- (i) Leeds
- (ii) Sheffield
- (iii) Liverpool
- (iv) Bristol
- (v) Swansea

Question 2.

On the map of Britain, mark and locate the following cotton textile manufacturing areas.

- (i) Newcastle
- (ii) Nottingham
- (iii) Birmingham
- (iv) Glasgow
- (v) Leicester
- (vi) London

## Assignment on Derivatives2

### CLASS11

Find the derivatives of

1.  $x^2 \cos x$

2.  $x^2 \sin 2x$

3.  $x^2 \sin^2 x$

4.  $\frac{x}{\tan^2 x}$

5.  $x \cot x + \sin x$

6.  $\frac{x + \cos x}{x - \sin x}$

7.  $\frac{\sqrt{x}}{\cos^4 x}$

8.  $(ax + bx^2 + c)^2$

9.  $(\sin x + \cos x)^2$

10.  $x^{10} + 9x^9 + 8x^6$