ENGLISH MODEL QUESTIONS
CLASS - X

Section – A

(Reading)

1. **Read the passage given below :**   8

For millions of people in India, river Ganga is the most sacred river. It is considered as mother and goddess. It is also a lifeline to millions of Indians who live along its course and depend on it for their daily needs. River Ganga is the third largest river in the world by the amount of water that flows through it. It is the longest river in India. The river water of Ganga is used for irrigation, transportation and fishing. The Gangetic plain formed by river Ganga is one of the most fertile lands on earth. This is why almost 10% of the world population lives here and earns its livelihood. The Ganga, in India is the most worshipped body of water. The irony here is that inspite of being the most worshipped river, it is also the dirtiest one. It carries some metals thrown out by tanneries, waste produced by industries and urban waste from different cities. All this has made river Ganga the fifth most polluted river in the world. Another major reason that adds to the Ganga river pollution is the coal based power plants on its banks which burn tons of coal every year and produce tons of fly ash. This ash mixed with domestic waste water is released in the river. This bad situation calls for an urgent need to make efforts to reduce pollution and revive river Ganga. To achieve these objectives, Government of India has started a programme named "Namami Gange Programme". The main pillars of this programme are sewage treatment, river surface cleaning, afforestation, river front development and public awareness. The importance of the success of 'Namami Gange Programme' can be seen through the following lines :

"If Ganga dies, India dies. If Ganga thrives, India thrives. No Ganga, No India."

On the basis of your understanding of the above passage, answer any eight of the questions that follow: 1x8 = 8

(a) What are the pollutants that make river Ganga very dirty ?
(b) How do the coal based power plants pollute river Ganga ?
(c) Which two purposes will be served by the programme named "Namami Gange" ?
(d) For whom is river Ganga a lifeline ?
(e) For what purposes is the Ganga river water used ?
(f) Why does almost ten percent of the world population live in the Gangetic Plain ?
(g) Write any two main pillars of the "Namami Gange Programme".
(h) Most people in India consider the Ganga as _____.
(i) What is the irony of the Ganga being a most worshipped river ?

2. Read the passage given below: 12

Great people are born to produce an influence on society. One such personality, who was so humble and lived his complete life with determination and purpose to achieve certain aims was Ishwar Chandra Vidyasagar. He was a great social reformer, writer, educator and worked endlessly to transform the society. He strongly protested against polygamy and child marriage. He favoured widow

remarriage and women's education in India. The Widow Remarriage Act was passed in 1856 making the marriage of widows legal because of his efforts to solve these problems.

Ishwar Chandra Vidyasagar refined the way Bengali language was written and taught. His book 'Borno Porichoy' (Introduction to the Alphabet) is still used as the introductory text to teach Bengali alphabet. Thus, he brought about a revolution in the Bengali Education System. Vidyasagar is credited with the role of completely changing the old method of teaching which prevailed in Sanskrit College. As a professor in Sanskrit College, he brought modern outlook into the method of teaching. He included English and Bengali as mediums of learning, besides Sanskrit. He, also, introduced courses in European History, Philosophy and Science alongside Vedic scriptures. He encouraged students to study these subjects and make the best of both the worlds.

Ishwar Chandra Vidyasagar was a strong advocate of women education. He rightly viewed education as the primary way for women to achieve emancipation from the society's oppression they had to face at that time. He exercised his power to open schools for girls and even outlined suitable curriculum to educate them. He went from door todoor, requesting heads of families to allow their daughters to be enrolled in schools.

Ishwar Chandra was a man who defined his own path of action. He never listened to whatothers said about his work and made decisions based on his own judgement. He wasfamous for all these qualities. He was also known for his great courage. Vidyasagar had avery soft heart that sympathised with those in trouble. He was easily moved to tears when he saw someone in pain and was always the first one to offer his help to colleagues and friends in distress. After his death, Rabindranath Tagore said, "One wonders how God, inthe process of producing forty million Bengalis, produced a man !"

Answer briefly the following questions : (any four) 2x4 = 8

(a) What kind of life did Ishwar Chandra lead ?
(b) What changes did Vidyasagar bring about in the method of teaching at Sanskrit college ?
(c) What was Vidyasagar's contribution as a professor in the Sanskrit college ?
(d) How did Ishwar Chandra Vidyasagar promote women education ?
(e) How can we say that Vidyasagar was a softhearted man ?

Choose meanings of the words given below with the help of options that follow :
(any four)

(f) Influence

(i) income   (ii) inside

(iii) impression   (iv) attraction

(g) Transform

(i) improve   (ii) encourage

(iii) change   (iv) insist

(h) Advocate

(i) caretaker   (ii) promoter

(iii) neighbour   (iv) aggressor

(i) Emancipation

(i) oppression   (ii) control

(iii) freedom   (iv) contribution

(j) Distress

(i) unhappiness or pain   (ii) safety

(iii) calmness   (iv) joy

3. Read the passage given below and answer any eight of the questions that follow: 1 × 8 = 8

Thornfield Hall was a large gentleman's house in the country, near a town called Millcote. There, after my sixteen-hour journey, I was welcomed by Mrs. Fairfax. She was a little old lady, dressed in black, who seemed glad to have someone else to talk to, apart from the servants. Although the house was dark and frightening, with its big rooms full of heavy furniture, I was excited at being in a new place, and looked forward to my new life there, working for kind Mrs. Fairfax.

But I was surprised to discover on my first full day at Thornfield that Mrs. Fairfax was not in fact the owner, as I had assumed, but the housekeeper, and that my new master was a Mr. Rochester, who was often away from home. My pupil was a girlcalled Adèle, seven or eight years old, who was born in France and could hardly speak English. Luckily I had learnt French very well at Lowood, and had no difficulty in communicating with your Adèle, a pretty, cheerful child. It appeared that Mr. Rochester, who had known Adèle and her mother very well, had brought Adèleback to England to live with him after her mother had died. I taught her for several hours every day in the library, although it was not easy to make her concentrate on anything for long, as she was clearly not used to the discipline of lessons.

One day I took the opportunity of asking Mrs. Fairfax a few questions about Mr. Rochester, as I was curious about him, and the little housekeeper seemed happy to
talk.

'Is he liked by most people ?' was my first question.

'Oh yes, his family have always been respected here. They've owned the land around here for years,' she replied.

'But do you like him ? What is his character like ?'

'I have always liked him, and I think he's a fair master to his servants. He's a little peculiar, perhaps. He's travelled a lot, you know. I expect he's clever, but I can't tell, really.'

'What do you mean, peculiar ?' I asked, interested.

It's not easy to describe. You're never sure whether he's serious or joking. You don't really understand him, at least I don't. But that doesn't matter, he's a very good master.'

 (a) Why was Mrs. Fairfax glad to receive the narrator ?
(b) Why was the narrator excited ?

(c) What wrong assumption was made by her ?
(d) Why had she come to Thornfield Hall ?
(e) How do we know that Mr. Rochester was a man of noble nature ?
(f) Why was it difficult to make Adèle study for long hours ?
(g) Why was Mr. Rochester liked by most people ?
(h) What was peculiar about the nature of Mr. Rochester ?
(i) How does the narrator describe Adèle ?

4. **Read the passage given below**: 12

People who smoke are being hounded out of all public places – offices, restaurants, educational institutions, buses, trains etc. Away from home now it is becoming nearly impossible to find a place to smoke. Growing restrictions and the fear of various diseases caused by tobacco are prompting many smokers to stop smoking. 19 states in the U.S. have made laws against smoking.

Taxes on tobacco products are being raised. Smoking is banned at several places. Still the number of smokers is rising in India. More than 25 crore people in India are addicted to tobacco. And according to a WHO report around half of them will die of tobacco related diseases. Unfortunately most people in India still need a strict warning based on a test report before they decide to give up smoking. Patients too seek medical help only after they show serious symptoms of an illness. Some hospitals have set up centres to identify risk factors among the young so that they can take preventive measures like giving up smoking early in life.

Tobacco is the second biggest cause of death in the world. It is responsible for the death of five crore people each year all over the world. Half of the people who are addicted to tobacco will ultimately be killed by this addiction. Many people get rid of this habit on their own and those who are willing to, but can't, go to de addiction centres. These centres use counselling, nicotine replacement therapy and prescriptive drugs to deal with withdrawal problems.

Quitting cold turkey – stopping the use of tobacco at once – works well but only for those who have control and determination to quit.

On the basis of your understanding of the passage answer any four of the following questions.

(a) For which two reasons do smokers give up smoking ?
(b) Name two steps taken in India against smoking.
(c) Why is the situation unfortunate in India ?
(d) How do people get rid of smoking ?
(e) What does 'cold turkey' mean ?

 Complete any two of the following statements:

(f) In the U.S. _____ states have passed laws against smoking.
(g) In India one can't smoke at a _____.
(h) Tobacco is the _____ biggest killer in the world.

 Choose the meanings of the given words/phrases from the options that follow each word/phrase: (any two)

(i) hounded out
(i) driven out (ii) given out
(iii) washed (iv) endangered
(j) restrictions
(i) checks (ii) imitations
(iii) failures (iv) defeats
(k) prompting
(i) abusing (ii) initiating
(iii) empowering (iv) encouraging

Section – B
(Writing Skills with Grammar)

1. Complete the paragraph given below by filling in the blanks with the help of options that follow: (any four) 1x4 = 4

Yesterday, a rich woman from West Bengal (a) _____ to Delhi to buy jewellery. She was sitting outside (b) _____ jewellery shop. Suddenly two young boys came there (c) _____ snatched the chain that she was (d) _____. She called the police
(e) _____ the snatchers had run away.

(a) (i) come	(ii) comes	(iii) came	(iv) coming
(b) (i) a	(ii) an	(iii) the	(iv) some
(c) (i) and	(ii) or	(iii) but	(iv) how
(d) (i) wear	(ii) wears	(iii) wore	(iv) wearing
(e) (i) so	(ii) because	(iii) but	(iv) only

2. Rearrange the words/phrases given below to form meaningful sentences: (any four)
1x4 = 4

(a) wave / suddenly / came / huge / a
(b) road / all the / rushed / towards / the / people
(c) standing / at the / one day / I / beach / was
(d) number / come / of people / a large / had / there
(e) hawkers / there / eatables / so many / were / selling

3**. Write a story in 200-250 words based on the following outline:** 10

A jackal falls into a dyer's tub _____ gets coloured yellow _____ an idea _____ announces himself king of forest _____ animals respect _____ jackal insults them _____ worried animals _____ hold a meeting _____ starts howling _____ identified _____ cannot resist _____ truth comes out _____ animals kill him.

OR

Write a story in 200-250 words beginning with the following lines :

'Yesterday morning, I was getting ready for my school. As soon as I picked up my school bag, someone knocked on the door. I opened the door and saw _ _ _ _ _ _ _ .

4. You are Apoorv /Apoorva, a student of class X. You feel that in the current age, human beings have to use a lot of computers, therefore it is essential for every student to learnhow to use computers. Write an article in 100-120 words for the school magazine on the topic, "Importance of Computers for Students". 8

OR

You are Shubham/ Surabhi, a resident of 'R' Block, Shivaji Nagar, Mumbai. For the past few days you have been noticing that garbage is not being removed from your area. People cannot bear the stinking smell and unhygienic condition caused by this garbage. Write a letter in 100-120 words to the editor of a newspaper to draw the attention of the concerned authorities to take necessary action.

5. The following paragraph has not been edited. There is one error in each line. Write the error and its correction. (any four). 1x4 = 4

Error Correction
People of diverse cultures lives (a) _____ _____
together in India. There is many (b) _____ _____
people who exhibit unity on diversity. (c) _____ _____
They celebrated different festivals (d) _____ _____
together. I love being an citizen of India. (e) _____ _____

6. Rearrange the words/phrases given below to form meaningful sentences: (any four)
                                                        1x4 = 4
(a) standing / at the / one day / I / beach / was
(b) number / come / of people / a large / had / there
(c) hawkers / there / eatables / so many / were / selling
(d) wave / suddenly / came / huge / a
(e) road / all the / rushed / towards / the / people

7. You are Arun/Anita, 22 New Light Colony, Guwahati. The park in your colony has not been maintained properly for quite some time. Write a letter in 100-120 words to the Chief Officer, Horticulture Dept. complaining against the park incharge for not doing his duty properly. You may use the following points : 8
☐ boundary wall broken

☐ flower beds but no flowers

☐ no proper cutting of hedges

OR

You are Ms. Alka Rao, librarian S.J. Public School, Guntur. Place an order in 100-120 words with Janatha Book Store, Station Road, Chennai for 5 copies each of 4 books (name any four) which students of class X need for reference. Ask for a discount and an early delivery.

8. Write a story in 200-250 words based on the following clues :   10

A house full of rats – happy – a cat comes – rats in danger – how to warn – a small rat – tie a bell – bell ringing – warning – an elder rat – who will bell the cat ?

OR

It was a dark night. We had lost our way among the fields. Then I saw a light in the distance. We started walking in that direction......

9. Complete the paragraph given below by filling in the blanks with the help of options that follow :   **1x4 = 4**

Rakesh ___(_a)___ not quarrel with anyone in ___(b_)___ jail. Then one day I saw him ___(_c)___ his cool. In his ward ___(d_)___ was a young man ___(_e)___ did not look like a criminal.

(a) (i) do	(ii) does	(iii) did	(iv) doing
(b) (i) a	(ii) an	(iii) the	(iv) some
(c) (i) lose	(ii) loses	(iii) lost	(iv) losing
(d) (i) there	(ii) their	(iii) here	(iv) nowhere
(e) (i) which	(ii) who	(iii) that	(iv) whose

10. The following paragraph has not been edited. There is an error in each line. Identify the error, write it and its correction as shown in the example: (any four)
                                                                                          1x4 = 4

Error   Correction

People always take pity on Reddy. e.g. take took
He was a victim on an acid attack. (a) _____ _____
He was very young hard eleven (b) _____ _____
years old. People will say, "What'll (c) _____ _____
he do in life ? What is go to (d) _____ _____
happen to him when we had gone ?" (e) _____ _____

11. Rearrange the following words/phrases to form meaningful sentences. (any four)

(a) were / on the / Ram / standing / and / beach / Sham
(b) at the / waves / were / rising and falling / they / looking
(c) a boat / a wave / they / top of / saw / on the
(d) the wave / up and down / was / with / it / going
(e) in the / two men / there / sitting / were / boat

Section – c
(LITERATURE)

1. (A) Read the extract given below and answer the questions that follow: 4

Coorgi homes have a tradition of hospitality, and they are more than willing to recount numerous tales of valour related to their sons and fathers. The Coorg Regiment is one of the most decorated in the Indian Army, and the

first Chief of the Indian Army, General Cariappa, was a Coorgi. Even now, Kodavus are the only people in India permitted to carry fire arms without a licence.

(i) What kind of stories are the Coorg people always ready to tell?

(ii) Who was the first chief of the Indian army?

(iii) What is the special favour granted only to them even now?

(iv) Find a word from the passage which means the same as 'courage and bravery, usually in war.'

2. (a) Read the extract given below and answer the questions that follow.   1x4=4

We kids would be pushed aside with a mild rebuke and the loaves would be delivered to the servant. But we would not give up. We would climb a bench or the parapet and peep into the basket, somehow. I can still recall the typical fragrance of those loaves. Loaves for the elders and the bangles for the children.

(i) Who are 'we' in the passage?

(ii) Why were the children pushed aside ?

(iii) Why did they still follow the baker ?

(iv) Which word/phrase in the passage means the same as 'an expression of disapproval/a scolding' ?

3. The true Chameleon is small,

   A lizard sort of thing;

   he hasn't any ears at all,

   And not a single wing.

   if there is nothing on the tree,

   "Tis the chameleon you see.

   (a) Which creature has the Chameleon been compared to?   1

   (b) What is the point of comparison?   1

   (c) Mention any two physical characteristics of a Chameleon.   1

   (d) What is the rhyme scheme in the stanza?   1

4. Read the extract given below and answer the questions that follow. Write the answer in your answer sheet in one or two lines only. Remember to number the answers correctly.   4 marks

The class roared. I had to laugh too, though I'd nearly exhausted my ingenuity on the topic of chatterboxes. It was time to come up with something else, something original. My friend, Sanne, who's good at poetry, offered to help me write the essay from beginning to end in verse and I jumped for joy. Mr. Keesing was trying to play joke on me with ridiculous subject, but I'd make sure the joke was on him.

(a) Why did the class laugh heartily?   1

(b) What did Anne decide to do this time?   1

(c) What was the help offered by her friend?   1

(d) How did Keesing try to play a joke on Anne?   1

5. Read the following passage and answer the questions that follow:

"I am sure that none of the boys and girls in Room Thirteen would purposely and deliberately hurt anyone's feelings because his or her name happened to be a long, unfamiliar one."

i. Name the speaker.
ii. Why does she speak in this manner?
iii. Whose name and feelings is she talking about?

iv. What is the reaction of the listeners?

6. What is the boy now, who has lost his ball?

What, what is he to do? I saw it go

Merrily bouncing, down the street, and then

Merrily over – there it is in the water!

(a) Name the poet and poem.   1

(b) What is the boy doing?   1

(c) What has happened to the ball?   1

(d) What is the state of boy's mind?   1

Short answer type questions: -   **(2 marks each)**

1. How does a leopard behave when he sees someone?
2. Describe a few characteristics of a Chameleon.
3. How can you distinguish between a hyena and a Crocodile?
4. Why did the boy feel so sad at the loss of his ball?
5. Do you think the boy has lost anything earlier? Write your answer with reference to the context.

6. What does Anne Frank tell about her family in her diary?
7. What was Mr. Keesing's reaction after reading Anne's poem on the third essay that he had given to her to write?
8. How does the hundred dresses game start?
9. Why does Maddie feel sorry for Wanda while she does not tease her?
10. How does Maddie feel after listening to the note from Wanda's father?
11. Why does Amanda seen moody most of the times?
12. What did Griffin do in the shop of a theatrical company?
13. What did the London boys follow and why were they fascinated?
14. Why couldn't Richard Ebright play baseball during his childhood days?
15. Why was Matilda's friend astonished to see her at the end of the story?
16. Why did Matilda throw the invitation spitefully?
17. Why was it not difficult for Horace to open the safe?
18. How did Horace help the 'Landlady'?
19. Describe the Indian legend about tea?
20. Why is baking called a profitable profession?
21. Describe the wildlife of Coorg.

Long Answer Type Question: -   **(8 marks each)**

1. Mme Loisel's disposition invites her doom – comment in the context of the text you've read.
2. What impression do you form of Griffin after reading the lesson, "Footprints without Feet"?
3. Horace was cleaver but the lady in red was cleverer. Do you agree with this statement? Justify your answer.
4. Why is it important for everyone to experience loss and to stand up after it?
5. How does Amanda tackle the nagging nature of her parent? Explain with examples from the poem. What values does it portray about Amanda?
6. Rajvir was excited on seeing Assam from the train but Pranjol was not what could be the reason for it. Is it appropriate for Pranjol to have no excitement? Justify your answer with reason.
7. How can you say that Maddie is an emotional girl? Compare and contrast Maddie and Piggy.
8. 'From the Diary of Anne Frank' throws light on teacher – student relationship, class atmosphere and discipline.

১)দুটি স-জাত ও দুটি র-জাত বিস-র্গের উদাহারন দাও।

২)সন্ধি বি-চ্ছেদ কর:-

ভাস্কর,নিশ্চয়,নিশ্ছিদ্র,ইতস্তত,নীরক্ত,নির্জন,দুশ্চিন্তা,দুর্লভ,দিগম্বর,মুখচ্ছবি,উড্ডীন

৩)সন্ধি কর:-নিঃ+স্পন্দ,যশঃ+লাভ,নিঃ+চল,-শ্রেয়ঃ+কর,বিপদ+জনক,বৃহৎ+পতি,-গা+পদ

৪)ব্যাসবাক্য সহ সমাস নির্ণয় কর:-

দুধসাগু,আমরা,নরনারী,আশৈশব,প্রতিদিন,উপকূল,যথাবিধি,কুমতি

৫)নির্দশ অনুসাসে-র বা-ক্যর রুপান্তর কর

ক)তিনি কাজটি -শষ ক-রই চ-ল -গ-লেন(-যৌগি-ক)

খ)বৃষ্টি হ-য়-ছ তাই -খলা হয়নি(সর-ল)

গ)আরম্ভ করা কাজটি -শষ কর(জটিল)

ঘ)যদি ভয় পাও ত-ব ঈশ্বর-ক স্মরন কর(সর-ল)

ঙ)মা-হ-শর র-থর -মলায় -গলাম এবং রথ -দ-খ আনন্দ -পলাম(সর-ল)

৬)সঠিক উত্তর নির্বাচন কর

১)জ্ঞানচক্ষু গল্পের কেন্দ্রীয় চরিএ নগেন/তপন/রুপেন।

২)র-ত্নর মূল্য স্যাকরা/মুদি/জহ্বরীর কা-ছ।

৩)-ম-জামাসি/-ছাটমাসি/-ছাড়দি ওর চিরকা-লর বন্ধু।

৪) ঈদ/ -হালি / দুর্গাপূজার- দি-নর পড়ন্ত বি-কল।

৫)অতন্ত্য ফর্সা রঙ -রী-দ্র পুরিয়া -য়ন কাল-চ/তামা-ট/বিবর্ন হইয়া -গ-ছ।

৬)আম / চালতা / নিম গা-ছর নি-চ - গ্রা-মর একদল ধু-লা -ছাড়াছুড়ি ক-র -খলছল

৭)আমি বাবু ভারী সাহসী/ধর্মভীরু/রগচটা মানুষ।

৮)তাঁর ডান হা-ত/বাঁ হা-ত/-কাম-র একটি -ছাট থলিছিল।

৯)বনফুলের আত্মজীবনীমূলক গ্রন্থ পশ্চাদপট/মন্ত্রমুগ্ধ/জঙ্গম।

১০)বনফু-লর -লখা প্রথম উপন্যাস হা-টবাজা-র/তৃণখন্ড/শ্রীমধুসূদন।

১১) অদল বদল- আশাপূর্ণা -দবী / পান্নালাল প্যা-টল / সু-বাধ -ঘাষ

নীচের প্রশ্নগুলির উত্তর দাও

৭)তাড়াতাড়ি ঢু-ক পড়-লন নি-জর ঘ-র---কার -লখা?-কান গ-দ্যর অংশ?পরবর্তী ঘটনা সং-ক্ষ-প -লখ।

৮)সত্যিই অন্যায় কাজ ক-র-ছন ----ক কী অন্যায় কাজ ক-র-ছন?

৯)আ-লাকবাবুর -চহা-রর বর্ননা দাও।

১০)-স্ন-হর কাঙাল -বচারা---সপ্রসঙ্গ ব্যাখ্যা কর।

১১) 'অমৃ-তর অত -জার দি-য় বলার কারণ ছিল'- কার -লখা ? -কান গ-দ্যর অংশ ? ব্যাখ্যা কর।

১২) অমৃত ও ইসা-বর পরস্প-রর প্রতি ভা-লাবাসার পরিচয় দাও।

১৩) 'ভ-য় অমৃবুক টিপটিপ করিছিল'- কারণ দর্শাও।

১৪)ইচছা কর-ল আমি -তামা-ক টানিয়া নী-চ নামাই-ত পারি------কার উক্তি?সপ্রসঙ্গ ব্যাখ্যা কর।

১৫)সহজ ক-র।................ সম্ভব

তিনপাহা-ড়.......................কলরব ---------সপ্রসঙ্গ ব্যাখ্যা কর।

১৬)আমা-দর পথ -নই -কা-না

আমা-দর ঘর -গ-ছ উ-ড়-----------সপ্রসঙ্গ ব্যাখ্যা কর।

১৭)তিন পাহা-ড়র -কা-ল কবিতার মূল উপজীব্য আ-লাচনা কর।

১৮)আয় আ-রা -বঁ-ধ -বঁ-ধ-----------কবিতার মূল বিষয়বস্তু কী?

১৯)গা-যব গা-যবী কারা?

২০)তা-দর মা-যর নাম কী?

২১)তিনি কাসর কা-ছ মন্ত্র শিক্ষা ক-রছি-লন?

২২) গা-যব এর নাম পরবর্তীকা-ল কী হয়?

২৩)-গাহ কার সন্তান?-গা-হর নাম -গাহ রাখা হল -কন?

২৪)গা-যব তার মার কা-ছ কী জান-ত চায়?

২৫)-কন জান-ত চায়?

২৬)মালিয়া পাহা-ড়র নী-চ -য জায়গাটি ছিল তার নাম কী?

২৭)-সখা-ন মূলত কা-দর নাম ছিল?

২৮)যুদ্ধক্ষেত্রে শিলাদিত্যের পরিনতি কী হল?

২৯) -গা-হর মা-যর নাম কী?

৩০)মা-যর সখীর নাম কী ছিল?
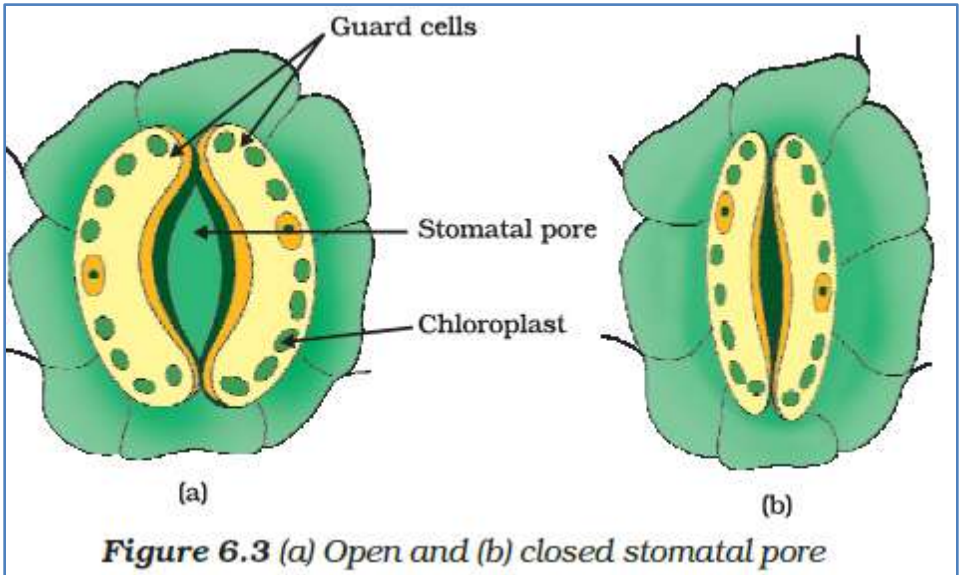
Class X

Science

Model Questions Answers

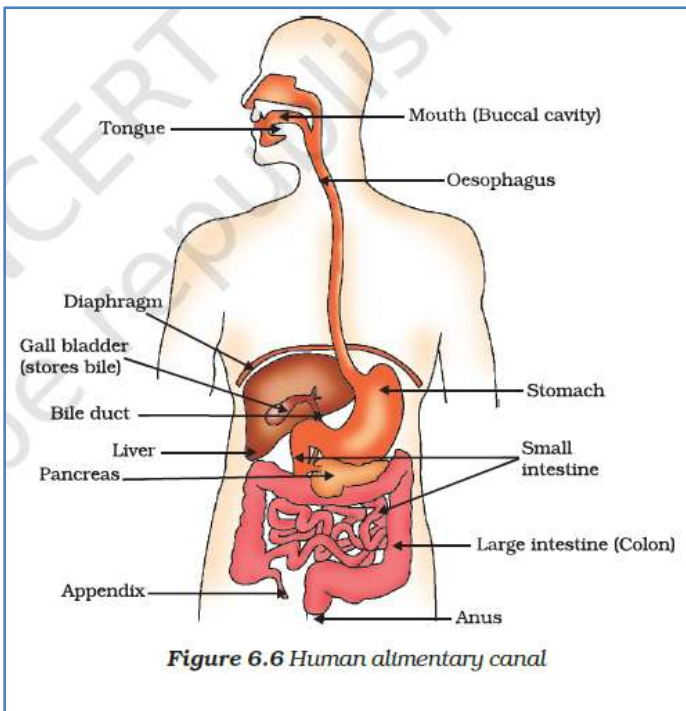1. Mention the differences between autotrophic and heterotrophic nutrition?

Ans. Hint.

Autotrophic Nutrition	Heterotrophic nutrition
In this mode of nutrition the organisms prepare their own food from inorganic raw materials like carbon di oxide and water present in the surroundings with the help of sunlight. For example green plants and some bacteria.	In this mode of nutrition an organism cannot make their own food from the simple inorganic material and depends on other organisms for food. It may be holozoic like amoeba, parasitic like cuscuta, tick or like saprophytic like fungi etc.

2. Draw and label structure of stomata as seen in lab (activity based).

Ans.

Figure 6.3 (a) Open and (b) closed stomatal pore

3. Draw and label the human digestive system
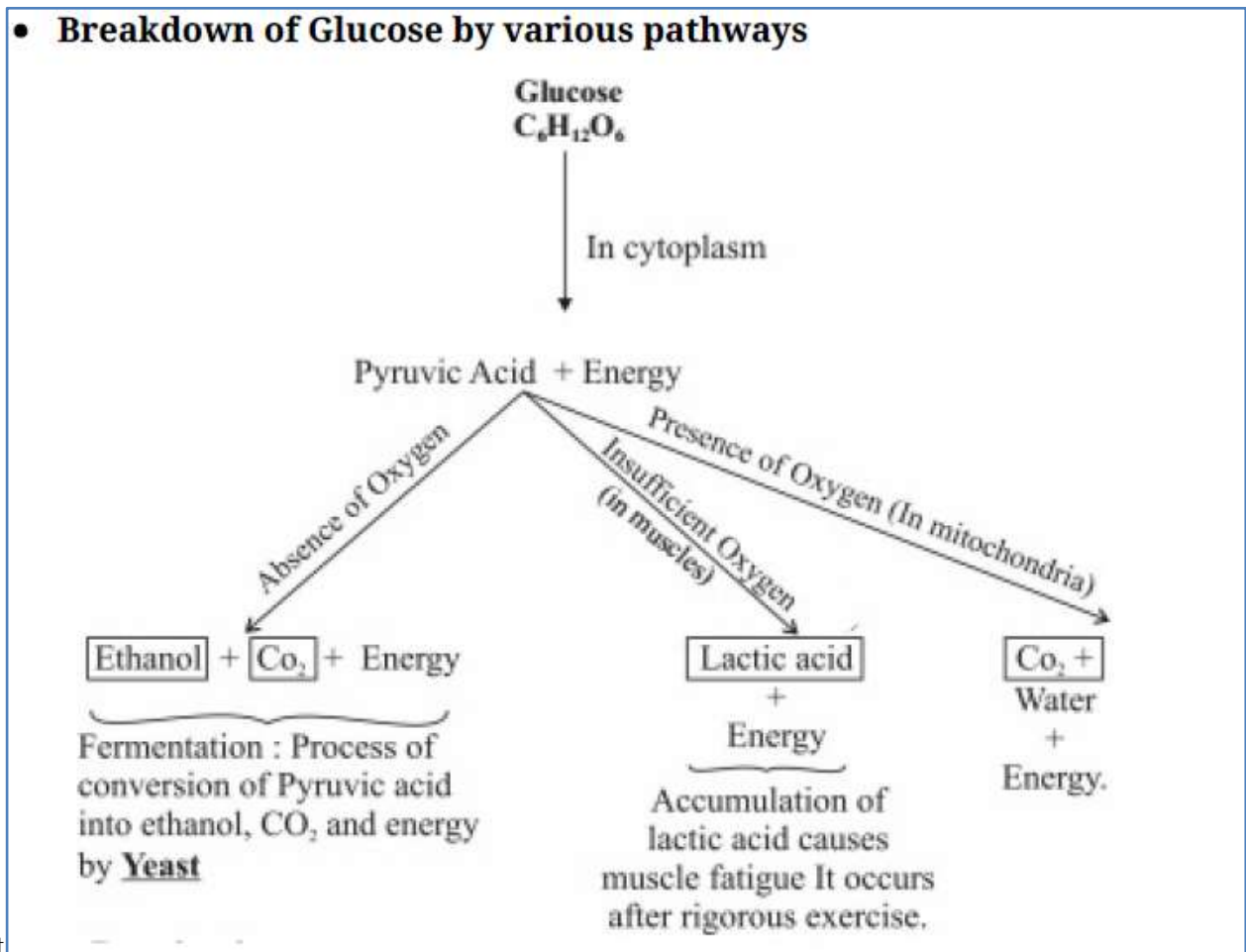

Figure 6.6 Human alimentary canal

Note: Labeling practice of diagrams is very important.

4. What is the function of amylase enzyme?

Ans. Hint. Digestive enzymes help in the breakdown of complex food particles into simpler soluble forms that can be easily absorbed by our body cells for further yielding energy or for growth and maintenance. Amylase is carbohydrate digesting enzymes which helps to convert carbohydrates to glucose.

5. Mention the the different ways in which glucose is oxidized to provide energy in various pathways?

Breakdown of Glucose by various pathways

Glucose
$C_6H_{12}O_6$

↓ In cytoplasm

Pyruvic Acid + Energy

- Absence of Oxygen → Ethanol + CO_2 + Energy

  Fermentation : Process of conversion of Pyruvic acid into ethanol, CO_2 and energy by **Yeast**

- Insufficient Oxygen (in muscles) → Lactic acid + Energy

  Accumulation of lactic acid causes muscle fatigue It occurs after rigorous exercise.

- Presence of Oxygen (In mitochondria) → CO_2 + Water + Energy.

Ans.Hint

6. Mention the differences between artery and vein.

Ans.

Artery	Vein
1. Arteries are thick walled	1. Veins are thin walled
2. These carry oxygenated blood from heart to different organs	2. These carry deoxygenated blood back from different organs to heart.
3. Valves absent	3. Valves present to resist back flow

7. Name the parts of phloem which help in the translocation of food and other substances.

Ans. Hint. It takes place in the sieve tube with the help of companion cells in up and downward directions.
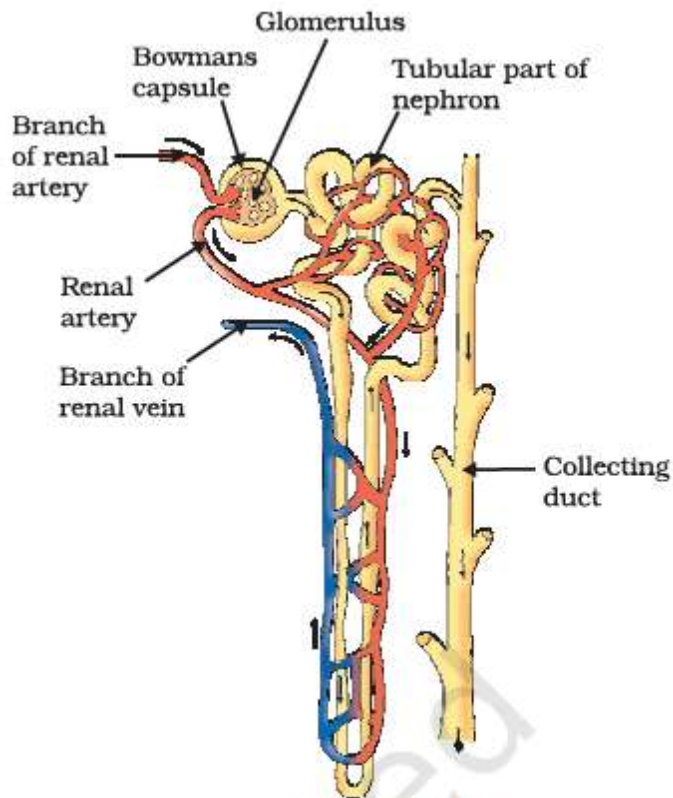
8. Draw and label the parts of a nephron.

Ans.

Figure 6.14
Structure of a nephron

9. Explain what is artificial kidney?

Ans.Hint: Kidneys are vital organs for survival. Several factors like infections, injury or restricted blood flow to kidneys reduce the activity of kidneys. This leads to accumulation of poisonous wastes in the body, which can even lead to death. In case of kidney failure, an artificial kidney can be used. An artificial kidney is a device to remove nitrogenous waste products from the blood through *dialysis*.

10. Explain the term biodegradable substances.

Ans. Hint. Substances that are broken down easily through biological processes by decomposers (bacteria and fungi) are said to be biodegradable (as they possess specific enzymes for such activity).

11. What are trophic labels?

Ans. Hint. Each step or level of the food chain forms a trophic level. (Put any example)

12. What is ozone and mention any one way how it can affect any ecosystem?

Ans. Hint. Ozone is a molecule formed by three atoms of oxygen. At higher level of atmosphere it shields the surface of the earth from ultraviolet radiation coming from Sun.

It may affect the ecosystem in the following way-

i. At the surface of earth it is deadly poison for all lower forms of life.

13. Enumerate the role of decomposers in an ecosystem.

Ans. Hint. Decomposers fungi and bacteria help in recycling the nutrients in a n ecosystem. They feed on the dead and decaying bodies of plants and animals. They return the nutrients back to the soil and thus help to make the ecosystem stable.

14. What is meant by biological magnification or biomagnification?

Ans. Hint. Accumulation of non biodegradable chemicals progressively at each trophic level in a food chain is called biological magnification.

15. How is the process of pollination different from fertilization?

In the process of pollination, the male gametes enclosed in pollen grains are carried from anther lobes of the stamens to the stigma of the pistil in flower. In the fertilization, fusion of male and female gametes occurs.

16.How does the embryo get nourishment inside the mother's body?

The embryo gets nourishment from mother's blood with the help of a special tissue called placenta.

17.The use of contraceptive pills may be harmful. Why?

The pills function by changing hormonal balance of the body. This prevents release of ova from the ovary and hence fertilization does not occur.

18. What happens in synapse between two neurons?

Ans. At synapses the electrical impulse generated at dendrite of a neuron is passed on to the dendrite of another neuron in form of chemical impulses. The chemical present at synapse is called neurotransmitter.

19. How do we detect the smell of an incense stick?

Ans. Smell of incense stick is detected by olfactory receptors in the temporal lobe of fore brain. It is first received by olfactory receptor in our nose.

20. Define heredity.

Heredity is the resemblances among individual related by descents and by this the transmission of traits from parents to offspring occur.

21. How do we come to know that a chemical reaction has taken place?

Ans. Hint. Irreversible Change in state/ colour /temperature etc.

22. Why distilled water does not conduct electricity?

Ans. Hint. As it does not contain any dissolved salt.

23. What is neutralization reaction?

Ans. Hint. A reaction where acid reacts with a base to form salt and water. (Put eg.)

24. What is the role of acid in human stomach?

Ans. Hint. It helps in digestion of food to activate pepsinogen.

25.Why Mg ribbon starts floating when it is placed in hot water?

Ans. Hint. Due to bubbles of H_2 stuck to it.

26. What is anodising?

Ans. Hint. Process of formation of thick layer of aluminium. A clean Al article is made anode and electrolised with sulphuric acid. Oxide makes the layer around Al.

27. Explain why carbon has special properties.

Ans. Hint. Exceptional ability to bind with a wide variety of other elements,; it may form single double or even triple bond; catenation property.

28. What is the speciality of diamond?

Ans. Hint Hardest substance

29. What is covalent bond?

Ans. Hint. Sharing of electron pairs between atoms.

30. Explain what is rusting of iron with an activity.

Ans. Hint. As in class copy.

31. State Ohm's Law.

Ans. Hint. physical conditions if same current flowing through conductor is directly proportional to potential difference across to ends.

32. An electric bulb is connected to a 220V generator. The current is 0.50 A. What is the power of the bulb.

Ans. Hint. 110W

33. Two resistances of 3 ohm and 6 ohm are connected in parallel. What is the equivalent resistance?

Ans. Hint. 2 ohm

34. List the properties of magnetic lines of force.

Ans. Hint. i. Travel from north to south

ii. Continuous closed curves

iii. Two lines never intersects each other. Etc.

35. Which properties of a proton can change while it moves freely in a magnetic field?

Ans. Hint. Velocity, momentum.

36. What is the principle of an electric motor?

Ans. Hint. Current carrying conductor placed in a uniform magnetic field experiences a force.

37. Explain Flemings right hand rule.

Ans. Hint. It shows direction of induced current when a conductor attached to a circuit moves in a magnetic field.

38. What is the principle of electric motor?

Ans. Hint. Based on magnetic effect of electric current.

39. How voltmeter works?

Ans. Hint. Either through pointer across a scale in proportion to voltage of circuit or digital display by digital converter.

40. What is magnetic effect of electric current?

Ans. Hint. Electric current produces magnetic force. Compass can be defelected because of flow of electricity.

[Note: Question marks will be variable from 1 to 5 depending upon content asked for.]

[Note: Question marks will be variable from 1 to 3 depending upon content asked for.]

Std 10 model question paper mid term 2019
1. Find a point on the y-axis equidistant from (-5, 2) and (9, -2).
2. Find the distance between the points (-8/5, 2) and (2/5, 2).
3. In triangle ABC, D and E are mid-points of the sides BC and AC respectively. Find the length of DE. Prove that DE = 1/2AB.
4. Points P (5, -3) is one of the two points of trisection of the line segment joining points A(7, -2) and B(1, -5) near to A. find the coordinates of the other point of trisection.
5. Find the area of quadrilateral ABCD whose vertices are A (1, 0), B (5, 3), C (2, 7), D (-2, 4).
6. Points P, Q, R and S divide a line segment joining A (2, 6) and B (7, -4) in five equal parts. Find the coordinates of P and R.
7. Find the relation between x and y if points (2, 1), (x, y) and (7, 5) are collinear.
8. If A (-2, 4), B (0, 0) and C (4, 2) are the vertices of triangle ABC, then find the length of the median through the vertex A.
9. If points A (4, 3) and B (x, 5) are on the circle with centre O (2, 3), find the value of x.
10. If vertices of a triangles are (1, k), (4, -3) and (-9, 7) and its area is 15 sq. units then find then the value of k.
11. Find the area of triangle ABC whose vertices are A (-5, 7), B (-4, -5) and C (4, 5).
12. If point A (0,2) is equidistant from the point B (3, p)and C (p, 5), find p
13. If x $\sin^3|$+ y $\cos^3|$=sin|cos| and xsin|=ycos|, prove x²+y²=1.
14. Find the value of (sin°45- cos°45)
15. If tan|+sin|=m and tan|- sin|=n, show that (m²-n²)=4√mn
16. If cosec |-sin |=l and sec |- cos |=m, prove that l²m²(l²+m²+3)=1
17. If sin A=1/2, then find the value ofcos A.
18. If cosec |=3x and cot |=3/x. then find the value of (x²-1/x²)
19. Given cosec|=4/3, calculate all other trigonometric ratios.
20. 6 men and 10 women can finish making pots in 8 days, while the 4 men and 6 women can finish it in 12 days. Find the time taken by the one man alone from that of one woman alone to finish the work.
21. A boat covers 14 kms in upstream and 20 kms downstream in 7 hours. Also it covers 22 kms upstream and 34 kms downstream in 10 hours. Find the speed of the boat in still water and of that the stream.
22. Draw the graph of 2x+y=6 and 2x-y+2=0. Shade the region bounded by these lines and x axis. Find the area of the shaded region
23. When you add two numbers and the number obtained by reversing the order of its digits is 165. If the both numbers differ by three, find the number.
24. A number say z is exactly the four times the sum of its digits and twice the product of the digits. Find the numbers.
25. Solve graphically 4x-3y+4=0, 4x+3y-20=0
26. There are two points on a highway a,b. They are 70 km apart. An auto starts from A and another auto starts from B simultaneously. If they travel in the same direction, they meet in 7 hours, but if they travel towards each other they meet in 1 hour. Find how fast the two autos are.
27. A diver rowing at the rate of 5 km/h in still water takes double the time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream.
28. The larger of two supplementary angles exceeds thrice the smaller by 20 degrees. Find them.

29. The sum of two children is 'a'. The age of the father is twice the 'a'. After twenty years, his age will be equal to the addition of the ages of his children. Find the age of father.
30. If one zero of the polynomial $5z^2 + 13z - p$ is reciprocal of the other, then find p.
31. If the product of two zeroes of polynomial $2x^3 + 3x^2 - 5x - 6$ is 3, then find its third zero.
32. Find the polynomial of least degree which should be subtracted from the polynomial $x^4 + 2x^3 - 4x^2 + 6x - 3$ so that it is exactly divisible by $x^2 - x + 1$.
33. Is polynomial $y^4 + 4y^2 + 5$ have zeroes or not?
34. Write the zeroes of the polynomial $x^2 + 2x + 1$.
35. If the zeroes of the polynomial $f(x) = x^3 - 12x^2 + 39x + a$ are in AP, find the value of a.
36. A polynomial $g(x)$ of degree zero is added to the polynomial $2x^3 + 5x^2 - 14x + 10$ so that it becomes exactly divisible by $2x - 3$. Find the $g(x)$.
37. Find the zeroes of the quadratic polynomial $x^2 + 5x + 6$ and verify the relationship between the zeroes and the coefficients.
38. If the zeroes of polynomial $x^3 - ax^2 + bx - c$ are in AP then show that $2a^3 - 9ab + 27c = 0$
39. If 1 and –1 are zeroes of polynomial $Lx^4 + Mx^3 + Nx^2 + Rx + P$, show that $L + N + P = M + R = 0$
40. Draw graph of the function $f(x) = -2x^2 + 4x$.

41. If $x + a$ is a factor of the polynomial $x^2 + px + q$ and $x^2 + mx + n$ prove that
.
42. Write cubic polynomial whose zeroes are
43. α, β, γ are zeroes of cubic polynomial $kx^3 - 5x + 9$.
    If $α^3 + β^3 + γ^3 = 27$, find the value of k.
44. α, β, γ are zeroes of cubic polynomial $x^3 - 12x^2 + 44x + c$.
    If α, β, γ are in AP, find the value of c.
45. Two zeroes of cubic polynomial $ax^3 + 3x^2 - bx - 6$ are –1 and –2. Find the third zero and value of a and b.
46. α, β, γ are zeroes of cubic polynomial $x^3 - 2x^2 + qx - r$.
    If $α + β = 0$ then show that $2q = r$.
47. α, β, γ are zeroes of polynomial $x^3 + px^2 + qx + 2$ such that α.
    $β + 1 = 0$. Find the value of $2p + q + 5$.

48. Find the HCF of 52 and 117 and express it in form $52x + 117y$.
49. Prove that $x^2 - x$ is divisible by 2 for all positive integer x.
50. If m and n are odd positive integers, then $m^2 + n^2$ is even, but not divisible by 4. Justify.
51. If HCF (6, a) = 2 and LCM (6, a) = 60, then find a.
52. If n is any prime number and a^2 is divisible by n, then n will also divide a. Justify.
53. Find the greatest number of 5 digits exactly divisible by 12, 15 and 36.
54. Find the smallest number which when increased by 20 is exactly divisible by 90 and 144.
55. Find the smallest number which leaves remainder 8 and 12 when divided by 28 and 32 respectively.
56. Floor of a room is to be fitted with square marble tiles of the largest possible size. The size of the room is 10 m × 7 m. What should be the size of tiles required that has to be cut and how many such tiles are required?
57. If the HCF of 408 and 1032 is expressible in the form $1032p - 408 × 5$ find p.
58. The lengths of the diagonals of a rhombus are 30 cm and 40 cm. Find the side of the rhombus.
59. The perimeter of two similar triangles ABC and LMN are 60 cm and 48 cm respectively. If LM = 8 cm, then what is the length of AB?
60. If the areas of two similar triangles are in ratio 25 : 64, write the ratio of their corresponding sides.
61. If one diagonal of a trapezium divides the other diagonal in the ratio 1:3. Prove that one of the parallel sides is three times the other.

62. A right triangle has hypotenuse of length q cm and one side of length p cm. If (q ◆ p) - 2, express the length of third side of the right triangle in terms of q.

63. ABCD is a trapezium with AB ∥ DC in which diagonals AC and BD intersect at E and AAED ˜ ABEC. Prove that AD = BC.
64. ABC is a triangle. PQ is a line segment intersecting AB in P and AC in Q such that PQ ∥ BC and divides ΔABC into two parts equal in area. Find BP/AB,
65. ABC is a triangle in which AB = AC and D is any point in BC. Prove that : $(AB)^2 - (AD)^2 = BD \cdot CD$.

66. AD is the median of ΔABC, O is any point on AD. BO and CO produced meet AC and AB in E and F respectively. AD is produced to X such that OD = DX. Prove that AO : AX = AF : AB.

67. In a triangle ABC, P divides the sides AB such that AP : PB = 1 : 2, Q is a point on AC such that PQ ∥ BC. Find the ratio of the areas of ΔAPQ and trapezium BPQC.

s.st calss 10 sample questions

1) What do you mean by conservatism?
2) Name the two underground societies formed by Mazzini?
3) When did the concept of nationalism arise in Europe?
4) Name the the region which become a part of unified Italy in 1858 CE?
5) Who was Bismarck?
6) What do you mean by the term 'Absolutist'?
7) Why did Gandhi withdraw the Non Cooperation movement in 1922?
8) Who formed the Swaraj Party?
9) Who founded the Depressed Classes Association?
10) What do you mean by bank ?
11) What are the sources of electronic banking services?
12) What are the miscellaneous functions of a bank ?
13) What do you understand by double coincidence of wants?
14) In situations with high risks, can credit create further problems for the borrower?
15) How does money solve the problem of double coincidence of wants?
16) State three inconveniences of barter exchange.
17) Name Major religion of India.
18) Name few leaders who worked for the caste problem in India .
19) Define Urbanisation.
20) Define Feminism.
21) Define Literacy Rate.
22) Define 'Sexual Division of Labour'.
23) Why is the work done by males more visible than the work done by the females?

OR

Discuss the gender issue with reference to politics.

24) Why does communalism problem became acute?
25) Name some of the states where rainwater harvesting is practiced.
26) Name the only state of India where all the houses have rooftop rain water harvesting.
27) Name the world's longest man-made dam.
28) Name the first multi-purpose project of India
29) Where is bamboo drip irrigation common?
30) Name the river on which Sardar sarovar dam is constructed?
31) Define inundation canals.
32) What is the term used for rainwater harvesting in Rajasthan?
33) What is the reason for lack of water infiltration in desert soil?
34) Define a multipurpose river valley project.