

HALF YEARLY
SAMPLE PAPER
Class - X
Computer Application

Time: 2 Hours

Max. Marks: 30

General Instructions:

1. Question paper is divided into two sections: Section-A and Section- B.
2. Section–A:
 - i. Multiple choice question/Fill in the blanks/Direct Questions of 1 mark each.
 - ii. Very Short Answer of 2 marks each.
 - iii. Short Answer of 3 marks each.
3. Section–B: Long type questions of 5 marks each.
4. All questions of a particular section must be attempted in the correct order.

SECTION- A

Q1. Multiple choice question/Fill in the blanks/Direct Questions: (5*1=5)

1. Which of these is not a part of URL?
 - a. IP address
 - b. Port Number
 - c. Domain name
 - d. None of these
2. Which of the following is not a legal domain in context of web address?
 - a. Edu
 - b. com
 - c. tv
 - d. work
3. The numbered list can be created by _____ tag.
4. Credit card fraud may include
 - a. Stealing of credit card
 - b. Unauthorized and illegal use of credit card
 - c. Both of the above
5. _____ is a software that are available at no cost but cannot be modified.

Q2. Very Short Question Answers (4*2=8)

1. What is protocol? Explain HTTP protocol.
2. What do you understand by Plagiarism? Why is it a punishable offence.
3. What are some features of dynamic website?
4. What is the purpose of name and href attributes of <A> tag?

Q3. Short Question Answers. (4*3=12)

1. Which tag do we use to change the size and style (face) of the text of a HTML file viewed on a web browser? Also explain any two attributes used with this tag.

2. Why mailto is used? Write the HTML code to send an email to abc@y.com through your web page.
3. What is secure data transmission? What technical ways are used to ensure the secure data transmission?
4. What advantages do online source offer over traditional media?

SECTION- B

Q4. Long Question Answers.

(1*5=5)

1. Write HTML code to create a webpage Sample.html.
 - Make sure there are at 2 paragraphs
 - Use h1 and h2 headings
 - Use table with 2 columns and 2 rows
 - At least 2 hyperlinks

Create external.css with following rules

- H1 and h2
 - Appear in a color of your choice
 - Be center align on page
- Paragraph
 - Specify font family and font size
- Table
 - Table heading in bold
 - Border of width 3 px

HALF YEARLY
SAMPLE PAPER
CLASS X
ENGLISH

TIME – 3 HOURS

MM. 80

1. The Question Paper is divided into four sections:

Section A: Reading 20Marks

Section B: Writing &Grammar 30 Marks

Section C :Literature 30Marks

General Instructions:

1. All questions are compulsory.
2. You may attempt any section at a time.
3. All questions of a particular section must be attempted in the correct order.

SECTION – A (READING) 20M

Q1. Read the following passage carefully and answer the questions: (12m)

QUALIFIED YOUNGSTERS

1. Hundreds of thousands of our qualified youngsters take off from different international airports every year for higher studies or highly lucrative jobs in the US, the UK, Germany, France and Australia. And most of these Indians prefer to settle down abroad, attracted by the facilities and the higher quality of life provided by these countries. We have been crying hoarse about the brain drain from India over the last five decades or more, without going in for a well-set blueprint to check the counter-productive phenomenon. Some of the public schools in our metros and our IITs (Indian Institutes of Technology) and IIMs (Indian Institutes of Management) are providing a world-class education. One might wonder that having spent a lot on infrastructure, training and other facilities and the best teaching staff, can the Government and the people of India look away as the talent, assiduously nurtured in India, is utilized by other countries for their development and excellence in different fields.

2. During the decades-long debate on the brain drain, it was said that our youngsters leave India just because excellence is neither recognized nor rewarded in India. This could have been partly true at the beginning of this debate. But today, things have changed beyond recognition and talented people can reach the highest position possible if only they are prepared to work hard.

3. Youngsters from India – Whatever be the field they are working in – are today suitably recognized and rewarded.

4. Take the field of sports where many of the celebrities are household names – Sania Mirza, Narain Karthikeyan, Sachin Tendulkar, Anju Bobby George, P.T. Usha and several others. Innovation and managerial skill get recognition when Indians can vie with others in excellence from any part of the world.

5. If there is one individual who has catapulted India to the number one position in milk production in the world, it's none other than Dr. Verghese Kurien, the father of the White Revolution. A top engineer who completed the Konkan Railway in record time, Mr. E. Sreedharan has built up the world class Delhi Metro.

Mr Amitabh Bachchan is no longer a megastar of the Indian screen only. His only presentation of KaunBanegaCrorepati and other ventures have made him a living legend of global proportions. Take the story of the Ambani brothers, the Tatas, the Mittals and others who are having their footprints in different continents. We have had so many Indians who rose to the summit as Miss Universe and Miss World, but none has earned so much acclaim globally, in Bollywood, Hollywood: or the Cannes Film Festival, as Ms. AishwaryaRai. In the wake of globalization, India has produced a galaxy of eminent entrepreneurs in IT; Biotechnology, civil aviation, steel production and the like. Just mention a field and we are already in the vanguard or moving ahead at a frantic pace. A time may come when India would be capable of reversing the so-called brain drain to India's supreme advantage.

6. And happily enough, this is already happening now. A report released by a high-tech lobbying group in the Silicon Valley in 2005 revealed that the highly skilled Indian born talent that once flocked to the US was returning home, "turning America's brain drain into India's brain gain". Titled "Losing the Competitive Edge: The Challenge for Science and Technology in the US", the report said that countries like India and China, through the restructuring of their economies, were dramatically increasing the skill sets of their workforce, thereby posing a challenge "to the US leadership in the technology domain. "Public-private partnerships (in India)' have invested in technical universities and communications infrastructure to create cutting-edge technology parks in places like Bangalore in Karnataka. This will make India more competitive, and alluring to investors and multinational companies." The report further said: "They are dramatically increasing the skill sets of their workforce, investing in research and development, and adopting advanced technologies, all to create wealth and spur economic growth."

1.1 On the basis of your understanding of the above passage answer each of the questions given below with the help of options that follow: (4m)

(a) The qualified and talented youngsters go abroad for————

- (i) higher studies and high paying jobs
- (ii) better quality of life
- (iii) better facilities
- (iv) excellence is neither recognized nor rewarded in this country

(b) A report from the Silicon Valley states that skilled and talented Indians were——-

- (i) unhappy in the US
- (ii) returning home to better work conditions
- (iii) not being given enough recognition in the US
- (iv) none of the above

(c) technology parks in India are found in———

- (i) Delhi
- (ii) Bangalore
- (iii) Mumbai
- (iv) Chennai

(d) Choose the option which is not true———

- (i) Youngsters are returning to India because of the restructuring of the Indian economy
- (ii) India is spending a lot of money on research and development
- (iii) All students from the IITs and IIMs prefer to go abroad
- (iv) Today young Indian achievers are respected and rewarded in the country which was not always the case in the past

1.2 Answer the following questions briefly in your own words: (6m)

- (a) What is meant by brain drain?
- (b) Why is Dr Kurien held in such high esteem in India?
- (c) What is the contribution of Mr E Sreedharan to modern India?
- (d) What does the counter-productive phenomenon refer to?
- (e) How is India becoming alluring to investors and MNCs?
- (f) What is the most essential quality a talented person must possess to reach the pinnacle of success?

1.3 Find words from the passage which mean the same as each of the following: (2m)

- (i) tirelessly/attentively (para-1)
- (ii) zenith (para- 5)

Q2. Read the passage given below and answer the questions that follow: (8m)

BOARDERS

1. There were three kinds of borders in the convent. The first class borders, who were given a breakfast of cereal, eggs and toast, meat at lunch-time, snacks at tea and pudding after supper; the second class girls, who had only cereal at the breakfast, rice and fish curry at lunch and no pudding at supper; the third class borders, who got only a gruel made of maize in the morning, rice at lunch and gruel again at night. Worse off than even the third class borders were the children without parents. They were the ones who cleaned the lavatories, swept the droppings of the turkeys and the dead leaves from the kitchen yard, chopped firewood, helped in the kitchen and ate only two meals of gruel a day.

2. They wore white and exuded the smell of rancid coconut oil which they had applied to their dusty hair. These children were nearly always busy filling up the wooden tubs in the many bathrooms that they hated drawing water from the well for their own baths. They therefore bathed only once a week.

3. The oldest of these children was a 70-year-old lady called Rocky Mariam who went to the bazaar with baskets to buy the provisions for the cruising-house. Whenever she came on the scene the turkeys chased her, making loud friendly sounds, and she spoke to them in Malayalam in a quavering voice full of affection. They are calling me Ammachi (Mother) said the old lady one day pointing at the gawky birds.

4. The cook laughed and her laughter resembled the cackle of birds. She was called Felicitas and was respected by all the children. It was within her power to give them an extra ladle of gruel if they pleased her. She was weedy and emaciated. Her teeth looked like rusty nails, being pointed and discolored by the betel and tobacco she chewed the whole day long.

5. After each vacation, each of us brought from our homes sweets and fruits and banana chips. Once, my grandmother had sent with me a bunch of ripe bananas which disappeared from our dressing room at night. It was obvious that someone very hungry had eaten them, creeping into our rooms while we were asleep, for we found the peels lying outside the window.

6. Mid does not want anyone to know about this petty theft but the assistant boarding-mistress somehow got wind of it and decided to make a huge fuss. After the prayer, she told the children that St. Anthony was going to turn the culprit insane within three days. For two days we went around looking for lunacy in others' faces

7. Finally, at dusk, a terrified girl went up to the plaster statue of St. Anthony in the chapel and began to sob hysterically. The nuns prayed to the saint and begged him to spare the young girl in view of her tender age. She was a plump girl, fond of eating and apparently the convents niggardly rations did not satisfy her hunger. She was let off with a gloomy warning from the Mother Superior. She developed convulsions soon after and went home for good.

1.1 On the basis of your understanding of the above passage answer each of the questions given below with the help of options that follow: (4m)

(a) The fact that the orphans were treated in such a harsh manner shows that the members running the convent were ———

- (i) discriminatory (ii) miserly
(iii) brutal (iv) unkind

(b) The orphans bathed only once a week because———

- (i) they had no time to bathe
(ii) they were busy filling water for others
(iii) they did not have the energy left to fill water for themselves

(iv) they were not permitted to fill water for their baths

(c) **Felicitas was** _____

(i) the cook at the convent (ii) the oldest orphan living in the convent

(iii) the banana thief (iv) the girl whose bananas were stolen

(d) **The fact that the girls believed that the thief would become mad shows that**_____

(i) they were very innocent

(ii) they were not very intelligent

(iii) they were scared of the authorities

(iv) they were very religious

1.2 Answer the following questions briefly in your own words: (4m)

(a) Why do you think were the orphans treated differently from the others?

(b) How did Rocky Mariam treat the turkeys in the convent?

(c) Find words from the passage which mean the same as each of the following:

(i) rotten/stale (para-2)

(ii) miserly (para-7)

SECTION – B (WRITING AND GRAMMAR) (30M)

Q3. Write an article on the topic “Save Earth, Save Life” in about 120 – 150 words. (8m)

Q4. You went to your aunt, Mary’s house for her blessings on your birthday. She asked

You to do one good thing every day. The next day when you were going to your school you saw an old woman..... Complete the following story. (10m)

Q5. Complete the paragraph choosing the correct options: (8x0.5=4marks)

When (a) _____ papayas (b) _____ our garden were ripe, grandmother(c) _____ sent a basket of (d) _____ to her friend, Mrs.Ghosh (e) _____ was the Principal (f) _____ the nursery school. On (g) _____ occasion, Henry (h) _____ to get into the basket.

Q6. Rearrange the following to form meaningful sentences. (4m)

a) an immediate / of energy / bananas are / source / and prolonged

b) levels up / snacking / helps to / on bananas / keep blood sugar / between the meals

c) bananas can / people trying / smoking / also help / to give up

d) are /bananas / every / season /in/ available

Q7. Read the conversation given below and complete the paragraph that follows in reported speech. (4m)

Kavita : Where do you want to go ?

Sabita : I want to go to the drop point near the Zoo

Kavita : In that case you will have to get down at the Lakshmi Nagar bus stop and

take an auto.

Sabita : How long will I take to reach there ?

Kavita asked Sabita (a)_____ Sabita told her that
(b)_____ Kavita told Sabita that (c) _____ at the Laxmi
Nagar and take an auto. Sabita asked Kavita (d)_____.

SECTION - C (LITERATURE) (30M)

Q8. Read the extract given below and answer the following questions. (1x4=4)

He stalks in his vivid stripes

The few steps of his cage,

On pads of velvet quiet,

In his quiet rage.

- (a) Who is 'he' here? How does 'he' walk?
- (b) What emotion does 'he' show?
- (c) What does 'pads of velvet' mean?
- (d) Name the poem and the poet.

OR

He stepped slowly out to the brink of the ledge, and standing on one leg with the other leg hidden under his wing; he closed one eye, then the other, and pretended to be falling asleep. Still they took no notice of him.

- (a) What did the young seagull do?
- (b) Why was young seagull not confident?
- (c) Why did he close his eyes one-by-one?
- (d) What were his brothers and sisters doing?

Q9. Answer the following questions in 30 – 40 words: (2x5=10)

- 1. Why was Lencho's soul filled with sadness?
- 2. Why had the international leaders gathered on South Africa's soil? What did it signify?
- 3. How was the young Seagull different from his brothers and little sisters?
- 4. Why did Mrs. Pumphrey think that Tricki was suffering from malnutrition? What did she do?
- 5. Describe the weather at night after Hari left the station.

Q10. Answer any one of the following questions in about 120 -150 words: (8m)
What does your reading of the story “The Midnight Visitor” tell you about Ausable as a secret agent?

OR

Horace Danby was a meticulous planner, but still he faltered. Where did he go wrong and why?

Q11. Answer any one of the following questions in about 120 -150 words: (8m)
Man’s goodness is a flame that can be hidden but never extinguished”? Why does Mandela say this?

OR

What is common in the theme between the story of the young seagull and the pilot of the old Dakota?

आदर्श प्रश्न पत्र
अर्ध वार्षिक परीक्षा
कक्षा— दसवीं
विषय — हिंदी

समय— 3 घंटे
सामान्य निर्देश —

अंक— 80

1. इस प्रश्न-पत्र के तीन खण्ड हैं— क , ख, ग और घ।
2. सभी प्रश्नों के उत्तर देना अनिवार्य है।
3. शब्द सीमा को ध्यान में रखते हुए उत्तर दीजिए।
4. लेख एवं वर्तनी पर विशेष ध्यान दीजिए।
5. सभी प्रश्नों के उत्तर क्रमानुसार ही लिखिए।

खण्ड —क

15

प्र. 1 निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

मनुष्य जीवन की सबसे बड़ी सिद्धि अपने अहं के संपूर्ण त्याग में है। जहा वह शुद्ध समर्पण के उदात्त भाव से प्रेरित होकर अपने स्व का त्याग करने को प्रस्तुत होता है वही उसके व्यक्तित्व की महानता परिलक्षित होती है। साहित्यानुसारी जब उच्च साहित्य का रसास्वादन करते समय स्वयं की सत्ता को भुलाकर पात्रों के मनोभावों के साथ एकत्व स्थापित कर लेता है तभी उसे साहित्यानंद की दुर्लभ मुक्तामणि प्राप्त होती है। भक्त जब अपने आराध्य देव के चरणों में अपने आप को अर्पित कर देता है और पूर्णतः प्रभु की इच्छा में अपनी इच्छा को लय कर देता है तभी उसे प्रभु —भक्ति की अलम्य पूँजी मिलती है। यह विचित्र विरोधाभास है कि कुछ और प्राप्त करने के लिए स्वयं को भूल जाना ही एक मात्र सरल और सुनिश्चित उपाय है। यह अत्यंत सरल दिखने वाला उपाय अत्यंत कठिन भी है। भौतिक जगत में अपनी क्षुद्रता को समझते हुए भी मानव हृदय अपने अस्तित्व के झूठे अहंकार में डूबा रहता है। उसका त्याग कर पाना उसकी सबसे कठिन परीक्षा है। किंतु यही उसके व्यक्तित्व की चरम उपलब्धि भी है। दूसरे का निःस्वार्थ प्रेम प्राप्त करने के लिए अपनी इच्छा — आकांक्षाओं और लाभ—हानि को भूलकर उसके प्रति सर्वस्व समर्पण ही एकमात्र माध्यम है। इस प्राप्ति का अनिवर्चनीय सुख वहीं चख सकता है जिसमें स्वयं को देना — लुटाया जाना हो। इस सर्वस्व समर्पण से उपजी नैतिक और चारित्रिक दृढ़ता अपूर्व समृद्धि और परमानंद का सुख वह अनुसारी चित्त ही समझ सकता है जो — “ज्यों ज्यों बूढ़े श्याम रंग, त्यों त्यों उज्ज्वल होय”।

- क) मनुष्य जीवन की महानता किसमें है? लेखक ऐसा क्यों मानता है? 2
- ख) साहित्यानुसारी से क्या तात्पर्य है? उसे आनंद किस प्रकार प्राप्त होता है? 2
- ग) प्रभु —भक्ति की पूँजी कैसी बताई गई है और भक्त उसे कब प्राप्त कर सकता है? 2

घ) मनुष्य के व्यक्तित्व की चरम उपलब्धि क्या है? 1

ड) विचित्र विरोधाभास किसे माना गया है? और क्यों। 2

प्र 2 निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

जो रूकावट डालकर होवे कोई पर्वत खड़ा
तो उसे देते है अपनी युक्तियों से वे उड़ा।
बीच में पड़कर जलधि जो काम देवे गड़बड़ा
तो बना देंगे उसे वे क्षुद्र पानी का घड़ा।
वन खँगाँलेंगे करेंगे व्योम में बाजीगरी
कुछ अजब धुन काम के करने की है उनमें भरी।
सब तरह से आज जितने देश हैं फूले फले
बुद्धि, विद्या, धन, वैभव के हैं जहाँ डेरे डले
वे बनाने से उन्हीं के बन गए इतने भले
वे सभी हैं हाथ से ऐसे सपूतों के चलें।
लोग जब ऐसे समय पाकर जन्म लेंगे कभी
देश की औ जाति की होगी भलाई भी तभी।

क) कवि ने काव्यांश में कैसे व्यक्तियों की ओर संकेत किया है? 2

ख) कैसे व्यक्ति पर्वत जैसी रूकावटों को दूर कैसे कर सकते हैं? 2

ग) काम करने की धुन वाले लोगों से देशों पर क्या असर हुआ है? 2

खण्ड—ख

प्र 3 शब्द किसे कहते हैं? 1

प्र 4 निम्नलिखित वाक्यों को निर्देशानुसार परिवर्तित कीजिए। 3

क) जब उसने अपनी निंदा सुनी तो वह क्रोध से आग बबूला हो गया। (सरल वाक्य में)

ख) मुझे देखकर वह खिसक गया। (मिश्र वाक्य में)

ग) पिता जी की इच्छा के कारण मुझे छात्रावास जाना पड़ा। (संयुक्त वाक्य में)

- प्र 5 समासिक विग्रह कर समास का नाम लिखिए। 2
कार्यकुशल, अनिच्छा
- प्र 6 समासिक पद बनाकर समास का नाम लिखिए। 2
आत्मा पर विश्वास गुण से युक्त
- प्र 7 निम्नलिखित वाक्यों को शुद्ध कीजिए। 4
क) जीवन और साहित्य का घोर संबंध है।
ख) वह अच्छे आदमी नहीं है।
ग) वह बड़ा दूर चला गया।
घ) लड़के अध्यापक को प्रश्न पूछते हैं।
- प्र 8 उचित मुहावरों द्वारा रिक्त स्थान भरिए— 3
क) हमारे जवानों ने शत्रुओं के दौत— ।
ख) अच्छी नौकरी के लिए पापड़ — ।
ग) हिंदी का प्रश्न-पत्र देखकर सुधीर को छठी— ।

प्र 11 निम्नलिखित प्रश्नों के उत्तर दीजिए।

2+2+1=5

क) कबीर ने कस्तूरी और मृग का उदाहरण क्यों दिया है?

ख) कवि ने तालाब की समानता किसके साथ दिखाई है और क्यों?

ग) मीरा बाई श्री कृष्ण से कैसा संबंध रखना चाहती है?

प्र 12 बिहारी कवि ने सभी की उपस्थिति में भी कैसे बात की जा सकती है, इसका वर्णन किस प्रकार किया है, अपने शब्दों में लिखिए। 5

अथवा

'तोप' शीर्षक कविता का भाव समझते हुए इसका गद्य रूपांतरण कीजिए।

प्र 13 अनपढ़ होते हुए भी हरिहर काका दुनिया की बेहतर समझ रखते हैं? कहानी के आधार पर स्पष्ट कीजिए। 5

खण्ड- घ

प्र 14 दिए गए संकेत बिंदुओं के आधार पर किसी एक विषय पर 80 से 100 शब्दों में अनुच्छेद लिखिए। 5

क) ग्लोबल वार्मिंग

- ग्लोबल वार्मिंग क्या है?
- इसका असर
- कौन जिम्मेदार
- हमें क्या करना है?

ख) परिश्रम का महत्त्व

- चींटी का उदाहरण
- सफलता प्राप्ति का माध्यम
- जीवन में परिश्रम का महत्त्व
- परिश्रम के लाभ

ग) पर्वतीय सौंदर्य

- भूमिका
- पर्वतों का आकर्षण
- पर्वतों का सिरमौर
- प्राकृतिक छटा का वर्णन

प्र 15 दिल्ली में यमुना नदी का प्रदूषण बढ़ता जा रहा है किंतु सरकार इस पर ध्यान नहीं दे रही। इस समस्या का वर्णन करते हुए किसी दैनिक समाचार पत्र के संपादक को पत्र लिखिए।

अथवा

5

खोया हुआ सामान लौटाने वाले किसी अपरिचित को धन्यवाद ज्ञापन करते हुए पत्र लिखिए।

प्र 16 पंद्रह अगस्त को होने वाले स्वतंत्रता दिवस समारोह की सूचना देते हुए सोसायटी के सचिव की ओर से सूचना लिखिए।

5

प्र 17 दिल्ली में ट्रेफिक के नियमों पर दो कार चालकों के बीच हुए संवाद को 50 से 60 शब्दों में लिखिए।

5

प्र 18 आप शहर में नए आए हैं और आपको किराये के घर की आवश्यकता है। उसके लिए 50 शब्दों में विज्ञापन तैयार कीजिए।

5

Section C

13. Show that $5 - \sqrt{3}$ is irrational.
14. Check whether $t^2 - 3$ is a factor of $2t^4 + 3t^3 - 2t^2 - 9t - 12$.
15. Part of monthly hostel charges is fixed and the remaining depends on the number of days one has taken food in the mess. When a student A takes food for 20 days she has to pay Rs. 1000 as hostel charges where as a student B, who takes food for 26 days, pays Rs. 1180 as hostel charges. Find the fixed charges and the cost of food per day.
16. A girl of height 90 cm is walking away from the base of a lamp-post at a speed of 1.2 m/s. If the lamp is 3.6m above the ground, find the length of her shadow after 4 seconds.
17. If $\tan(A+B) = \sqrt{3}$ and $\tan(A-B) = \frac{1}{\sqrt{3}}$, $0^\circ < A+B \leq 90^\circ$; $A > B$, find A and B.
18. A student noted the number of cars passing through a spot on a road for 100 periods each of 3 minutes and summarized it in the table given below. Find the mode of the data:

No. of Cars	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	7	14	13	12	20	11	15	8

19. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears
- (i) A two- digit number.
 - (ii) A perfect square number.
 - (iii) A number divisible by 5.
20. A train travels 360km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less for the same journey. Find the speed of the train.
21. Two tangents TP and TQ are drawn to a circle with centre O from an external point T. Prove that $\angle PTQ = 2\angle OPQ$.
22. In an equilateral triangle ABC, D is a point on side BC such that $BD = \frac{1}{3} BC$. Prove that $9 AD^2 = 7 AB^2$.

Section D

23. The distribution below gives the weights of 30 students of a class. Find the median weight of the students.

Weight (in Kg)	40-45	45-50	50-55	55-60	60-65	65-70	70-75
No. of students	2	5	x	12	17	20	y

24. On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $(x-2)$ and $(-2x+4)$ respectively. Find $g(x)$.
25. 2 women and 5 men can together finish an embroidery work in 4 days, while 3 women and 6 men can finish it in 3 days. Find the time taken by 1 woman alone to finish the work and also that taken by 1 man alone.
26. A sum of Rs. 700 is to be used to give seven cash prizes to students of a school for their overall academic performance. If each prize is Rs. 20 less than its preceding prize, find the value of each of the prizes.
27. D and E are points on the sides CA and CB respectively of a triangle ABC right angled at C. Prove that $(AE)^2 + (BD)^2 = (AB)^2 + (DE)^2$.
28. Prove that the ratio of the areas of two similar triangles is equal to the square of the ratio of their corresponding sides.
29. Prove that
- $$\frac{\sin\theta - \cos\theta + 1}{\sin\theta + \cos\theta - 1} = \frac{1}{\sec\theta - \tan\theta}.$$
30. Two concentric circles of radii 5cm and 3cm. Find the length of the chord of the larger circle which touches the smaller circle.

.....XXXXXXXXX.....

HALF YEARLY SAMPLE PAPER
SUBJECT- SOCIAL SCIENCE
CLASS – X

Time: 3 Hrs

MM.80

GENERAL INSTRUCTIONS:-

1. All questions are compulsory.
2. Q 1 to Q20 is very short type questions. Each carry 1 mark.
3. Q 21 to Q 29 is 3 marks questions.
4. Q 30 to Q 35 is 5 marks questions.
5. Q 36 is map based question of 3 marks.

Q 1. James Watt patented the 'steam engine' in year

- a) 1718
- b) 1871
- c) 1781
- d) 1817

Q 2. The first book to be printed was

- a) Bible
- b) Diamond sutra
- c) Panchtantra
- d) Ninety five Theses

Q 3. 'Chote Aur Bade Ka Sawal' was written by-

- a) Khashi Baba
- b) Tara baiShinde
- c) Raja Ram Mohan Roy
- d) PanditaRamabai

Q 4. What was Vernacular Press Act?

Q 5. ----- soil is formed by intense leaching in tropical regions.

Q 6. In which of the following states arid soil is found?

- a) Jammu and Kashmir.
- b) Gujarat
- c) Rajasthan
- d) Jharkhand

Q 7. Which forest is declared 'Protected forest'?

Q 8. What percentage of mammals are on the threatened list?

- i) 30%
- ii) 20%
- iii) 10%
- iv) 15%

Q 9. Where is rooftop rainwater harvesting most common?

Q10. Name two plantation crops grown in India.

Q 11 Which of the following countries has federal division of powers?

- i) India
- ii) Belgium
- iii) Pakistan
- iv) Nepal

Q 12. The vertical distribution of power is shared among

- a) Organs of the government
- b) Centre and state government
- c) Local government
- d) Community government

Q 13. Mention any two subjects included in Union list.

Q 14. Give one example of a homogeneous society.

Q 15. _____ is the best way to fight for recognition and to accommodate diversity.

Q 16. Give one example of overlapping social differences.

Q17. Which are the two major sources of formal loan for rural households?

Q18. Name the sector in which forms the base for all other products.

Q19. Study the data given below and answer the question that follow.

Some comparative data on Punjab, Kerala and Bihar:

State	Infant Mortality rate per 1,000 (2003)	Literacy Rate (%) (2001)	Net attendance Ratio for Classes 1-V (1995-96)
Punjab	49	70	81
Kerala	11	91	91
Bihar	60	47	41

Which state appears the most development?

Q 20. As Per HDI 2016 report , India ranked _____ in the world.

- | | |
|--------|--------|
| a) 130 | c) 133 |
| b) 131 | d) 135 |

Q 21. Why in Victorian Britain , the upper classes preferred things produced by hand? Give three reasons.

Q 22. How did nationalism develop through culture in Europe?

Q 23. How is the issue of sustainability important for development? Explain

Q 24. Explain three causes of water scarcity.

Q 25. Differentiate between horizontal and vertical power sharing in modern democracies.

Q 26. Examine what makes India a federal state.

Q27. What do we learn from the struggles in Nepal and Bolivia?

Q28. Explain how public sector contributes to the economic development of a nation?

OR

“Though the level of income is important, it is an inadequate measure of the level of development.” Justify the statement.

Q29. What is environmental degradation? Explain with example.

Q30. How did print introduce a new world of debate and discussion? What were its implications in the sphere of religion?

Q31. Explain the process of unification of Italy.

Q32. What is the importance of pulses in our economy? Why are pulses grown as a rotation crop?

Q33 What is a secular state? Explain factors which make India a secular state.

Q 34. “Workers are not exploited in organized sector”. Do you agree with the statement? Explain reason for your answer. How the condition of organized sector is different from unorganized sector?

Q35. Which government body supervises the functioning of formal sources of loans in India? Explain its functioning.

OR

Write the difference between commercial bank and central bank.

Q36. On the outline map of India mark -

- a) Corbett National Park
- b) Major Rice growing region
- c) Largest cotton producer state.

HALF YEARLY EXAMINATION SAMPLE PAPER

CLASS – X

SCIENCE

Time allowed: 3 hours

M.M: 80

General Instructions:

- (i) All questions are compulsory.
- (ii) Section-A (Objective type and multiple choice questions) Question numbers 1 to 20 are one mark questions. These are to be answered in one word ,one sentence and by choosing one option.
- (iii) Section-B (Short answers) Question numbers 21 to 30 are three marks questions. These are to be answered in about 50 words each.
- (iv) Section-C (Long answers) Question numbers 31 to 36 are five marks questions. These are to be answered in about 70 words each.

SECTION-A

1. Which of the following is not a chemical change?
 - (a) Cooking of food
 - (b) Digestion of food in our body
 - (c) Evaporation of water
 - (d) Burning of candle wax
2. Calcium phosphate is present in tooth enamel. Its nature is
 - (a) Basic
 - (b) Acidic
 - (c) Neutral
 - (d) Amphoteric
3. Generally, non-metals are not lustrous. Which of the following non-metal is lustrous?
 - (a) Sulphur
 - (b) Oxygen
 - (c) Nitrogen
 - (d) Iodine
4. What happens when dilute hydrochloric acid is added to iron filings?
5. Why does dry HCl gas not change the colour of the dry litmus paper?

6. Give an example of a metal which is liquid at room temperature.
7. Which mirror is used in solar cooker:
 - (a) Concave
 - (b) Convex l
 - (c) Bi-focal
 - (d) plane
8. S.I unit of magnetic field is:
 - (a) Tesla
 - (b) Weber
 - (c) Pascal
 - (d) joule
9. charge per unit time is known as:
 - (a) current
 - (b) potential
 - (c) magnetic field
 - (d) power
10. Define wind energy?
11. Why do magnetic field lines never intersect each other?
12. What is resistance ?
13. During the deficiency of oxygen in tissues of human beings, pyruvic acid is converted into lactic acid
 - a) Cytoplasm
 - b) Mitochondria
 - c) Chloroplast
 - d) Golgi body
14. The excretory unit in the human excretory system is called:
 - a) Nephron
 - b) Neuron
 - c) Nephridia
 - d) kidneyon
15. A plant hormone inhibits the growth:
 - a) Absciscic acid
 - b) Ethylene
 - c) Ascorbic acid
 - d) cytokinin
16. In the food chain given below, if the amount of energy available at forth trophic level is 5kJ, what was the energy available at the producer level:

Grass → Grasshopper → Frog → Snake → Hawk

- a) 500 kJ
- b) 50 kJ
- c) 5000 kJ
- d) 5 kJ

17. The trachea divides into two tubes at its lower end. What is the name of these tubes?

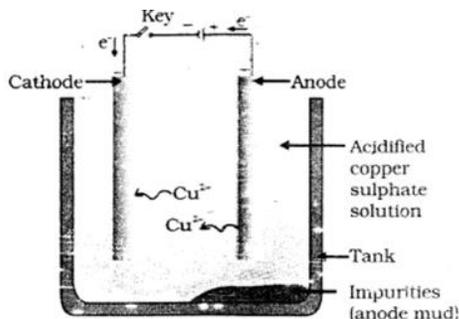
18. Which plant hormone is responsible for wilting and falling of leaves?

19. Name the hormones secreted by testes and ovaries.

20. Name two waste materials that can be recycled.

21. Define the following terms: (a) Minerals (b) Ores (c) Gangue

22. Name the following process which is shown in the given figure. Write the substances which are used to prepare cathode and anode electrodes. Explain the process including the reactions involved.



23. Write word equations and then balanced equations for the reactions taking place when

- (a) Dilute sulphuric acid reacts with zinc granules
- (b) Dilute hydrochloric acid reacts with magnesium ribbon
- (c) Dilute sulphuric acid reacts with aluminium powder

24. State Ohm's law? How can it be verified experimentally? Does it hold good under all conditions? Comment.

25. What is meant by electrical resistivity of a material? Derive its S.I. unit. Describe an experiment to study the factors on which the resistance of a conducting wire depends.

26. Differentiate between renewable and non-renewable energy.

27. What is the ten percent law? Explain with an example.

28. Define a) Saprophytic nutrition, b) Parasitic nutrition, c) Holozoic nutrition

29. A) What do you mean by 'translocation' with respect to transport in plants?

b) What are the differences between transport of materials in xylem and phloem?

30. A) What is the spinal cord? What is its main function?

B) Give the functions of the medulla.

C) How do we detect the smell of an incense stick?

31. For making cake, baking powder is taken. If at home, your mother uses baking soda instead of baking powder in cake,
- (a) How will it affect the taste of the cake and why?
 - (b) How can baking soda be converted into baking powder?
 - (c) What is the role of tartaric acid added to baking soda?
32. An element A reacts with water to form a compound B which is used in white washing. The compound B on heating forms an oxide C which on treatment with water gives back B. Identify A, B and C and give the reactions involved.
33. Explain electromagnetic induction with the help of an experiment?
34. State and explain thermoelectric plant?
35. (i) What is lymphatic system? What are its functions?
- (ii) What is blood pressure? What are the two factors used to express the blood pressure of a person?
 - (iii) Name the main nitrogenous waste in the human blood. How is it removed from the blood?
36. A) What is neuron? Draw a labelled diagram of a neuron.
- B) What is synapse? What happens at the synapse between two neurons? How are the message carried across a synapse? Explain with help of labelled diagram.