THE FIRST COMPARATIVE EXAMINATION 2018–19

Class X (ICSE)

ENGLISH LANGUAGE

ENGLISH Paper – 1

(Two hours)

Maximum marks: 80

Answers to this Paper must be written on the paper provided separately.
You will not be allowed to write during the first 15 minutes.
This time is to be spent in reading the question paper.
The time given at the head of this paper is the time allowed for writing the answers.

Attempt all five questions.
The intended marks for questions or parts of questions are given in brackets [ ].
*You are advised to spend not more than 30 minutes in answering **Question 1** and 20 minutes in answering **Question 2**.*

Question 1

(Do not spend more than 30 minutes on this question.)

Write a composition (300 – 350 words) on any one of the following topics: [20]

(a) Write an original short story that brings out the truth of the statement: 'Never judge a book by its cover'.

(b) You had everything that you wanted. Yet, you felt it was not enough. One evening you saw a child sitting under the street lamp near your home, trying to study. You approached the child and had a long conversation. It triggered off a change in your thinking and lifestyle. Narrate the change and how it enriched your life.

(c) Describe the role your grandparents play in your life.

(d) *"Children must be allowed to make career choices on their own."*
Express your views either **for** or **against** the topic.

(e) Study the picture given on the next page carefully. Write a story or a description or an account of what it suggests to you. Your composition may be about the subject of the picture or you may take suggestions from it; however, there must be a clear connection between the picture and your composition.

Question 2 [10]

(*Do not spend more than 20 minutes on this question.*)

Select *one* of the following:

(a) Write a letter to your neighbour, requesting him not to play loud music in the evening as a member of your family is seriously ill and has been advised complete rest.

(b) You have written a book and want to get it published. Write a letter to the Head of a publishing house requesting it to be published. Give a synopsis of your book, why you want it to be published and the impact it will have on the readers.

Question 3

(a) You are the Secretary of the Literary Club of your school. Draft a notice to be displayed on the school notice board, informing the students about a literary event to be organised in your school. Give all necessary details. [5]

(b) Write an email to two famous literary persons, requesting them to be the Guests of Honour at the literary event to be organised in your school. [5]

Question 4

Read the following passage carefully and answer the questions that follow:

There came to our town some years ago a showman who owned an institution called the Gaiety Land. Overnight, our Gymkhana Grounds became *resplendent* with banners and streamers and coloured lamps. From all over the district, crowds poured into the show. Within a week of opening, in gate money, they collected five hundred rupees a day. Gaiety Land provided us with all sorts of fun and gambling and side-shows. For a couple of annas, in each booth, we could watch anything from performing parrots to crack motorcyclists. In addition to this, there were lotteries and shooting galleries, where, for an anna, you always stood a chance of winning a hundred rupees.

There was a particular corner of the show which was in great favour. Here for a ticket costing eight annas, you could be lucky enough to acquire a variety of articles – pin cushions, sewing machines or even a road engine. One evening, they drew a ticket, number 1005, and I happened to own the other half of the ticket. Glancing down the list of articles, they declared that I had become the owner of a road engine! 10

I looked ***stunned***. People gathered around and gazed at me as if I were some sort of a curious animal. Some people muttered and giggled, "Fancy anyone becoming the owner of a road engine!" 15

It was not the sort of prize one could carry home at short notice. I asked the showman if he could help me to transport it. He merely pointed at a notice which decreed that all the winners should remove their prizes immediately after the draw and by their own effort. However, they had to make an exception in my case. They agreed to keep the engine at the Gymkhana Grounds till the end of the season, and then, I would have to make my own arrangements to take it out. 20

When I asked the showman if he could find me a driver, he just smiled and said, "The fellow who brought it here had to be paid hundred rupees for the job and five rupees a day. I sent him away and made up my mind that if no one was going to draw it, I would just leave it to its fate." 25

"Can't I sell it to some municipality?" I asked innocently. He burst into a laugh.

"As a showman I have enough trouble with municipal people. I would rather keep out of the way." 30

My friends and relatives poured in, to congratulate me on my latest ***acquisition***. No one knew precisely how much a road engine would fetch; all the same they felt that there was a lot of money in it. "Even if you sell it as scrap iron, you can make a few thousands," some of my friends declared. Everyday I made a trip to the Gymkhana Grounds to have a look at my engine. I grew very fond of it. I loved its shining brass parts. I stood near it and patted it affectionately, hovered about it, and returned home everyday only at the close of the show. I thought all my troubles were coming to an end. How ignorant I was! How little did I guess that my troubles had just begun! 35

(a) Give the meaning of the following words as used in the passage:
One word answers or short phrases will be accepted.

(i) resplendent *(line 2)*
(ii) stunned *(line 15)*
(iii) acquisition *(line 31)*

[3]

(b) Answer the following questions briefly in your own words.

(i) Which two sentences in the first paragraph show that Gaiety Land was popular? [2]
(ii) Give two reasons for the popularity of Gaiety Land. [2]

(iii) What is meant by 'it was not the sort of prize one could carry home at short notice'? [2]

(iv) What was the showman's response to the narrator asking for help to transport the road engine? [2]

(v) Why was the showman ready to leave the road engine to its fate? [1]

(c) In not more than 50 words, describe the reactions of the public, friends and relatives towards the narrator on his winning the road engine. How did he treat his proud possession? [8]

Question 5

(a) Fill in each of the numbered blanks with the correct form of the word given in brackets. Do not copy the passage, but write in correct serial order the word or phrase appropriate to the blank space. [4]

Example:

(0) Mukesh had been _____ (sit) on the bank of a small irrigation canal.

Answer: (0) sitting.

Mukesh had been _____ (0) (sit) on the bank of a small irrigation canal. He was _____ (1) (gaze) at a couple of herons _____ (2) (fish) in the muddy water, when he _____ (3) (feel) something bump his elbow. _____ (4) (look) around, he _____ (5) (find) at his side a little goat, jet black and soft as velvet with lovely grey eyes. Neither her owner nor her mother _____ (6) (be) around. She continued to _____ (7) (nudge) Mukesh, so he _____ (8) (look) in his pocket for nourishment.

(b) Fill in the blanks with appropriate words: [4]

(i) You can insure your gold _____ theft.

(ii) The workers brought _____ the issue at the meeting.

(iii) The beggar was blind _____ one eye.

(iv) The engineers were _____ pressure to meet the deadline.

(v) She acceded _____ her friend's request.

(vi) Your parents take pride _____ your success.

(vii) The children are looking _____ to the trip to Disney World.

(viii) Society must do _____ with meaningless superstitions and practices.

(c) Join the following sentences to make one complete sentence **without using** ***and***, ***but*** or ***so***: [4]

(i) I rang the bell.Immediately the door was opened.

(ii) His health deteriorated day by day.They continued the treatment.

(iii) Lila is very intelligent.Anita is less intelligent.

(iv) You must practice more.You will not qualify for selection with team.

(d) Re-write the following sentences according to the instructions given after each. Make other changes that may be necessary, but do not change the meaning of each sentence. [8]

(i) She bought a dress and a pair of shoes.
(Begin: Not only .....)

(ii) I do not mind big cities but I prefer small towns.
(Begin: I prefer .....)

(iii) People believe that laughter is the best medicine.
(Begin: Laughter .....)

(iv) If there are many complaints, the road will be repaired soon.
(Begin: The more .....)

(v) This is one of the best movies released this month.
(Use: good)

(vi) The pizza was so delicious that nobody could stop eating.
(Begin: The pizza .....)

(vii) She made a shopping list so as not to forget anything.
(Use: lest)

(viii) If you give me your book, I will lend you my stamp collection.
(Begin: Unless .....)

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

LITERATURE IN ENGLISH

ENGLISH Paper 2

(Two hours)

Maximum marks: 80

Answers to this Paper must be written on the paper provided separately.
You will not be allowed to write during the first 15 minutes.
This time is to be spent in reading the question paper.
The time given at the head of this paper is the time allowed for writing the answers.

Attempt five questions in all.
*You must attempt one question from each of the **Sections A, B** and **C** and any two other questions.*
The intended marks for questions or parts of questions are given in brackets [ ].

SECTION A – DRAMA

The Merchant of Venice: Shakespeare

Question 1

Read the extract given below and answer the questions that follow:

Bassanio
Sometimes from her eyes
I did receive fair speechless message ...
Her name is Portia, nothing undervalued
To Cato's daughter, Brutus' Portia —

(i) Where does the scene take place? Who all are present there? What are they talking about at the beginning of the scene? [3]

(ii) What confession has Bassanio made to Antonio earlier about his financial position? How does Bassanio propose to payback his previous loan as well as present loan? [3]

(iii) What is meant by 'fair speechless message'? How does he describe Portia to the listener? [3]

(iv) What evidence is there to show that Portia's fame had spread throughout the world? [3]

(v) Who are Cato and Brutus? Why are they referred to here? [4]

Question 2

Read the extract given below and answer the questions that follow:

Arragon

What's here? the portrait of a blinking idiot.
Presenting me a schedule! I will read it.
How much unlike art thou to Portia!

(i) Where is Arragon at the moment? Who else is with him? On what condition can the speaker win Portia's hand? [3]

(ii) What are the injunctions that the suitors have to take before selecting the casket? [3]

(iii) How does the Prince of Arragon interpret the gold casket? Mention the inscription on the various caskets. [3]

(iv) Highlight any two character traits of the Prince of Arragon with suitable examples. [3]

(v) What was written on the scroll when he opens his respective casket? [4]

Question 3

Read the extract given below and answer the questions that follow:

Portia

I do desire you
Not to deny this imposition,
The which my love and some necessity
Now lays upon you.

(i) What fair commands are given by Portia and to whom? What reason does she give for her absence? [3]

(ii) How do 'you' and Jessica happen to be at the same place as Portia? Who else is there with them? [3]

(iii) How will the people in Portia's house treat 'you' and Jessica in her absence? Why does Portia feel that Antonio must be like her lord Bassanio? [3]

(iv) Who is Balthazar? What responsibility does Portia entrust him with? Where should he meet her after completing the work? [3]

(v) How does she intend to disguise Nerissa and herself? What impression do you form of Portia from this scene? [4]

SECTION B - POETRY

A Collection of Poems

Question 4

Read the extract given below and answer the questions that follow:

He plants a friend of sun and sky;
He plants the flag of breezes free;
The shaft of beauty, towering high;
He plants a home to heaven anigh.

(*The Heart of the Tree*, Henry Cuyler Bunner)

(i) Who is referred to in the above extract? List any two things that he does by planting trees. [3]

(ii) What is referred to as 'shaft of beauty, towering high' and why? [3]

(iii) How is the tree a friend of sun and sky? [3]

(iv) How do the trees fade and flush again? How does it reflect the theme of regeneration? [3]

(v) Mention any two literary devices with suitable examples used in the poem. Describe in detail the major themes in this poem. [4]

Question 5

Read the extract given below and answer the questions that follow:

We'll answer this by asking you,
'What used the darling ones to do?
'How used they keep themselves contented
Before this monster was invented?'

(*Television*, Roald Dahl)

(i) What is referred to as the 'monster' in the extract? What harm does the monster do to the children? [3]

(ii) What advice does the poet give to the parents about the monster? [3]

(iii) According to the poet, which activity kept the children occupied before the invention mentioned above? How did that activity enrich them? [3]

(iv) What effects does the continuous sitting and staring at the monster have on children? [3]

(v) What are the poet's views regarding this monster? Do you agree with his views? Give reasons. [4]

Question 6

Read the extract given below and answer the questions that follow:

They say it was a shocking sight
After the field was won;
For many thousand bodies here
Lay rotting in the sun;
But things like that, you know, must be
After a famous victory.

(*After Blenheim*, Robert Southey)

(i) To whom does 'they' refer to? Why do you think the sight was shocking even when the battle was won? [3]

(ii) Identify the figure of speech used in the phrase 'a famous victory'. Why is it used here? [3]

(iii) What was the occupation of the speaker? How do you come to know about it? [3]

(iv) Who was Duke of Marlbro? Why did he win great praise? [3]

(v) State clearly the form and background of the poem. What message does the poet want to convey through the poem? [4]

SECTION C – PROSE

A Collection of Short Stories

Question 7

Read the extract given below and answer the questions that follow:

Mrs Thompson saw him approaching from the window, and with ruffling feathers met him a few paces from the door, as he opened the garden gate, and came in. He bore a precious burden, and he felt it to be so.

(*An Angel in Disguise*, T.S. Arthur)

(i) Whom did Mrs Thompson see approaching? What precious burden was he carrying? Why is the burden precious? [3]

(ii) How has this precious burden been treated earlier? What had happened to her family? [3]

(iii) What did Mrs Thompson ask her husband? What was his reaction to it? [3]

(iv) What was the reaction of Mrs Thompson when the precious burden was brought in? How did her attitude change later? [3]

(v) Who is the angel in disguise in the story? Give reasons to justify your answer. [4]

Question 8

Read the extract given below and answer the questions that follow:

> There was a pontoon bridge across the river and carts, trucks, and men, women and children were crossing it.
>
> (*Old Man at the Bridge*, Ernest Hemingway)

(i) What is a pontoon bridge? Why are many people crossing the bridge? [3]

(ii) Where is the old man sitting? Why doesn't he move? How does the writer describe him? [3]

(iii) What business did the narrator have? What question did he ask the old man? What was his reply? [3]

(iv) Why is the old man, the last person to leave his town? What information did the old man give about the animals and his family? [3]

(v) Write the character sketch of the 'Old man'. Briefly mention the major themes as expressed in the story. [4]

Question 9

Read the extract given below and answer the questions that follow:

> So the little girl walked about the streets on her naked feet, which were red and blue with the cold.
>
> (*The Little Match Girl*, Hans Christian Andersen)

(i) Where is the little girl and why is she there? What kind of weather was there that evening? [4]

(ii) Describe any two hallucinations of the Little Match Girl and their significance. [4]

(iii) The orphaned children in the Victorian society were not only deserted but also neglected and abused. Justify the statement giving suitable examples from the story. [8]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

MATHEMATICS

Time: Two hours and a half **Maximum marks: 80**

Instructions:

* *Answers to this paper must be written on the answer script provided separately.*
* *You will **NOT** be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.*
* *The time given at the head of this paper is the time allowed for writing the answers.*
* *Answer **all** questions in **Section A**. Attempt any **four** questions from **Section B**.*
* *All working, including rough work must clearly be shown and must be done on the same sheet as the rest of the answer. Omission of essential working will result in loss of marks.*
* *The intended marks for questions or parts of questions are given in brackets [ ].*
* ***Mathematical tables and graph papers shall be provided to you.***

SECTION A [40 marks]

Attempt all questions from this section.

Question 1

(a) Find the roots of the equation $2x^2 - 9x + 10 = 0$, when $x \in Q$ (rational numbers). [3]

(b) If $\begin{bmatrix} x-2 & 6 \\ 4 & 7 \end{bmatrix} = \begin{bmatrix} 5 & 8 \\ y & 6 \end{bmatrix} + \begin{bmatrix} -4 & -2 \\ -1 & 1 \end{bmatrix}$, find the values of x and y. [3]

(c) Solve the following inequation and represent the solution set on the number line:

$$-2\frac{1}{2} + 2x \le \frac{4x}{3} \le 1\frac{1}{3} + 2x;\ x \in W$$ [4]

Question 2

(a) Given that $(x + 2)$ and $(x - 3)$ are factors of $x^3 + ax + b$, find the values of a and b. [3]

(b) How much should a man invest in ₹ 25 shares selling at a premium of ₹ 5 to obtain an annual income of ₹ 1800, if the dividend declared is 15% per annum? [3]

(c) Find the mode and the median of the following frequency distribution: [4]

x	10	11	12	13	14	15
f	1	4	7	5	9	3

Question 3

(a) Shweta deposits ₹ 350 per month in a recurring deposit account for 1 year at the rate of 8% per annum. Find the amount she will receive on maturity. [3]

(b) If $x = 3$ is a solution of the equation $2x^2 - kx + 15 = 0$, find the value of k. [3]

(c) For the following distribution, draw a histogram on graph paper. Hence, calculate the mode. [4]

Class	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30
Frequency	2	5	12	8	6	4

Question 4

(a) Solve the following inequation and graph the solution set on the number line: [3]

$$3z - 5 \le z + 3 < 5z - 9; z \in R$$

(b) If $A = \begin{bmatrix} 0 & -1 \\ 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 2 \\ -1 & 1 \end{bmatrix}$, find the matrix X such that $3A + X = B$. [3]

(c) The difference of two natural numbers is 4 and the difference of their reciprocals is $\frac{1}{3}$. Find the numbers. [4]

SECTION B [40 marks]

Attempt any four questions from this section.

Question 5

(a) Solve $x^2 - 10x + 6 = 0$, using formula. Give your answer correct to 2 decimal places. [3]

(b) What number should be subtracted from $2x^3 + x^2 - 13x + 9$ so that the resulting polynomial has a factor $(2x - 1)$? [3]

(c) Given $\begin{bmatrix} 2 & 5 \\ 5 & 2 \end{bmatrix} \times X = \begin{bmatrix} -7 \\ 14 \end{bmatrix}$. Find:

(i) the order of the matrix X

(ii) the matrix X. [4]

Question 6

(a) Solve the following inequation and represent the solution set on the number line:

$$4x - 19 < \frac{3x}{5} - 2 \le -\frac{2}{5} + x;\ x \in I$$ [3]

(b) Solve for x and y:

$$\begin{bmatrix} x+y & x-4 \end{bmatrix} \begin{bmatrix} 1 & 2 \\ 2 & 2 \end{bmatrix} = \begin{bmatrix} -7 & -11 \end{bmatrix}$$ [3]

(c) Sameer has a recurring deposit account in a post office for 2 years at 6% p.a. simple interest. If he gets ₹ 1,200 as interest at the time of maturity, find:

(i) the monthly instalment

(ii) the amount of maturity. [4]

Question 7

(a) Find the values of m so that the following equation has real and equal roots:

$$x^2 - 2mx + (7m - 12) = 0$$ [3]

(b) A man invests ₹ 8,400 in ₹ 100 shares at ₹ 70. If the company pays a dividend of 14% per annum, find:

(i) the number of shares he buys

(ii) his annual income

(iii) the percentage return on his investment. [3]

(c) Using the Factor Theorem, show that $(x - 2)$ is a factor of $x^3 + 10x^2 - 37x + 26$. Hence, factorise it completely. [4]

Question 8

(a) Find the mean of the following distribution by step deviation method: [5]

Class interval	80–100	100–120	120–140	140–160	160–180
Frequency	20	30	20	40	90

(b) A car covers a distance of 80 km at a certain speed. Had the speed been 12 km/hr more, the time taken for the journey would have been 20 minutes less. Find the original speed of the car. [5]

Question 9

(a) In a recurring deposit account, the monthly instalment was ₹ 2,500 and the maturity amount was ₹ 30,975. Find the time (in years) for which the account was held, if the rate of interest was 6% p.a. [5]

(b) The expression $4x^3 - bx^2 + x - c$ leaves remainders 0 and 30 when divided by $x + 1$ and $2x - 3$ respectively. Calculate the values of b and c. Hence, factorise the expression completely. [5]

Question 10

(a) A man sold 600 (₹ 25) shares paying $6\frac{1}{2}$ % dividend at ₹ 22 and invested the sale proceeds (excluding dividend) in ₹ 10 shares, paying 9% at ₹ 12.

(i) How many ₹ 10 shares did he buy?

(ii) What was his annual income at 9%?

(iii) Calculate the change in his annual income from dividend. [5]

(b) The mean of the following distribution is 88. If the sum of the frequencies is 100, find the values of f_1 and f_2. [5]

Class interval	40 – 60	60 – 80	80 – 100	100 – 120	120 – 140
Frequency	5	25	f_1	f_2	5

Question 11

(a) Attempt this question on graph paper.

Marks obtained by 200 students in an examination are given below:

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
No. of students	5	10	14	21	25	34	36	27	16	12

Draw an ogive for the given distribution. Use your ogive to estimate:

(i) the median

(ii) the upper quartile

(iii) the number of students scoring above 65 marks.

(iv) If 10 students qualify for merit scholarship, find the minimum marks required to qualify. [6]

(b) Two years ago, the father's age was the square of his son's age. Two years hence, his age will be four times the age of his son. Find their present ages. [4]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

GEOGRAPHY – H.C.G. 2

Maximum marks: 80

Time: Two hours

Instructions:

- *Answers to this paper must be written on the answer script provided separately.*
- *All subsections of each question must be answered in the correct serial order.*
- *You will **NOT** be allowed to write during the first fifteen minutes. This time is to be spent in reading the question paper.*
- *Please do **not** write anything on your question paper except your name and roll number.*
- *The intended marks for questions or parts of questions are given in brackets [ ].*
- *Do not copy the questions on your answer script but copy the correct question number.*
- ***The map given at the end of this question paper must be detached and after marking, must be fastened to your answer booklet after the cover page.***

Note

*In **all** map work, make wise use of arrows to avoid overcrowding of the map.*

*Attempt **six** questions in all. Part I is **compulsory**. All questions from Part I are to be attempted. A total of **four** questions are to be attempted from Part II.*

*To be supplied with this paper: **Survey of India Map** sheet No. 45 D/7, T18 502; and **20 cm twine.***

PART I [40 marks]

*Attempt **all** questions from this section.*

SECTION 1 [25 marks]

Question 1

Study the extract of the Survey of India Map Sheet No. 45 D/7 T18 502 and answer the following questions:

(a) Give the six figure grid reference for:

(i) Δ 217 in northwest of the map extract [1]

(ii) Surveyed tree south of Karja settlement. [1]

(b) Calculate the distance between Juvol and Amiwada along the cart track. Give your answer in kilometres and metres. [2]

(c) Calculate the area of the map. Give your answer in kilometre square. [2]

(d) Define contour interval. What is the contour interval of the given map? [2]

(e) What do the black curved lines marked in grid 9582 mean? How are they formed? [2]

(f) Draw the symbols for the following:

(i) chhatri [1]

(ii) tube well. [1]

(g) (i) What type of climate do you infer from the nature of streams present in this region? [1]

(ii) Mention the man made means of irrigation shown on the map extract. [1]

(h) Give a reason to prove that Sipu Nadi is flowing in the middle course. Name a village located on its left bank. [2]

(i) Name the following:
   (i) The drainage pattern in 9386 [1]
   (ii) The pattern of settlement in 9786. [1]

(j) (i) What kind of road connects Khara to Manpuriya? [1]
   (ii) What is the meaning of 3r in grid square 9089? [2]

(k) Give two man made and two natural features in 9281. [1]

(l) (i) What is the compass direction of Chekhla from Arniwada? [1]
   (ii) Name one relief feature shown in 9187. [1]

(m) What is the black vertical line made along 93 eastings?

SECTION 2 [15 marks]

Question 2

On the map of India provided mark / shade and label the following:

(a) Mumbai High [1]
(b) The Tropic of Cancer [1]
(c) The River Yamuna [1]
(d) The Palk Strait [1]
(e) The Malabar Coast [1]
(f) An area of laterite soil [1]
(g) The Karakoram Pass [1]
(h) Hyderabad [1]
(i) The sparsely populated area in India [1]
(j) The Gulf of Kutch [1]
(k) Lake Chilika [1]
(l) The Western Ghats [1]
(m) The River Tungabhadra [1]
(n) The Vindhya Range [1]
(o) The Chota Nagpur Plateau. [1]

PART II [40 marks]

Attempt any four questions from this Part.

Question 3

(a) "Rainfall in India is orographic in nature." Explain giving an example. [3]

(b) Give reason for the following:
   (i) The northeast monsoons bring almost no rain in India. [1]
   (ii) The northern plains of India do not freeze in winters. [1]

(c) Explain the meaning of the following:

(i) Burst of monsoon [1]

(ii) October heat. [1]

(d) Given below is the climatic data of a station. Study the table and answer the questions that follow:

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp °C	13.7	16.6	21.6	25.5	33.2	33.5	30.8	29.8	29.2	25.5	19.6	15.2
Rainfall (cm)	2.5	2.0	1.5	0.9	1.5	7.5	17.8	18.5	12.5	1.0	0.2	1.5

(i) Calculate the annual range of temperature. [1]

(ii) What is the total rainfall experienced by the station? [1]

(iii) Which month is the wettest? [1]

Question 4

(a) Name the soil that is also known as riverine soil. State two of its characteristics. [2]

(b) Why is laterite soil unsuitable for the cultivation of crops? Name an area in India where this soil is found. [2]

(c) Explain the need for soil conservation in India. State two methods of soil conservation. [2+1]

(d) Answer the following:

(i) What is humus? [1]

(ii) How does overgrazing lead to soil erosion? [1]

(iii) Mention two ways by which soil can get nitrogen. [1]

Question 5

(a) With reference to Tropical Evergreen Forests, answer the following:

(i) Why do they appear green all the year round? [1]

(ii) Why are they difficult to exploit? [1]

(b) Mention any two characteristics of the Mangrove Forests. [2]

(c) What is the role of the forests in each of the following:

(i) having a favourable effect on the climate of the region [1]

(ii) maintaining the cycle of oxygen and carbondioxide in the biosphere [1]

(iii) preventing floods? [1]

(d) Give any three objectives of social forestry. [3]

Question 6

(a) Why is there a need for irrigation in India? [2]

(b) Where are the tanks most widely used in India? Why? [2]

(c) Name any two canal systems of Punjab-Haryana. Give two drawbacks of conventional methods of irrigation. [3]

(d) Mention any three geographical conditions favouring the installation of a tube well. [3]

Question 7

(a) Distinguish between inundation and perennial canals. [2]

(b) What efforts have been made by the government to conserve forests? [2]

(c) Name the soil:

(i) which supports half of the population of India [1]

(ii) that has self ploughing capacity [1]

(iii) that is useful for the cultivation of jute. [1]

(d) (i) Name any two states in the northern plains of India that receive rain in winters. [1]

(ii) Name the winds which are responsible for the above rainfall. [1]

(iii) How is this rainfall useful for the region? [1]

Question 8

(a) What is water scarcity? Mention any two factors responsible for it. [2]

(b) How does deforestation increase greenhouse effect in the atmosphere? [1]

(c) Give reason for the following:

(i) Red soil is less fertile. [1]

(ii) Black soil needs to be tilled after the first rain. [1]

(iii) Different regions in India have different kinds of soil. [1]

(d) (i) Name two factors which have influenced the climate of India apart from the Himalayas. [2]

(ii) How do the Himalayas help in causing rainfall? [1]

(iii) What is the name given to the climate of India? [1]

Question 9

(a) "Need of the hour is to conserve and manage our water resources." Mention any two reasons. [2]

(b) Name two states which are affected by 'Kal Baisakhi'. How is it useful for the states mentioned by you? [2]

(c) Give the meaning of the following:

(i) Soil texture [1]

(ii) Plugging of gullies [1]

(iii) Contour ploughing. [1]

(d) State three main characteristics of tropical deciduous forests. [3]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

History & Civics – H. C. G. – Paper 1

Time: Two hours **Maximum marks: 80**

Instructions:

- *Answers to this paper must be written on the answer script provided separately.*
- *All subsections of each question must be answered in the correct order.*
- *You are **NOT** allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.*
- *The time given at the head of this paper is the time allowed for writing the answers.*
- *Please do not write anything on your question paper except your name and roll number.*
- *The intended marks for questions or parts of questions are given in brackets [ ].*
- ***Do not copy the questions on your answer script but copy the correct question number.***
- ***Part I** is **compulsory**. Attempt **two** questions out of three from Section A and **three** questions out of five from Section B. A total of **five** questions will be attempted from **Part II**.*

PART I [30 marks]

*Attempt **all questions** from this Part.*

Question 1

(a) What is the required quorum to hold the meetings of the Lok Sabha? [1]

(b) Mention any one circumstance when the Parliament can make laws on State list subjects. [1]

(c) Name the bill which cannot originate in the Rajya Sabha. [1]

(d) Who elects the Speaker of the Lok Sabha? [1]

(e) Who can propose an amendment to the Constitution? [1]

(f) Who decides whether a bill is a money bill or not? [1]

(g) How many members are nominated by the President to the Lok Sabha? Which community do they represent? [1]

(h) Mention one provision of the Constitution which clearly establishes the supremacy of the Lok Sabha with regard to the Money bill. [1]

(i) What do we mean when we say that the Rajya Sabha is a permanent house? [1]

(j) Who is the ex-offico chairperson of the Rajya Sabha? [1]

Question 2

(a) Mention any two economic factors responsible for the growth of nationalism in India. [2]

(b) Name the nationalist who said, 'Swaraj is my birth right and I shall have it. State any one of his contribution to the national movement. [2]

(c) Mention any two contributions of Jyotiba Phule in preparing the ground for the National Movement. [2]

(d) Name the famous pact that demonstrated the unity between the Congress and the Muslim League. When was it signed? [2]

(e) Who presided over the first two sessions of the Indian National Congress? [2]

(f) Under what pretext was Avadh annexed to the Company's dominion? [2]

(g) When was Bengal partitioned? Name the Viceroy responsible for it. [2]

(h) What was the immediate cause of the First World War? [2]

(i) Name the two rival blocs formed in Europe before World War I and during World War I respectively. [2]

(j) How did the failure of the League of Nations lead to the rise of dictatorship? [2]

PART II [50 marks]

SECTION A

Attempt any two questions from this Section.

Question 3

With reference to the Union Parliament, answer the following questions:

(a) (i) What is the maximum strength of the Lok Sabha provided by the Constitution? [1]

(ii) How are the members to the Lok Sabha elected? [2]

(b) Mention any three of Rajya Sabha's exclusive powers in India's federal set up. [3]

(c) Explain:

(i) Question hour [2]

(ii) No-Confidence Motion. [2]

Question 4

With reference to the Union Parliament, answer the following:

(a) Relationship between the two houses in case of an ordinary bill. [3]

(b) How is the Lok Sabha more powerful than the Rajya Sabha? [3]

(c) Four functions of the Speaker. [4]

Question 5

The Rajya Sabha is the second chamber of the Indian Parliament and represents the interest of the States. In this context, explain the following:

(a) Its composition [3]

(b) Qualification for membership [3]

(c) Term of the House and two of its legislative powers. [4]

SECTION B

Attempt any three questions from this Section.

Question 6

Numerous causes gave rise to the First War of Independence and its consequences led to several changes in the British Government in India. In this context, answer the following:

(a) Explain any three political causes of the Revolt of 1857. [3]

(b) Briefly explain the immediate cause of the Great Revolt. [3]

(c) State any four changes in the administration of the British Government as a consequence of the Revolt. [4]

Question 7

With reference to the Indian National Congress and its two groups, answer the following:

(a) Who is known as the father of the Indian National Congress? What was the attitude of the British towards the formation of the Indian National Congress? [3]

(b) Who was known as India's unofficial ambassador? Mention any two of his contributions. [3]

(c) Highlight the objectives and the methods of struggle of each of the sections – Early and Assertive Nationalists. [4]

Question 8

With reference to the picture given below and the Divide and Rule policy of British, answer the following:

(a) Identify the personality and mention his role in the formation of the Muslim League. [3]

(b) What was the argument of British in favour of the Partition of Bengal and how did the nationalists interpret it? [3]

(c) Mention the objectives of the Muslim League. [4]

Question 9

The war that broke out in 1914 was different from the previous wars in many ways. In this context discuss the following points briefly:

(a) Militant Nationalism as a cause of the war. [3]

(b) How did the Treaty of Versailles seek to cripple Germany's military strength? [3]

(c) What was the territorial re-arrangement of Europe as a result of this war? [4]

Question 10

With reference to the rise in Nazism and Fascism, answer the following:

(a) How did the Treaty of Versailles lead to dictatorship in Germany and Italy? [3]

(b) How did the Anti-Semitic propaganda lead to the rise of Nazism in Germany? [3]

(c) What were the similarities between the ideologies of Fascism and Nazism? [4]

THE FIRST COMPARATIVE EXAMINATION 2018-19
Class X (ICSE)
HINDI

Time: Three hours **Maximum marks: 80**

Instructions:

- Answers to this paper must be written on the paper provided separately.
- You will **NOT** be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.
- ***The time given at the head of this paper is the time allowed for writing the answers.***
- This paper comprises of two sections: **Section A** and **Section B**.
- Attempt **all** the questions from **section A**. Attempt **any four** questions from section B, answering at least **one** question each from the sections (prose and poetry) you have studied and **any two** other questions.
- The intended marks for questions or parts of questions are given in brackets [ ].

SECTION A [40 marks]
Attempt **all** questions.

Question 1

Write a short composition in Hindi of approximately **250** words on any *one* of the following topics:– [15]

निम्नलिखित विषयों में से किसी एक पर हिन्दी में लगभग **250** शब्दों में संक्षिप्त लेख लिखिए:–

(i) आपने अपने जीवन के विषय में क्या सोचा है ? आप क्या बनना चाहेंगे ? अपने उद्देश्य की प्राप्ति के लिए आप कौन–कौन से प्रयास करेंगे ?

(ii) 'यदि दूरदर्शन न होता तो हमारे घर अधिक सुखद और शान्तिप्रिय होते।' इस कथन के पक्ष या विपक्ष में अपने विचार प्रस्तुत कीजिए।

(iii) कल्पना कीजिए यदि बिजली का आविष्कार न हुआ होता तो मानव जीवन कैसा होता ? लिखिए।

(iv) 'शठ सुधरहिं सत्संगति पाई' इस उक्ति को आधार बनाकर एक मौलिक कहानी लिखिए।

(v) नीचे दिए गए चित्र को ध्यान से देखिए और चित्र को आधार बनाकर कोई कहानी अथवा प्रस्ताव लिखिए, जिसका सीधा और स्पष्ट सम्बन्ध चित्र से होना चाहिए।

Question 2

Write a letter in **Hindi** in approximately **120** words on any *one* of the topics given below:– [7]

निम्नलिखित में से किसी एक विषय पर हिन्दी में लगभग 120 शब्दों में पत्र लिखिए:–

(i) आपकी छोटी बहन, जो छात्रावास में रहकर पढ़ रही है, परीक्षा में अनुत्तीर्ण हो गई है। उसे सांत्वना देते हुए तथा पुनः अध्ययन के लिए प्रेरित करते हुए एक पत्र लिखिए।

(ii) अपने नगर में बढ़ते अवैध निर्माण की समस्या की ओर प्रशासन का ध्यान आकृष्ट करने के लिए किसी समाचार पत्र के संपादक के नाम पत्र लिखिए।

Question 3

Read the passage given below and answer in **Hindi** the questions that follow, using your own words as far as possible:–

निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए तथा उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए। उत्तर यथासंभव आपके अपने शब्दों में होने चाहिए:–

मानव के जीवन में नारी का बहुत महत्त्वपूर्ण स्थान है, उसके बिना पुरुष अधूरा है। इसी कारण कहा गया है कि शक्ति के बिना शिव भी शव बन कर रह जाते हैं। इसी कारण शिव को अर्द्धनारीश्वर कहा जाता है। नारी के दो मुख्य रूप हैं। सामान्य रूप में वह अबला कहलाती है किन्तु आत्म–सम्मान को ठेस पहुँचने की दशा में चण्डी का रूप धारण कर लेती है। सहनशीलता में उसे धरती के समान माना गया है। अपने तप और सहनशीलता की शक्ति से वह देवताओं को भी विवश कर देती है। 'सावित्री' एक ऐसी ही भारतीय नारी थी।

मद्र देश के अश्वपति नाम के राजा की कन्या सावित्री का जन्म सावित्री देवी की उपासना से हुआ था। वह बहुत सुन्दर, विदुषी और मेधावी कन्या थी। उसके रूप और गुणों के अनुसार पति की खोज में असमर्थ माता–पिता ने सावित्री को अपने योग्य पति चुनने की आज्ञा दी। बूढ़े मंत्री के साथ राजकुमारी यात्रा पर चल दी। यात्रा के मध्य एक सघन वन से निकलते समय सावित्री की दृष्टि आकर्षक व्यक्तित्व वाले एक सुन्दर युवक पर पड़ी। मंत्री की सहायता से उसका परिचय जानकर वे सब वापस राजधानी आ गए। उस युवक का नाम सत्यवान था। वह शाल्व देश के राजा का पुत्र था। जंगल में ही पला–बढ़ा था। संयोगवश नारद जी भी वहाँ उपस्थित थे। उन्होंने बताया कि जो वर सावित्री ने चुना है उसकी आयु का केवल एक वर्ष ही शेष है। तब सावित्री ने अपने पिता जी से कहा कि उसने एक बार जिसका वरण कर लिया है वह उसी से विवाह करेगी। विधि–विधान से शादी सम्पन्न हो गयी।

विवाह के पश्चात् सावित्री की दिनचर्या पति, सास और ससुर की सेवा तक ही सीमित रह गयी। इसके साथ ही पति की दीर्घायु संबंधी प्रार्थना भी चलती रही। जिस दिन सत्यवान की मृत्यु निश्चित थी उसके तीन दिन पूर्व उसने निर्जल व्रत आरम्भ कर दिया किन्तु उसकी

दिनचर्या यथावत् रही। अन्तिम दिन सत्यवान के साथ लकड़ी लेने जंगल भी गयी। अचानक सत्यवान की तबीयत बिगड़ने लगी और नारद जी की भविष्यवाणी के अनुसार सत्यवान ने देह त्याग दी। यमराज सत्यवान के शरीर से प्राण निकाल कर पाश में बाँधकर दक्षिण दिशा की ओर चल दिए। सावित्री ने यमराज से कहा कि जहाँ उसके पति को ले जाया जाएगा वह भी वहीं जाएगी। यमराज ने सावित्री के पातिव्रत्य से प्रसन्न होकर उसे अनेक वर दिए। यहाँ तक कि उसे सौ यशस्वी पुत्रों की माँ बनने का आशीर्वाद भी दिया। अन्त में विवश होकर अपने दिए आशीर्वाद के कारण ही उन्हें सत्यवान को पुनः जीवित करना पड़ा। इस प्रकार अपनी दृढ़ता से सावित्री मृत्यु पर भी विजय प्राप्त करने में सफल हुई।

(i) नारी के सम्बन्ध में लेखक के क्या विचार हैं ? [2]

(ii) सावित्री कौन थी ? उसके गुणों का वर्णन कीजिए। [2]

(iii) माता–पिता ने सावित्री को कब और क्या आज्ञा दी ? [2]

(iv) सावित्री ने किसे और क्यों अपना पति चुना ? [2]

(v) सावित्री ने किस प्रकार अपने पति के जीवन की रक्षा की ? [2]

Question 4

Answer the following according to the instructions given:–

निम्नलिखित प्रश्नों के उत्तर निर्देशानुसार लिखिए:–

(i) निम्नलिखित मुहावरों में से किसी एक की सहायता से वाक्य बनाइए:– [1]
आँखों में धूल झोंकना, आटे–दाल का भाव मालूम होना

(ii) निम्नलिखित शब्दों में से किन्हीं दो शब्दों के विलोम शब्द लिखिए:– [1]
सरस, आज्ञा, अभिशाप, क्रय

(iii) निम्नलिखित में से किसी एक शब्द के दो पर्यायवाची शब्द लिखिए:– [1]
इच्छा, कपड़ा

(iv) निम्नलिखित शब्दों में से किन्हीं दो शब्दों को शुद्ध कीजिए:– [1]
कवित्री, अगामी, ऐसी, रूपया

(v) निम्नलिखित शब्दों की भाववाचक संज्ञा बनाइए:– [1]
उड़ना, शान्त

(vi) कोष्ठक में दिए गए निर्देशानुसार वाक्यों में परिवर्तन कीजिए:–

(a) बालिका कम्प्यूटर सीख रही है। (पूर्ण वर्तमान में बदलिये) [1]

(b) किसान खेत में हल चला रहा है। (कर्मवाच्य में बदलिए) [1]

(c) आज हमारे ग्रह में अतिथी आ रहे हैं। (वाक्य शुद्ध कीजिए) [1]

SECTION B [40 Marks]

Attempt four questions from this section.

You must answer at least one question from each of the Sections (Prose and Poetry) you have studied and any two other questions.

साहित्य सागर – संक्षिप्त कहानियाँ

Question 5

Read the extract given below and answer in **Hindi** the questions that follow:–
निम्नलिखित गद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

"यही तो मेरा और तुम्हारा मतभेद है। जीवन के लघुदीप को अनन्त की धारा में बहा देने का यह संकेत है। आह ! कितनी सुन्दर कल्पना !"

– संदेह –

लेखक – जयशंकर प्रसाद

(i) वक्ता व श्रोता का नाम लिखते हुए बताइये कि उन दोनों का क्या सम्बन्ध है ? [2]

(ii) इस अनुच्छेद से पहले वक्ता ने श्रोता से क्या प्रश्न पूछा था और श्रोता ने क्या उत्तर दिया था ? [2]

(iii) " जीवन के लघुदीप को अनन्त की धारा में बहा देने का यह संकेत है।" इस पंक्ति का भाव स्पष्ट कीजिए। [3]

(iv) 'संदेह' कहानी का उद्देश्य स्पष्ट कीजिए। [3]

Question 6

Read the extract given below and answer in Hindi the questions that follow:–
निम्नलिखित गद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

एक दिन उसने ऊपर आसमान में पतंग उड़ती देखी। न जाने क्या सोचकर उसका हृदय एकदम खिल उठा। विश्वेश्वर के पास जाकर बोला, "काका ! मुझे एक पतंग मँगा दो।"

– काकी –

लेखक – सियारामशरण गुप्त

(i) बालक कौन था ? वह उदास क्यों रहता था ? [2]

(ii) उड़ती हुई पतंग को देखकर उसका हृदय क्यों खिल उठा ? [2]

(iii) विश्वेश्वर कौन थे ? श्यामू ने उनसे क्या कहा और क्यों ? [3]

(iv) पतंग प्राप्त करने के लिए श्यामू ने क्या किया ? उसका क्या परिणाम निकला ? [3]

Question 7

Read the extract given below and answer in Hindi the questions that follow:–
निम्नलिखित गद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

"नहीं सेठ, आज आपने भारी यज्ञ किया है। महाराज ! उसे बेचोगे तो हम खरीद लेंगे, नही तो नहीं।"

– महायज्ञ का पुरस्कार –
लेखक – यशपाल जैन

(i) उपरोक्त कथन के वक्ता व श्रोता कौन हैं ? वक्ता को बिना देखे सब कुछ कैसे ज्ञात हो जाता था ? [2]

(ii) यज्ञ और महायज्ञ के अन्तर को उदाहरण सहित स्पष्ट कीजिए। [2]

(iii) सेठ जी ने रास्ते में कौन–सा महायज्ञ किया था ? [3]

(iv) कहानी के शीर्षक की सार्थकता स्पष्ट कीजिए। [3]

साहित्य सागर – पद्य भाग

Question 8

Read the extract given below and answer in Hindi the questions that follow:–
निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

राजा के दरबार में, जैये समया पाय।
साँई तहाँ न बैठिए, जहँ कोउ देय उठाय।।
जहँ कोउ देय–उठाय, बोल अनबोले रहिए।
हँसिये नहीं हहाय, बात पूछे ते कहिए।।

– कुण्डलियाँ –
कवि – गिरिधर कविराय

(i) राजा के दरबार का क्या अर्थ है ? वहाँ बैठने के सम्बन्ध में कवि ने क्या सुझाव दिया है और क्यों ? [2]

(ii) राजदरबार में बोलने तथा हँसने के सम्बन्ध में क्या नियम हैं ? [2]

(iii) दरबार में आत्मसंयम के विषय में कवि के क्या विचार हैं ? [3]

(iv) गिरिधर कविराय की कोई तीन काव्यगत विशेषताएँ लिखिए। [3]

Question 9

Read the extract given below and answer in Hindi the questions that follow:–

निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

ऊँचा खड़ा हिमालय, आकाश चूमता है,
नीचे चरण तले पड़, नित सिंधु झूमता है।
गंगा, यमुना, त्रिवेणी, नदियाँ लहर रही हैं,
जगमग छटा निराली, पग–पग पर छहर रही है।
वह पुण्यभूमि मेरी, वह स्वर्णभूमि मेरी।

– वह जन्मभूमि मेरी –
कवि – सोहनलाल द्विवेदी

(i) हिमालय किस दिशा में स्थित है ? उसकी ऊँचाई के सम्बन्ध में कवि ने क्या कहा है ? [2]

(ii) 'नित सिन्धु झूमता है' पंक्ति का भाव स्पष्ट कीजिए। [2]

(iii) 'त्रिवेणी' शब्द से कवि का क्या आशय है ? यह कहाँ स्थित है ? समझाकर लिखिए। [3]

(iv) भारत को स्वर्णभूमि क्यों कहा गया है ? समझाकर लिखिए। [3]

Question 10

Read the extract given below and answer in Hindi the questions that follow:–

निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

बूढ़े पीपल ने आगे बढ़कर जुहार की,
'बरस बाद सुधि लीन्हीं'
बोली अकुलाई लता ओट हो किवार की,
हरसाया ताल लाया पानी परात भर के।
मेघ आए बड़े बन–ठन के सँवर के।

– मेघ आए –
कवि – सर्वेश्वर दयाल सक्सेना

(i) मेघ की समानता किससे की गई है ? वह कहाँ और कितने समय बाद आया है ? [2]

(ii) लता किसकी प्रतीक है ? वह किवाड़ की ओट से अपनी बात क्यों कर रही है ? [2]

(iii) ताल किसका प्रतीक है ? वह क्या लेकर आया है ? उसकी प्रसन्नता का क्या कारण है ? [3]

(iv) पीपल को बूढ़ा क्यों कहा गया है ? ग्रामीण संस्कृति में उसका क्या महत्त्व है ? समझाकर लिखिए। [3]

Question 7

Read the extract given below and answer in Hindi the questions that follow:-

निम्नलिखित गद्यांश को पढिए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए-

नहीं सेठ, आज आपने भारी यज्ञ किया है। महाराज ! उसे बेचोगे तो हम खरीद लेंगे, नहीं तो नहीं।"

– महायज्ञ का पुरस्कार –

लेखक – यशपाल जैन

(i) उपरोक्त कथन के वक्ता व श्रोता कौन हैं ? वक्ता को बिना देखे सब कुछ कैसे ज्ञात हो जाता था ? [2]

(ii) यज्ञ और महायज्ञ के अन्तर को उदाहरण सहित स्पष्ट कीजिए। [2]

(iii) सेठ जी ने रास्ते में कौन–सा महायज्ञ किया था ? [3]

(iv) कहानी के शीर्षक की सार्थकता स्पष्ट कीजिए। [3]

साहित्य सागर – पद्य भाग

Question 8

Read the extract given below and answer in Hindi the questions that follow:-

निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:-

राजा के दरबार में, जैये समया पाय।
तौंई तहाँ न बैठिए, जहँ कोउ देय उठाय।।
जहँ कोउ देय–उठाय, बोल अनबोले रहिए।
हँसिये नहीं हहाय, बात पूछे ते कहिए।।

– कुण्डलियाँ –

कवि – गिरिधर कविराय

(i) राजा के दरबार का क्या अर्थ है ? वहाँ बैठने के सम्बन्ध में कवि ने क्या सुझाव दिया है और क्यों ? [2]

(ii) राजदरबार में बोलने तथा हँसने के सम्बन्ध में क्या नियम हैं ? [2]

(iii) दरबार में आत्मसंयम के विषय में कवि के क्या विचार हैं ? [3]

(iv) गिरिधर कविराय की कोई तीन काव्यगत विशेषताएँ लिखिए। [3]

Question 9

Read the extract given below and answer ...

निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

जाके प्रिय न राम बैदेही।
तजिए ताहि कोटि बैरी सम जद्पि परम सनेही।।
तज्यो पिता प्रह्लाद, विभीषण बन्धु, भरत महतारी।
बलि गुरु तज्यो, कंत ब्रज बनितहि, भए–मुद मंगलकारी।।
नाते नेह राम के मनियत, सुहृद, सुसेव्य जहाँ लौं।
अंजन कहा आँख जेहि फूटै, बहुतक कहौं कहाँ लौं।।

विनय के पद
कवि – तुलसीदास

(i) 'तजिए ताहि कोटि वैरी सम' से कवि क्या कहना चाहता है ? स्पष्ट कीजिए।
(ii) राम की भक्ति में किन–किन लोगों ने किनका त्याग किया है ?
(iii) 'अंजन कहा आँख जेहि फूटै, बहुतक कहौं कहाँ लौं।' पंक्ति की व्याख्या कीजिए।
(iv) कवि तुलसी के इष्टप्रभु का नाम बताइए। उनकी भाषा और भक्तिभावना का परिचय दीजिए।

Question 10

Read the extract given below and answer in Hindi the questions that follow:–

निम्नलिखित पद्यांश को पढ़िए और उसके नीचे लिखे प्रश्नों के उत्तर हिन्दी में लिखिए:–

काँकर पाथर जोरि कै, मसजिद लई बनाय।
ता चढ़ि मुल्ला बाँग दे, क्या बहरा हुआ खुदाय।।
पाहन पूजे हरि मिले, तो मैं पूजूँ पहार।
ताते ये चाकी भली, पीस खाय संसार।।

साखी
कवि – कबीरदास

(i) मनुष्य ने क्या–क्या जोड़कर क्या बनाया है, तथा किसलिये ? [2]
(ii) कवि ने चाकी को भली क्यों बताया है ? [2]
(iii) उपर्युक्त दोहों में कबीर के व्यक्तित्व का कौन–सा रूप दिखाई देता है ? इन दोहों में उन्होंने किन पर कटाक्ष किया है तथा क्यों ? [3]
(iv) कबीर का परिचय देते हुए, उनकी भक्ति भावना को समझाइए। [3]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

COMPUTER APPLICATIONS

Time: Two hours **Maximum marks: 100**

Instructions:

* *Answers to this paper must be written on the answer script provided separately.*
* *All subsections of each question are to be answered in the correct order.*
* *All working including rough work should be done on the same sheet as the rest of the answer.*
* *You will not be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.*
* *The time given at the head of the paper is the time allowed for writing the answers.*
* *Please do not write anything on the question paper except your name and roll number.*
* *The intended marks for questions or parts of questions are given in brackets [ ].*
* *Attempt **all** questions from **Section A** and any **four** questions from **Section B**.*

SECTION A [40 marks]

*Attempt **all** questions from this section.*

Question 1

(a) Why is Java known as a "Platform independent language"? [2]

(b) Define 'Implicit Type conversion' along with one suitable example. [2]

(c) Explain keyword 'final' as used in Java with the help of an example. [2]

(d) Rewrite the following set of if-else-if statements in terms of switch case:

```
if (code == 1)
    System.out.print("Accountant");
else if (code == 4)
    System.out.print("Grade IV");
else if (code == 3)
    System.out.print("Financial Advisor");
```

[2]

(e) Explain (type) operator with the help of an example. [2]

Question 2

(a) "Classes, in Java, are known as object factories", explain. [2]

(b) Name the concept of OOP in Java, that is implemented:

(i) using the concept of 'super class' and 'sub class'

(ii) for data hiding. [2]

(c) What is an 'Infinite loop'? Give an example. [2]

(d) Mention any two attributes required to define a class. [2]

(e) Write a Java statement to define an object 'school' of Scanner class. [2]

Question 3

Answer the following questions:

(a) Write the Escape sequence:

(i) which is used for Line Feed or New Line character

(ii) which is used to give Horizontal Tab. [2]

(b) Write an expression in Java for the following mathematical expression:

$$Val = \frac{|X^2 + Y^2 + 2XY|}{(X+Y)}$$ [2]

(c) What do you mean by compound statement? Explain with the help of an example. [2]

(d) Arrange the given data types in descending order of their size:

char, long, float, boolean [2]

(e) Rewrite the given code using Ternary operator:

```
if( a != b)
    p = a – b;
else
    p = b – a;
```

[2]

(f) Name the type of error (Syntax error, Run-time error, Logical error) for each of the following:

(i) division by a variable that contains value zero

(ii) missing semicolon. [2]

(g) Store the constant value of pi (i.e. 3.142) to a variable mentioning its appropriate data type. [2]

(h) Find the errors in the following code snippet and write the code after correcting the errors:

```
boolean true = a;
if(false)
    System.Out.println("Nothing in here")
else
    System.out.println(Correct this mistake);
```

[2]

(i) What will be the output of the following program snippet?

```
int x = 10, y = 5, z = 0;
if(x > y || x == ++y)
    z = ++x + --y;
System.out.println(z + " " + x + " " + y);
```

[2]

(j) What will be the output of the following statements if i = 10 initially?

(i) System.out.println(++i <= 10);

(ii) System.out.println(i++ <= 10); [2]

SECTION B [60 marks]

Attempt any four questions from this section.

*The answers in this Section should consist of the **Program in Blue J environment with Java.** Each program should be written using **Variable descriptions/Mnemonic Codes** such that the logic of the program is clearly depicted.*

*Flow-charts and Algorithms are **not required.***

Question 4

The 'Central Library' charges late fine from the students if the book is returned late as per the following:

Number of days late	Fine per day
up to 10 days	20 paise per day
11th to 15th day	25 paise per day
16th to 30th day	30 paise per day
more than 30 days	35 paise per day

Write a program in Java to input the number of days the book is returned late. Display the number of days the book is returned late. Calculate and print the amount to be paid as fine. [15]

Question 5

Write a program in Java to input a number to check and print whether it is a NEON number or not.

Note: A number is said to be NEON, if sum of all the digits of the square of the number is equal to the number itself. For example 9 is a NEON number (square of 9 = 81, sum of digits of square: 8 + 1 = 9). [15]

Question 6

Write a program in Java to input a number and print the factors of the number separated by comma and also print the sum and product of the factors of the number.

Example:

Input	:	6
Factors	:	1, 2, 3, 6
Sum of factors	:	12
Product of factors	:	36

[15]

Question 7

Write a program in Java to print the following pattern on the computer screen, using nested 'for' loop:

```
5 4 3 2 1
5 4 3 2
5 4 3
5 4
5
```

[15]

Question 8

Write a program in Java to calculate and print the sum of the following series after accepting the required value(s) from the user.

$$\frac{x}{2!} + \frac{x}{4!} + \frac{x}{6!} + \ldots + \frac{x}{20!}$$

Where ! represents the factorial of a number which is equal to the product of all the numbers from 1 up to that number.

For example $4! = 1 \times 2 \times 3 \times 4$
$= 24$ [15]

Question 9

Write a menu driven program in Java using switch case to calculate and print the following:

(1) to calculate and print the Area of a circle (πr^2)

(2) to calculate and print the Area of a rectangle (length × breadth)

Take necessary inputs from the user.

Where $\pi = 3.14$
r = radius of the circle [15]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

BIOLOGY

SCIENCE Paper - 3

Time: Two hours **Maximum marks: 80**

Instructions:

- *Answers to this paper must be written on the answer script provided separately.*
- *You will **NOT** be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.*
- *The time given at the head of this paper is the time allowed for writing the answers.*
- *The intended marks for questions or parts of questions are given in brackets [ ].*
- *Please do not write anything on your question paper except your name and roll number.*
- *All subsections of each question must be answered in the correct order.*
- *Do not copy the questions on your answer script. Copy the correct question number.*
- *This question paper consists of two sections. **Section I** contains **one** question with **eight** parts (a) to (h). All the parts are **compulsory**. **Section II** contains **six** questions numbered 2 to 7. You have to answer any **four** of these questions.*

SECTION I [40 marks]

*Attempt **all** questions from this Section.*

Question 1

(a) Name the following: [5]

(i) The cells that regulate the opening and closing of stomata

(ii) An instrument used to find the rate of transpiration

(iii) Unit of light absorbed by chlorophyll

(iv) A complex in which DNA winds around a core of eight histone molecules

(v) The openings found on woody stems.

(b) State whether the following statements are **'True'** or **'False'**. If **false, rewrite the correct form of the statement** by changing the **first** or the **last** word/s only. [5]

(i) Chromosomes other than the pair of sex chromosomes are called alleles.

(ii) Guttation in plants occurs maximum at mid day.

(iii) The immediate product of photosynthesis is glucose.

(iv) Oxygen released during photosynthesis comes from CO_2.

(v) Mitosis is the type of cell division occurring in the injured parts of the body.

(c) **Copy and complete the following paragraph** by filling in the blanks numbered (1) to (5) with appropriate words/terms: [5]

The ____(1)____ is a very large single molecule, and it is described as a ____(2)____. It is composed of two ____(3)____ strands, wound around each other in a double ____(4)____. Each strand is composed of repeating ____(5)____.

(d) Given below is an example of a particular structure and its special functional activity. On a similar pattern complete the following: [5]

Eg. **Ribosomes and Protein synthesis.**

(i) Centrosome and _____

(ii) Genes and _____

(iii) Stroma and _____

(iv) Phloem and _____

(v) Root hair and _____

(e) Choose the correct answer from each of the four options given below: [5]

(i) The first step in the process of photosynthesis is:

(A) Absorption of light by Chlorophyll
(B) Production of ATP
(C) Release of Oxygen
(D) Fixation of CO_2.

(ii) Maximum transpiration occurs through:

(A) Lenticel (B) Stomata
(C) Cuticle (D) Root surface.

(iii) Marine fish when thrown under tap water bursts due to:

(A) Endosmosis (B) Exosmosis
(C) Diffusion (D) Plasmolysis.

(iv) G_1, S and G_2 are phases present in:

(A) Prophase (B) Interphase
(C) Metaphase (D) Anaphase.

(v) After mitotic cell division a female human cell will have:

(A) 44 + XX Chromosome (B) 44 + XY Chromosome
(C) 22 + X Chromosome (D) 22 + Y Chromosome.

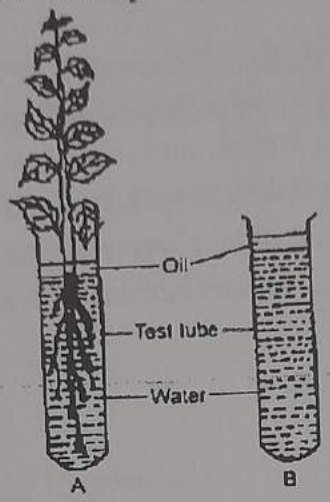
(f) Match the items in **Column A** with those which are most appropriate in **Column B. Rewrite the matching pairs:** [5]

	Column A	Column B
(1)	Xylem	Haploid
(2)	Karyokinesis	Loss of cell sap through a cut stem
(3)	Meiosis	Upward flow of water
(4)	Bleeding	Diploid
(5)	Mitosis	Division of nucleus
		Upward flow of food
		Division of cytoplasm

(g) Briefly explain the following terms: [5]

(i) Transpiration
(ii) Sex linked inheritance
(iii) Photophosphorylation
(iv) Root pressure
(v) Monohybrid cross.

(h) Study the diagram and answer the questions that follow: [5]



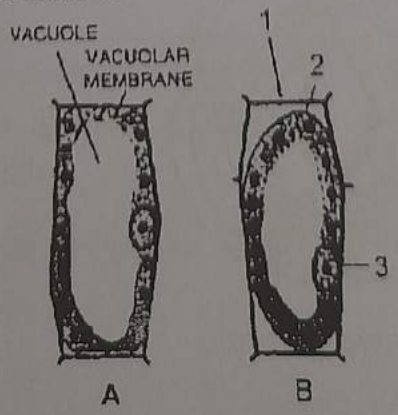
(i) Explain the physiological process being studied.
(ii) What will be observed in the two test tubes after a few hours?
(iii) Give a reason for your answer of the part (ii) above.
(iv) Why the surface of water is covered with oil in the test tubes A and B?
(v) State the purpose of setting up test tube B.

SECTION II [40 marks]

Attempt any four questions from this Section.

Question 2

(a) In the diagram given below, A shows a cell in the normal state and B shows the cell after leaving it in a certain solution for a few minutes. Study the same and answer the questions that follow:



(i) Is it a plant or an animal cell? [½]

(ii) Name the parts labelled 1 – 3. [1½]

(iii) Give the technical terms for the conditions in A and B. [1]

(iv) What was the nature of the solutions in which both the cells were kept? [1]

(v) How can the cell shown in B be brought back to its original condition? [1]

(b) Give reason: [5]

(i) Color blindness is more common in men than in women.

(ii) Root hair become flaccid when fertilizers are added to the moist soil around it.

(iii) Transpiration is the price that the plants pay for photosynthesis.

(iv) All life will come to an end if there were no green plants.

(v) Potato cubes when placed in water become firm and increase in size.

Question 3

(a) Expand the following abbreviations: [3]

(i) NADP

(ii) ATP

(iii) DNA

(b) State one point of difference between the following pair: [3]

(i) Turgor pressure and Wall pressure

(ii) Dominant allele and Recessive allele

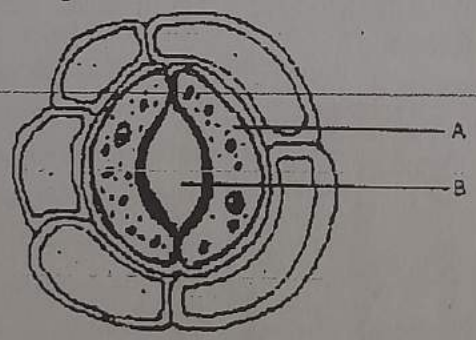
(iii) Active transport and Passive transport.

(c) Draw a neat labelled diagram of a duplicated chromosome. [2]

(d) What is destarching? How is it done? [2]

Question 4

(a) The diagram given below represents a structure found in a leaf. Study the same and answer the questions that follow: [5]



(i) Identify the diagram given above.

(ii) Label parts A and B.

(iii) Where is this structure likely to be found in a dorsiventral leaf?

(iv) What is the function of part labelled A?

(v) Which indicator is used to demonstrate unequal rate of transpiration in a leaf?

(b) Give the biological/technical term for each of the following: [5]

(i) Process of conversion of several glucose molecules to one molecule of starch

(ii) A pair of chromosomes carrying dissimilar alleles for a particular character

(iii) Point of attachment of the two sister chromatids

(iv) The biological process which is the starting point of a food chain

(v) Phenomenon by which the living or dead plant cells absorb water by surface attraction.

Question 5

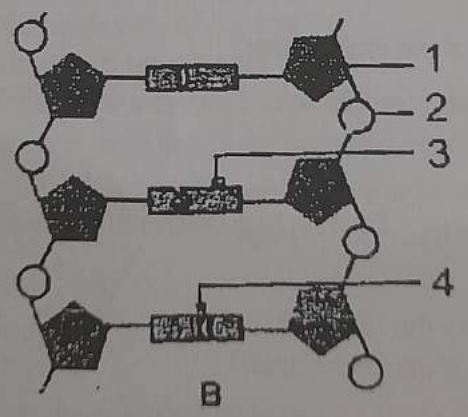
(a) State the location of following: [3]

(i) Cuticle

(ii) Chlorophyll

(iii) Gene responsible for Haemophilia.

(b) Given below is a schematic diagram of a portion of DNA. Study the same and answer the questions that follow:



(i) Label parts 1 – 4. [2]

(ii) How many nucleotides have been shown in each strand? [1]

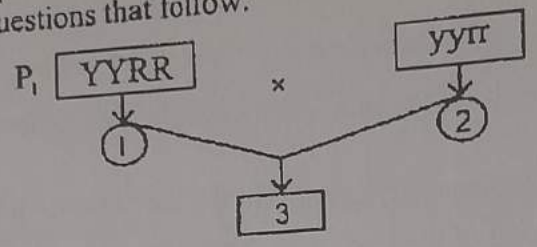
(iii) What happens in 'S' phase of cell cycle? [1]

(iv) Define a nucleotide. [1]

(c) Write the names of four nitrogenous bases in a DNA molecule. [2]

Question 6

(a) The flowchart given below shows Mendel's experiment on pea plant with yellow and round seeds (YYRR) and green and wrinkled seeds (yyrr). Study the same and answer the questions that follow:



(i) Label parts 1 – 3. [1½]

(ii) Give the phenotype of the offspring produced in the F_1 generation. [½]

(iii) Give the phenotypic ratio and various phenotypes obtained in F_2 generation. [2½]

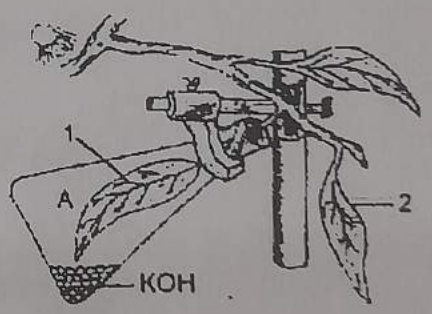
(iv) Name a blood disease caused due to gene mutation. [½]

(b) Draw a well labelled diagram (any four labellings) of metaphase in a plant cell. [3]

(c) How does cytokinesis differ in an animal cell from plant cell? [2]

Question 7

(a) The figure given below represents an experiment to demonstrate a particular aspect of photosynthesis. The letter 'A' represents a certain condition inside the flask. Study the same and answer the questions given alongside:



(i) What is the aim of the experiment? [1]

(ii) Identify the special condition A inside the flask. [1]

(iii) Name the process which is reverse of photosynthesis in terms of the end products. [½]

(iv) In what manner do the leaves 1 and 2 differ at the end of the starch test? [1]

(v) Write the overall chemical equation for the process. [1½]

(b) Mention one important difference between: [2]

(i) Osmosis and Diffusion

(ii) Light and Dark reaction.

(c) State the genotype and phenotype of the progeny between a colour blind man and a carrier woman. [3]

THE FIRST COMPARATIVE EXAMINATION 2018-19

CLASS X (ICSE)

PHYSICS

SCIENCE Paper - 1

Time: Two hours **Maximum marks: 80**

Instructions:

* *Answers to this paper must be written on the answer script provided separately.*
* *You will **NOT** be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper.*
* *The time given at the head of this paper is the time allowed for writing the answers.*
* *All subsections of each question must be answered in the correct order.*
* *Please **do not** write anything on the question paper except your name and roll number.*
* *The intended marks for questions or parts of questions are given in brackets [ ].*
* ***Section I** is compulsory. Attempt any **four** questions from **Section II**.*

SECTION I [40 marks]

*Attempt **all** questions from this section.*

Question 1

(a) State two factors affecting the turning effect of a force. [2]

(b) What is the position of centre of gravity of

(i) a triangular lamina (ii) a solid cylinder? [2]

(c) Is it possible to have an accelerated motion with a constant speed? Name such type of motion. [2]

(d) Name the force required for circular motion. State its direction. [2]

(e) State two conditions for a body, acted upon by several forces, to be in equilibrium. [2]

Question 2

(a) A body is acted upon by a force. State two conditions when the work done is zero. [2]

(b) Which physical quantity is measured in electron volt? How is it related to the SI unit of that quantity? [2]

(c) State the energy changes in the following devices while in use:

(i) microphone (ii) electric motor. [2]

(d) A truck weighing 1000 kgf changes its speed from 36 km h^{-1} to 72 km h^{-1} in 2 minutes. Calculate:

(i) the work done by the engine (ii) its power. ($g = 10\ m\ s^{-2}$) [2]

(e) Calculate the decrease in the kinetic energy of a moving body if its velocity reduces to $\left(\frac{1}{3}\right)^{rd}$ of initial velocity. [2]

Question 3

(a) The danger signal is red. Explain the reason. [2]

(b) Two waves A and B have wavelengths 0.01 Å and 9000 Å respectively.

(i) Name the two waves. [2]

(ii) Compare the speeds of these waves when they travel in vacuum. [2]

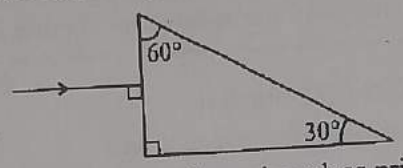
(c) Define the term dispersion of light and state its cause. [2]

(d) State two conditions necessary for the total internal reflection to occur. [2]

(e) Define critical angle. How is the critical angle related to the refractive index of a medium? [2]

Question 4

(a) Copy and complete the following ray diagram: (Given that $i_c = 42°$) [2]



(b) A monochromatic light ray passes through a glass prism surrounded by air and suffers minimum deviation. Draw a well-labelled ray diagram representing the same. [2]

(c) A convex lens forms a real and inverted image of an object kept in front of it. If upper half of the lens is painted black, what will be the change:

(i) In position of the image [2]

(ii) In brightness of the image?

(d) A water pond appears to be 2.7 m deep. If the refractive index of water is $\frac{4}{3}$, find the actual depth of the pond. [2]

(e) What is meant by the following statements?

(i) The critical angle for diamond is 24°. [2]

(ii) The refractive index of glass is 1.5.

SECTION II [40 marks]

Attempt any four questions from this section.

Question 5

(a) A uniform metre rule is balanced at the 70.0 cm mark when a mass of 0.05 kg is hung from the 94.0 cm mark.

(i) Draw a diagram of the arrangement. [4]

(ii) Find the mass of the metre rule.

(b) A boy weighing 350 N runs up a flight of 30 steps each 20 cm high in a minute. Calculate:

(i) the work done (ii) the power spent. [3]

(d) With reference to the motion of electrons around the nucleus in an atom, answer the following:

(i) What type of motion is executed by the electrons?

(ii) Name the force required for the motion of electrons.

(iii) How do the electrons get the required force? [3]

Question 6

(a) (i) Two bodies A and B having masses M_A and M_B respectively have equal momentum. If $M_A > M_B$ then prove that kinetic energy of A < kinetic energy of B.

(ii) Name the process used for producing electricity from the nuclear energy. [4]

(b) A body falls freely under gravity from rest. Name the kind of energy it will possess:

(i) at the point from where it falls → Potential energy

(ii) while falling → Kinetic and Potential energy

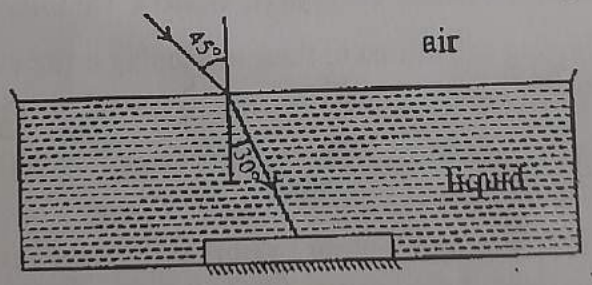
(iii) on reaching the ground. → Kinetic energy [3]

(c) How fast should a man weighing 600 N run so that his kinetic energy is 750 J? ($g = 10\ m\ s^{-2}$) [3]

Question 7

(a) A convex lens has a focal length of 20 cm. Calculate at what distance from the lens should an object be placed so that it forms an image at a distance of 40 cm on the other side of the lens. State the nature of the image formed. [4]

(b) A ray of monochromatic light enters a liquid from air as shown in the diagram below:



(i) Copy the diagram and show in the diagram the path of the ray of light after it strikes the mirror and re-enters the medium of air.

(ii) Mark in your diagram the two angles on the surface of separation when the ray of light moves out from the liquid to air. [3]

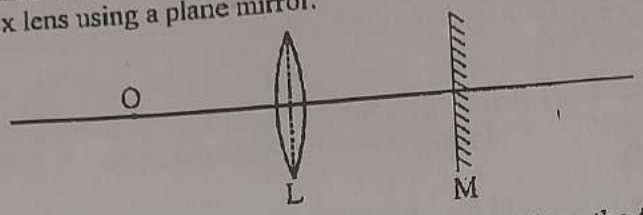
(c) State three factors on which the angle of deviation depends. [3]

Question 8

(a) A virtual and magnified image is formed by a lens. Name the lens and show this type of image formation with the help of a ray diagram. [4]

(b) Where will the image be formed if an object is kept in front of a concave lens at a distance equal to its focal length? Draw a ray diagram to illustrate your answer. [3]

(c) The diagram shows the experimental set up for the determination of focal length of a convex lens using a plane mirror:

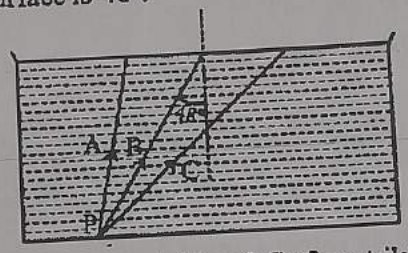


(i) Draw two rays from the point O of the object to show the formation of image I at O itself. [3]

(ii) What is the size of image I?

Question 9

(a) Following figure shows a point source P inside a water container. The critical angle for water air surface is 48°.



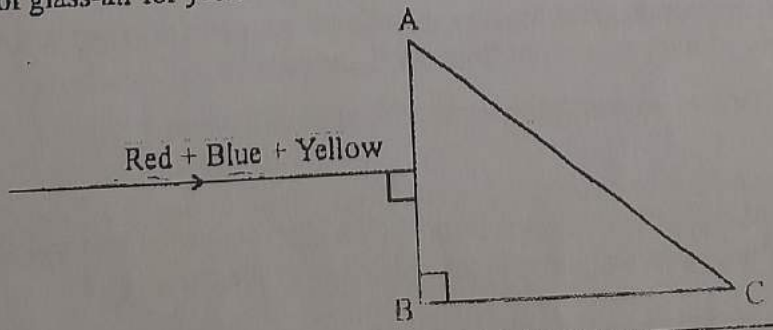
(i) Complete the path of rays A, B and C after striking water surface.

(ii) Name the phenomenon which the rays A, B and C exhibit. refraction? [4]

(b) (i) Arrange the following radiations in their increasing order of wavelength:
x-rays, infrared rays, radio waves, micro waves GXUVIMR

(ii) Define scattering of light. How does the intensity of scattered light depend on the wavelength of incident light? [3]

(c) A beam consisting of red, blue and yellow colours is incident normally on the face AB of an isosceles right angled prism ABC as shown in the figure. Complete the diagram to show the refracted and emergent rays. The critical angle of glass-air for yellow colour is 45°. [3]



Question 10

(a) State the principle of conservation of mechanical energy and prove it for a freely falling body under gravity. [4]

(b) A spring is kept compressed by a toy cart of mass 150 g. On releasing the cart, it moves with a speed of 0.2 m s^{-1}. Calculate the potential energy (elastic) of the spring. [3]

(c) (i) State the factor on which the position of centre of gravity of a body depends. Where will it lie for a freely suspended body?

(ii) Give an example when work done by a force is negative. [3]

THE FIRST COMPARATIVE EXAMINATION 2018-19

Class X (ICSE)

CHEMISTRY

SCIENCE Paper – 2

Time: Two hours **Maximum marks: 80**

- *Answers to this paper must be written on the answer script provided separately.*
- *You will **NOT** be allowed to write during the first 15 minutes.*
- *This time is to be spent in reading the question paper.*
- *The intended marks for questions or parts of questions are given in brackets [ ].*
- *The time given at the head of this paper is the time allowed for writing the answers.*
- *Please do **not** write anything on your question paper except your name and roll number.*
- *The paper is divided into two sections. **Section I** [40 marks] and **Section II** [40 marks]. Section I is **compulsory**. Attempt any **four** questions from Section II.*
- *Give balanced equations wherever required.*

SECTION I [40 marks]

*Attempt **all** questions from this Section.*

Question 1

(a) Fill in the blanks from the choices given in the brackets:

(i) The energy required to remove an electron from a neutral isolated gaseous atom and convert it into a positively charged gaseous ion is called _____ (Electron affinity, Ionisation potential, Electronegativity). [1]

(ii) The compound that does not have lone pair of electrons is _____ (water, ammonia, carbon tetrachloride). [1]

(iii) When a metallic oxide is dissolved in water, the solution formed has high concentration of _____ ions (H^+, H_3O^+, OH^-). [1]

(iv) Potassium sulphite on reacting with dilute hydrochloric acid releases _____ gas (Cl_2, SO_2, H_2S). [1]

(v) The basicity of acetic acid is _____ (4, 1, 3). [1]

(b) State one relevant observation for each of the following reactions:

(i) Action of dilute hydrochloric acid on iron (II) sulphide [1]

(ii) Action of sodium hydroxide solution on ferrous sulphate solution [1]

(iii) A glass rod dipped in ammonia solution brought near vapours of hydrochloric acid [1]

(iv) Dilute hydrochloric acid reacts with lead nitrate [1]

(v) Barium chloride solution is added to sodium carbonate. [1]

(c) Some word / words are missing in the statements given below. You are required to rewrite the statement in the correct form using the appropriate word / words:

(i) Sodium chloride reacts with sulphuric acid below 200°C, to give sodium bisulphate and hydrogen chloride gas. [1]

(ii) When sodium hydroxide is added to zinc sulphate, a gelatinous white precipitate is formed which is soluble in excess and changes into solution. [1]

(iii) Hydrogen chloride gas is collected by displacement of air. [1]

(d) Draw the electron dot structure of Methane. State the bonding present in it. [C = 6, H = 1] [1+1]

(e) (i) Calculate the percentage of sodium in sodium aluminium fluoride ($Na_3Al\ F_6$) correct to the nearest whole number (F=19, Na=23, Al=27). [2]

(ii) 100 cm^3 of methane is burnt in 250 cm^3 of oxygen. Calculate the composition of the resulting mixture. [2]

(iii) Write the empirical formula of CH_3COOH. [1]

(f) Give reasons for each of the following statements:

(i) Carbon tetrachloride, though a liquid, is a non-conductor of electricity. [1]

(ii) Ionization potential of elements increases across a period. [1]

(iii) HCl gas cannot be dried over quicklime. [1]

(iv) Acetic acid does not form an acid salt but forms a normal salt. [1]

(v) Covalent compounds have low melting and boiling points. [1]

(g) Give a balanced chemical equation for each of the following reactions:

(i) Ammonium hydroxide is added to Copper sulphate. [1]

(ii) Dilute Hydrochloric acid is added to Iron (II) sulphide. [1]

(h) (i) A metal M forms a volatile chloride containing 65.5% chlorine. If the density of chloride relative to hydrogen (i.e. V.D) is 162.5, find the molecular formula of chloride. [M=56, Cl=35.5] [3]

(ii) Draw a well-labelled diagram to show that HCl gas is heavier than air. [2]

(i) How can the following conversions be carried out:

(i) Lead chloride from Lead nitrate [1]

(ii) Lead sulphate from Lead carbonate. [2]

(j) Choose the most appropriate answer for each of the following:

(i) Which of the following is generally true? [1]

(A) Atomic size increases across a period.

(B) Ionisation potential decreases down a group.

(C) Electron affinity increases on going down a group.

(D) Electronegativity increases on going down a group.

(ii) The salt/s formed when a dibasic acid ionizes in aqueous solution is: [1]

(A) Acidic salt (B) Normal salt

(C) Mixed salt (D) Both (A) and (B).

(iii) Which of the following chloride is soluble in hot water? [1]

(A) $PbCl_2$ (B) AgCl

(C) HgCl (D) None of the above.

(iv) The type of bonding present in ammonia molecule is: [1]

(A) Coordinate Covalent (B) Electrovalent

(C) Covalent (D) None of the above.

(v) The drying agent used to dry HCl gas is: [1]

(A) Conc.H_2SO_4 (B) $CaCl_2$

(C) P_2O_5 (D) $CuSO_4$.

SECTION II [40 marks]

Attempt any four questions from this Section.

Question 2

(a) M is a metal above hydrogen in the activity series and its oxide has the formula M_2O. This oxide when dissolved in water forms corresponding hydroxide which is a good conductor of electricity. With reference to the above statement, answer the following:

(i) What kind of bonding exists between M and O? [1]

(ii) How many valence electrons are present in M? [1]

(iii) Name the group to which M belongs. [1]

(iv) Write down the formula for the sulphate of M. [1]

(b) Draw the electron dot structure to show the formation of hydronium ion. State the bonding present in it. [2+1]

(c) Differentiate between the following pairs of compounds using the reagent given in the brackets:

(i) NaCl and Na_2CO_3 **[By using dilute HCl]** [1]

(ii) $ZnCO_3$ and $ZnCl_2$ **[By using $BaCl_2$ and dilute HCl]** [1]

(iii) $Ca(NO_3)_2$ and $Pb(NO_3)_2$ **[By using NH_4OH]** [1]

Question 3

(a) Calculate the percentage of oxygen in ammonium nitrate NH_4NO_3 (O = 16, N = 14, H = 1). [2]

(b) A solution of HCl in water is added to the following compounds: [2+2]

(i) Calcium carbonate (ii) Magnesium ribbon

Name the gas evolved and also give the test for the gases in each case.

(c) Choose from the list given below the most appropriate description of oxides (i), (ii), (iii) and (iv). Each answer may be used only once.
[SO_2, SiO_2, Al_2O_3, MgO, CaO, Na_2O]

(i) A basic oxide [1]

(ii) An oxide which dissolves in water to form an acid [1]

(iii) An amphoteric oxide [1]

(iv) Covalent oxide of metalloids. [1]

Question 4

(a) (i) State Gay Lussac's Law. [1]

(ii) Calculate the volume of oxygen required to burn completely a mixture of 22.4 dm^3 of CH_4 and 11.2 dm^3 of H_2. [all volumes are measured at stp] [1 dm^3 = 1 litre] [3]

(b)

Group number	IA 1	IIA 2	IIIA 13	IVA 14	VA 15	VIA 16	VIIA 17	0 18
	Li		D			O	J	Ne
	A	Mg	E	Si		H	K	
	B	C		F	G			L

Some elements are given in the above table in their own symbol and positions in the periodic table, while others (shaded) are shown with a letter. With reference to the table:

(i) Which is the most electronegative element? [1]

(ii) How many valence electrons are present in G? [1]

(iii) Write the formula for the compound formed between B and H. [1]

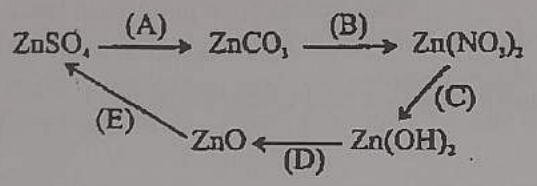
(iv) In the compound formed between F and J, what type of bond will be formed? [1]

(v) Draw the electron dot structure for the compound formed between C and K. [1]

(c) Define the term Electron affinity. [1]

Question 5

(a) How can the following conversions A to E be carried out? [5]

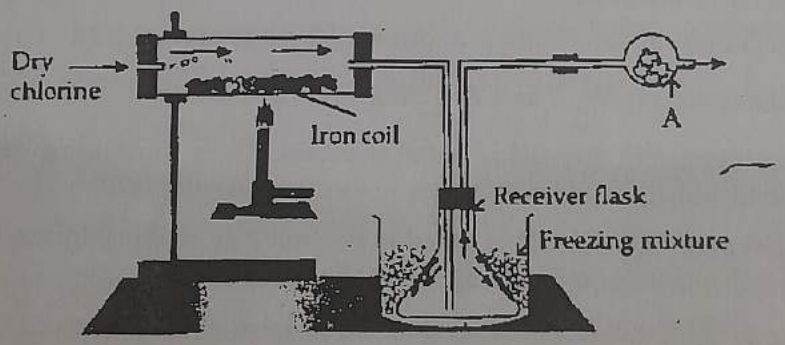


(b) Arrange the following elements as per the instruction given in the brackets:

(i)	Al, Si, Na, S, Cl	**(Increasing order of metallic nature)**	[1]
(ii)	Mg, Cl, Na, S, Si	**(Decreasing order of atomic size)**	[1]
(iii)	Na, K, Cl, S, Si	**(Increasing order of ionization potential)**	[1]
(iv)	Cl, F, Br, I	**(Increasing order of electron affinity)**	[1]
(v)	I, Cl, F, Br	**(Increasing order of electronegativity)**	[1]

Question 6

(a) The diagram given below represents the preparation of a soluble salt. Study the same and answer the questions that follow:



(i) Identify the salt. [1]

(ii) Give balanced chemical equation for the preparation of the salt named in (i) above. [1]

(iii) Name the method of preparation used to prepare this salt. [1]

(iv) Name the substance 'A'. [1]

(v) State the purpose of the substance A. [1]

(b) Study the table given below and answer the questions that follow:

Element	W	X	Y	Z
Electronic Configuration	2, 8, 1	2, 8, 7	2, 5	1

(i) State the type of bonding between: [1]
(1) W and X [1]
(2) Y and Z.

(ii) Write the formula of the compound formed between: [1]
(1) X and Z [1]
(2) W and X. [1]

(c) What do you understand by the lone pair of electrons?

Question 7

(a) The percentage composition of a compound as determined by analysis is 26.59% Carbon, 2.22% Hydrogen and 71.19 % Oxygen. If the vapour density of the compound is 45, calculate its molecular formula. [C=12, H=1, O=16] [3]

(b) Differentiate between each of the following pair of compounds by giving a suitable chemical test:
(i) Copper oxide and Manganese dioxide [1]
(ii) Oxygen and Hydrogen. [1]

(c) Name the following:
(i) A bond formed by the shared pair of electrons with both electrons coming from the same atom [1]
(ii) An acid that gives a white precipitate with silver nitrate. [1]

(d) Identify the cations in W, X and Z in each of the following:
(i) To solution 'W', NH_4OH is added in excess. Dirty white precipitate is formed which dissolves in excess to form a clear solution. [1]
(ii) To solution 'X', NH_4OH is added in excess. Pale blue precipitate is formed which changes to inky blue solution in excess. [1]
(iii) To salt 'Z', sodium hydroxide is added and the mixture is heated. Pungent smelling gas is evolved which turns moist red litmus blue. [1]