

Subject : English 1

Marking Scheme of English 1

**ANSWER AND MARKING SCHEME  
SELF ASSESSMENT TEST(2020-21)  
ENGLISH LANGUAGE CLASS IX**

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**Question 1. Composition [20]**

**Heading : A proper and suitable Heading with suggestive phrases 2**

**Structure of the Essay: 4**

- Different Paragraphs
- Uniformity in the size of the paragraphs
- Introduction
- Conclusion

**Understanding of the topic: 4**

- Good Knowledge on the topic
- Sufficient ideas on the topic

**Expression and Elaboration of Ideas: 4**

- Ability to Express Ideas well
- Able to elaborate at ease on the chosen topic
- Signs of awareness/ good arguments

**Grammar: 4**

- Tenses
- Brevity and Conciseness in Expression
- Good Vocabulary
- Spelling and Punctuation

- Overall Presentation:** **2**
- Good Handwriting
  - Clean Presentation

**N.B. Story should be original and self composed.**

## **Question 2. LETTER WRITING**

- Format : All steps and Paragraphs well organised 2
- Topic well discussed 2
- Grammar: Tenses, Spelling, Punctuation, Vocabulary 4
- Overall Presentation: Neatness and Handwriting 2

## **Q3 COMPREHENSION**

- a. Word meanings (4)
- i. the beginning
  - ii. according to customs
  - iii. enjoying the thought
  - iv. much desired
- b. After being blacklisted in Cuba the author's father could not find any suitable employmentso the family had to leave Cuba. (2)
- c. The father secretly joined a band of Cuban exiles being trained by the US army for the invasion of the bay of Pigs as it came to be called. (2)
- d. The author was different from the other children in the class since he was Hispanic, coloured and knew no English. he was taunted by the white children (2)
- e. Helped him to learn English, taught him about fairness in life and gave himthe required confidence to prepare for future life. (2)
- f. **Precis** **(8)**

**[Include the following ideas from the passage for the connected passage in GRIDS]**

- The author faced all teasing bravely
- He patiently bore racial discrimination in American school
- He learned English and the other required skills
- Mrs. Collins motivated her and taught her about fairness
- He progressed to compete with the others and was given recognition

## Question 4

**a. Fill in the blanks with appropriate words: (4)**

- was going
- was
- was wondering
- to do
- came
- going
- was
- ran.

**b. prepositions (4)**

- of
- over
- into
- on
- with
- over
- of
- with

**c. TRANSFORMATION OF SENTENCES (10)**

- Beyond that I do not know anything about the case.
- Songs are not sung by him these days due to bad throat.

- iii. He told his friends about his decision regarding his resignation.
- iv. You remembered to sign the cheque, didn't you?
- v. Not only did the aging actor make a comeback but he also managed to clear his debts.
  
- vi. His father asked him with annoyance if(whether) he thought he knew morethan his teacher.
  
- vii. My departure to Agra this month is possible, if I sell my new car now.
  
- viii. Despite not studying enough, Mita stands first.
  
- ix. Rita wished she had applied for the job
- x. Intellectual dishonesty should not be tolerated.

**c. SYNTHESIS OF SENTENCES:**

**(7)**

- i. Ramesh broke his arm after a fall down the slope/Falling down the slope.../  
Ramesh broke his arm as he fell down the slope
- ii. I have to mow the overgrown lawn this weekend.
- iii. This hastily thought out plan won't work/  
This plan which is hastily thought out won't work.
- iv. In spite of being strong, he refuses to work hard./  
Despite being strong, he refuses to work hard.
- v. She begins to sing whenever she likes.
- vi. Fearing the wild beasts the villagers do not go out at night./  
The villagers do not go out at night for the fear of the wild beasts.
- vii. He devoted himself to public affairs continuously for ten yearswithout taking a holiday.

Devoting himself to public affairs for ten continuous years, he never took a holiday.

**Subject :- English 2**

**Marking Scheme of English 2**

# **Answers and Marking Scheme Self Assessment, October 2020**

**IX A B CD: ENGLISH PAPER 2**

**LITERATURE IN ENGLISH**

**(Prescribed Textbooks)**

**(Maximum Marks: 80)**

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Attempt five questions in all

You must attempt one question from each of the Sections A, B and C

The intended marks for questions or parts of questions are given  
in the brackets []

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## **SECTION A - DRAMA**

### **The Merchant of Venice : Shakespeare**

#### **Question 1.**

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

‘Let me play the fool: with mirth and laughter  
Let old wrinkles come...’

- a. Who is the speaker of the above lines and why does he say these lines? [1+2]

b.

- **Gratiano**

[1]

- **Because Antonio said to him**

**' I hold the world but as the world, Gratiano**

**A stage where every man must play a part**

**And mine a sad one.**

[2]

- c. Which questions does the speaker raise just after the above lines? [3]
- **Why should a man, whose blood is warm within sit like his Grandsire cut in alabaster?**
  - **Sleep when he wakes?**
  - **Creep into the jaundice by being peevish?** [3]
- d. How does the speaker show his respect to the person spoken to having said the above lines? Which advice does the speaker offer to him thereafter? [1+2]
- **I love thee and it is my love that speaks.** [1]
  - **Fish not with this melancholy bait  
For this foolgudgeon** [2]
- e. In which terms had the speaker of the above lines described the condition of the person spoken to a while ago? [3]
- **You look not well, Signior Antonio  
You have too much respect upon the world  
They lose it that do buy it with much care  
You are marvelously changed.** [3]
- f. Mention how the speaker describes 'a sort of men' after the above lines? [4]
- **There are a sort of men, whose visages do cream  
And mantle like a standing pond** [1]
  - And do a willful stillness entertain  
With purpose to be dressed in an opinion** [1]
  - Of wisdom, gravity, profound conceit** [1]
  - As who should say, 'I am Sir Oracle'.** [1]

## Question 2.

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

Antonio: But lend it rather to thine enemy, who, if he break,  
Thou mayst with better face the exact the penalty.

- a. Which lending has Antonio referred to in the above lines? What has he said before the above lines to reach this proposition? [1+2]
- **Lending of three thousand ducats** [1]
  - **If thou wilt lend this money, lend it  
Not as to thy friends - for when did this  
Friendship take a breed for barren metal  
Of his friend.** [2]
- b. How does Shylock respond to these words of Antonio here? [3]
- **Look you, how you storm!** [1]
  - **I would be friends with you and have your love  
Forget the shames that you have stained me with**[1]
  - **Supply your present wants, and take no  
Of usance for my money, and you will not  
Hear me: This is kind I offer.** [1]

c. Which 'kindness' is presented by Shylock a while later and how is the 'penalty' mentioned therein? [4]

- **This kindness will I show: Come with me to anotary  
Seal me there your single bond, in a merrysport** [1]

**If you repay me not on such a day, in such a place  
Such sums as are expressed in the condition** [1]

**Penalty:**

- **Let the forfeit be nominated for an equal pound of  
Your flesh, to be cut off and taken in what part  
Of your body pleaseth me.** [2]

d. How does Bassanio react to the same 'kindness' and in what terms does Antonio calm the mind of Bassanio? [1+2]

- **You shall not seal to such a bond forme  
I'll rather dwell in my necessity.** [1]

**Fear not man, I'll not forfeit it  
Within these two months, that's a month before  
This bond expires, I do expect return of thrice  
Three times the value of this bond.** [2]

e. In what terms does Antonio hail this 'kindness' of the Jew, Shylock? How is he opposed by Bassanio in his hailing? Why does Antonio disregard the 'dismay' of Bassanio at this stage? [1+1+1]

- **The Hebrew will turn Christian, he grows kind.** [1]

- **I like not fair terms and avillain's mind.** [1]

- **He thinks: My ships come home a month before the day.** [1]

**SECTION B : POETRY**  
**A Collection of Poems**

**Question 3.**

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

‘Six humans trapped by happenstance’

- The Cold Within
- James Patrick Kinney

- a. What do you mean by ‘happenstance’? Where were the six humans trapped?  
What did they possess then? [3]
- **By chance.** [1]
  - **In bleak and bitter cold** [1]
  - **A stick of wood.** [1]
- b. Who was the first one and why did the person hold back from keeping the fire burning? [3]
- **A Whitewoman** [1]
  - **She noticed one among the six was a black man**  
**She hated black men**  
**She promoted racial/colour discrimination** [2]

c. How did the rich one and the poor man respond to the need of keeping the fire burning? [2+2]

- **Rich one just sat back and thought  
Of the wealth he had in store and  
How to keep what he had earned  
From the lazy shiftless poor.** [2]

- **The poor one gave his coat a hitch  
And thought why he should put his  
Log of wood to warm the idler rich.** [2]

d. Describe the type of man last man was? [2]

- **He did nothing except for gain  
And gave only to those who gave  
This is how he played the game.** [1]

- **He was a selfish man and an opportunist  
He only saw to his own benefits.** [1]

e. What was the proof of their 'human sin'? Explain in your own words? [2]

- **They held back logs in their still hands** [1]

- **They were the cause of their own death.  
They were selfish human beings** [1]

f. Which universal problems of human world have been discussed in the poem?  
Comment how poet would like to get rid of them? [2]

- **Racial/Colour Discrimination/Class conflicts between  
The rich and the poor/** [1]

- **Purely by cooperation and collaboration  
Kindness/Love/Share and Care** [1]

#### Question 4.

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

‘Bangle sellers are we who bear our shining load to the temple fair’

- The Bangle Sellers
- Sarojini Naidu

a. In what terms has the poet described the bangles in the first stanza? [3]

- **Shining loads** [1]
- **Delicate, bright rainbow-tinted circles of light** [1]
- **Lustrous tokens of radiant lives** [1]

b. Explain in your own words the meaning of the lines:

‘Lustrous tokens of radiant lives,

For happy daughters and happy wives’

[2]

- **Shining symbols/signs of bright and happy life**  
**The daughters and wives by wearing these**  
**Would be happy and bright as ever** [2]

c. Which bangles are ‘meet’ for a maiden’s wrist?

How have these bangles been mentioned by the poet for the maiden? [3]

- **Bangles of Silver and Blue colours.** [1]
- **They are like mountain mist**  
**Some are flushed like the buds that dream**  
**On the tranquil brow of a woodland stream** [1]
- **Some are aglow with the bloom that cleaves**  
**To the limpid glory of newborn leaves.** [1]

d. Describe the bangles worn by a bride on her bridal morn.  
Why are 'bridal laughter and bridal tear' mentioned for her by the poet? [3]

- **They are like fields of sunlit corn  
Suitable for a bride on her bridal morn** [1]

**Some are like the flame of her marriage fire  
Or rich with the hue of her heart's desire** [1]

- **The colour of the bangles are tinkling and  
Luminous as is seen in bride being happy and  
Tender and clear as is seen in bride's tears.** [1]

e. In which colours and their meanings has the poet described the life of a mother or an elderly woman? Explain. [3]

- **The Purple and gold flecked grey  
These are symbolic of ageing and graying** [1]

**They are no more young and bright because  
They have been busy in cherishing and cradling  
their children.** [1]

**They are busy with household  
duties in great pride like loving their husbands  
and worshipping their Gods.** [1]

f. Explain the following in the light of the figures of speech implied in them: [2]

1. **New born leaves - Metaphor**  
**The colours of bangles are like the limpid  
Glory [clear and honest] of newborn leaves** [1]

2. **Like her bridal laughter - Simile**  
**Bangles look happy and bright as the happiness of the bride.** [1]

## SECTION C: PROSE

### A Collection of Short Stories

#### Question 5.

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

‘I was taking care of animals’, he explained.

- Old Man at the Bridge
- Ernest Hemingway

- a. Which animals have been hinted here by the old man? How does the narrator respond to the above information? [3]
- **Two Goats, a cat and four pair of pigeons.**  
**[All animals mentioned- 2 marks or else - 1 mark only]**
  - **He did not quite understand and just said ‘Oh’.** [1]
- b. Where was the old man coming from? Where were the trucks going to? What did the old man say about this place? [3]
- **San Carlos.** [1]
  - **Barcelona** [1]
  - **I know no one in that direction.** [1]
- c. Describe the appearance of the old man as he sat by the side of the road. Describe the scene as witnessed by him and the narrator then? [4]
- **He wore steel rimmed spectacles**
  - **Black dusty clothes**
  - **He had gray dusty face.**
  - **He looked too tired to go anywhere.** [4]

d. Why wasn't the old man moving any farther? Which instruction, later in the story, did the narrator give to him regarding going farther? How did the old man respond then? [3]

- **He was too tired to move any farther.** [1]

- **If you are rested, Get up and try to walk.** [1]

- **'Thank you' he said and got up to his feet, swayed  
Side to side and then sat down backwards in the dust** [1]

e. 'I am without politics'. In the light of this statement from the old man, briefly describe the message or theme of the story. [3]

- **Wars are results of wrong or selfish politics.** [1]

- **The old man clearly suggests how common and innocent  
lives are lost in the wars.** [1]

- **Wars deny them a normal and a natural life and hence wars  
And mistaken politics should stop.** [1]

## Question 6.

With reference to the story 'An Angel in Disguise', discuss the following:

a. Describe the circumstances in which the three children John, Kate and Maggie were left behind by their dead mother. [4]

- The mother had been despised, scoffed at and angrily denounced
- She left them in a tumble down hut which was hardly enough during summer heats and winter cold.
- She had died in the presence of her frightened children.
- They were so poor that her funeral wasn't even honoured.
- They were half-starving children
- The youngest child Maggie was hopelessly diseased being bedridden for two years. She had to be carried about
- No one knew about the future of the children
- Pitying glances were cast on Maggie's condition
- No one was kind enough to help Maggie

b. Present the reasons and explain why Mr. Thompson, the wheelwright, decided to carry Maggie home and also mention the fears that awaited him then at home.

[4]

- The elder children John and Kate had found their takers.
- Maggie was left alone.
- She was bed-ridden and hopelessly diseased.
- No one wanted Maggie. She was to be taken to the Poorhouse.
- It was a cruel thing to leave her alone
- She was frightened and cried.
- She asked Mr. Thompson not to leave her alone.
- Mr. Thompson loved children and was a kind hearted man [3]

- Mrs. Thompson, his wife was a childless woman
- She wasn't a woman of saintly temper
- She did not see the good of others in her sacrifice
- She was sour and ill-tempered [1]

c. Analyse in your own words the unexpected change of heart for Jane, Mrs. Thompson and show how she clearly brings out the meaning of the title of the story 'An Angel in Disguise'. [8]

- Her womanly nature came to light
- She understood how she had drained her heart
- She opened up and saw the needs of the child
- She also understood the meaning of Charity
- The story from the Bible about Jesus loving children inspired her
- She wanted to at least try being soft and kind
- She got out from her darkness to go into the light of love [4]

-Mrs. Thompson began to realize the meaning of a mother's love.

- She started to enjoy her care for Maggie.
- She went out of herself to do everything to make her feel at home
- This way, she also felt at home and at ease with herself.
- She had got her real life that she had missed most.
- She remembered how she was not doing well all alone
- Her heart became a home of care and love
- She had the sweetness of the child, she was no burden to her
- She carried her in her heart - like honey to her soul
- Maggie was the 'angel in disguise'
- Maggie proved to be a blessing as a burden and as a sick child
- Maggie from her miserable life had brought her sunshine of love. [4]

**Subject :- Hindi**

## Marking Scheme of Hindi

### अंक योजना

### कक्षा नवम –हिंदी

#### मूल्यांकन का आधार -- Section A

#### 1 -प्रस्तावना –अंक प्राप्त-12/15

विषय –वस्तु ,भाषा –शैली और विचारों की अभिव्यक्ति सुन्दर हो एवं सभी बिंदुओं को कम से कम अनुच्छेद द्वारा लिखें | मुहावरा ,लोकोक्ति ,विद्वानों के वचन ,कविता की कुछ पंक्तियाँ एवं उदाहरण भी हो तो उत्तम है |शब्द सीमा से अधिक न हो अन्यथा अंक कटेंगे |वर्तनी एवं भाषा सम्बन्धी त्रुटियों पर ध्यान दें |

#### 2 -पत्र –अंक प्राप्त –6/7

पत्र का प्रारूप सही,पत्र में दिए गए सभी बिन्दुओं पर विचार ,शब्द सीमा और वर्तनी की अशुद्धियां न के बराबर .

प्रारूप सही न होने और वर्तनी की अशुद्धियों पर अंक कटेंगे |

#### 3-अपठित गद्यांश –अंक प्राप्त -8/10

क-ज्ञान के क्षेत्र में भारत ने प्रगति की और अनेक उपलब्धियाँ हासिल की |प्राचीन वेद भी इसके प्रमाण हैं|

इसी कारण विश्व में भारत की पहचान और प्रतिष्ठा है |

ख-विद्या ही जीवन में सबसे महत्वपूर्ण इसलिए है क्योंकि यह मनुष्य को सामाजिक प्रतिष्ठा ,उत्तम चरित्र ,स्वास्थ्य ,अन्न,धन,बल तथा सब तरह का सद्ज्ञान ,सुख और पवित्रता देती है |

ग-सरस्वती को विद्या की देवी के रूप में सबसे पहले वेदों ने मान्यता दी |विद्या सबसे अनमोल धन है क्योंकि इसे न तो कोई चुरा सकता है, न कोई छीन सकता है,न राजा या सरकार इस पर हक़ जमा सकते हैं और न तो यह बाज़ार में बिकती है |

घ –ज्ञान प्राप्त करने का सर्वोत्तम समय ब्रह्म मुहूर्त है |गुरु के पास जाकर पूर्ण समर्पित होकर ज्ञान प्राप्त करना चाहिए |

ड-प्रस्तुत गद्यांश से हमें यह सीख मिलती है कि गुरु से ज्ञान प्राप्त करने के लिए हर संभव प्रयास करना चाहिए, चाहे परिस्थितियाँ कितनी भी विषम क्यों न हो |इसी के माध्यम से समस्त सुखों की प्राप्ति होती है और कार्य भी सिद्ध होते हैं |

ध्यान देने योग्य बातें – उत्तर अपने शब्दों में होना चाहिए अन्यथा अंक कटेंगे | उद्धरण के वाक्यों को न लिखें |  
वर्तनी की त्रुटियों पर भी अंक कटेंगे |

4- अंक प्राप्त - 0-8/8

(i) -आख्यान –कथा, कहानी, किस्सा, वृतांत, वर्णन

उपाय –ढंग, रीति, युक्ति, साधन तरीका

एक पर्यायवाची शब्द पर आधा अंक

(ii)-बड़प्पन –बड़ा, रोमांच –रोमांचक, संचय –संचित

(iii) प्राकृत /नैसर्गिक, शुष्क, वाचाल, यथार्थ/अनादर्श

(iv) लम्बाई, भूख, जीवन

(v) नष्ट करना, घबड़ा जाना –(स्वरचित वाक्य)

(vi) क-हमारे द्वारा जो धन कमाया जाएगा, उसमें इसका भी हिस्सा होगा |

ख-इस फूलदान की कीमत मनुष्यों के जीवन से अधिक नहीं है |

ग-अतिवृष्टि के कारण सारी फसल चौपट हो गई |

ध्यान देने योग्य बातें-व्याकरण सम्बन्धी त्रुटियों पर शून्य अंक | मुहावरा से वाक्य बनाने में वर्तनी भूल पर अंक कटेंगे |

## Section B

5. अंक प्राप्त - 8/10

(i) श्रोता रसीला है | वह बाबू जगत सिंह के यहाँ नौकर था | उसका मासिक वेतन दस रुपया था | गाँव में उसके बूढ़े पिता, पत्नी, एक लड़की और दो लड़के थे | परिवार के प्रति अपनी जिम्मेदारियों का निर्वाह ईमानदारी से करता था |

(ii) एक दिन वक्ता अर्थात् रमजान ने रसीला को बहुत उदास देखा | वह मित्र रसीला की उदासी का कारण जानना चाहा, परन्तु रसीला उससे छिपाता रहा | जब रसीला उदासी का कारण नहीं बताता है तब रमजान अपने मित्र की उदासी का कारण जानने के लिए उसे सौगंध खाने के लिए कहता है |

(iii) सौगंध खाने की बात सुनकर श्रोता अर्थात् रसीला कहता है कि घर से पत्र आया है | बच्चे बीमार है | उन सब की जिम्मेदारी मेरे ऊपर है और गाँव भेजने के लिए मेरे पास एक रुपया भी नहीं है | मालिक से मांगने पर कहते हैं कि एक पैसा भी नहीं दूंगा |

हाँ, रसीला की समस्या का समाधान रमजान के द्वारा हुआ। रमजान ने कुछ रूपए देकर रसीला की सहायता की।

(iv) 'बात अठन्नी की' कहानी का उद्देश्य समाज में फैले शोषक एवं शोषित वर्ग के क्रिया-कलापों को दर्शाना है साथ ही समाज में व्याप्त भ्रष्टाचार को उजागर करना है। लेखक कहानी के माध्यम से उच्च पदों पर आसीन अधिकारियों की हृदयहीनता को भी व्यक्त करते हैं। मामूली चोरी के लिए रसीला को मारना-पीटना एवं जेल भेजना आदि बातें इस बात को सत्यापित करती हैं। रसीला एवं रमजान के माध्यम से सच्ची मित्रता पर भी प्रकाश डालते हैं।

6 अंक प्राप्त - 8/10

(i) जीजी का अर्थ दीदी है। अपनी शब्द भोला की ओर संकेत है।

उसका अर्थात् भोला का वक्ता से मित्रता का सम्बन्ध है। वह सुखिया दासी का बेटा है।

(ii) काकी अर्थात् माँ की मृत्यु के बाद श्यामू बहुत उदास रहता था। एक दिन उसने आसमान में पतंग उड़ती देखी। उसे बताया गया था कि काकी ऊपर राम जी के पास गई है इसलिए आकाश में पतंग देख वह खुशी से झूम उठता है। बाल मन यह सोचता है कि पतंग को आकाश में काकी के पास भेज दे तो काकी उसके सहारे नीचे उसके पास आ जाएगी। इसी उद्देश्य को पूर्ण करने के लिए पतंग मँगाई जा रही थी।

(iii) काकी को राम जी के यहाँ से वापस लाने की अपनी कल्पना को मूर्त रूप देने के लिए अपने पिता विश्वेश्वर से पतंग मँगाने के लिए कहता है तब उसके पिता अनमने भाव से कहते हैं कि मँगा दूँगा। श्यामू पतंग के लिए अधीर था इसलिए पिता का इंतज़ार न कर उनकी कोट की जेब से चवन्नी चुराकर भोला को दिया ताकि वह पतंग मँगा सके। चोरी करने और योजना के विफल होने के भय से पतंग मँगाने का कार्य गुपचुप तरीके से किया जा रहा है।

(iv) पतंग और डोर मँगाने का उद्देश्य विफल हो गया। पतंग और डोर आने पर भोला ने मोती रस्सी मँगाने का सुझाव दिया। श्यामू ने फिर पिता की कोट की जेब से एक रुपया चुराया और मोटी रस्सी मँगवाई। जवाहर भैया से पतंग पर काकी लिखवाया। श्यामू भोला के साथ अपनी योजना पूरी करने में व्यस्त था तभी क्रोधित विश्वेश्वर वहाँ आ पहुँचे।

श्यामू द्वारा पैसे चोरी करने की बात जान बिना सोचे-समझे श्यामू को थप्पड़ जड़ दिया। उसे बहुत डाँटा और पतंग भी फाड़ दी।

## 7. अंक प्राप्त – 8/10

(i) परिवर्तन प्रकृति का शाश्वत नियम है | समय भी परिवर्तनशील है | जीवन में सुख और दुःख के पल आते – जाते हैं | इसी परिवर्तनशील समय के कारण सेठ के जीवन में भी परिवर्तन आया और धनी सेठ से वे दरिद्र हो गए |

दरिद्र होने से पहले सेठ सुखी-संपन्न सेठ थे | उनके पास धन की कोई कमी नहीं थी | वे दान-पुण्य करते और भूखे को खाना खिलाते थे | उनके द्वार से कभी कोई निराश नहीं लौटता |

(ii) सेठ जी यज्ञ बेचने के लिए कुन्दनपुर धन्ना सेठ के यहाँ गए |

उनकी पत्नी के विषय में लोग कहते कि उन्हें कोई दैवी शक्ति प्राप्त है जिससे वे तीनों लोकों की बात जान लेती हैं |

(iii) यज्ञ बेचने के लिए सेठ जी गरमी के मौसम में प्रातःकाल में निकले |

रास्ते के लिए उनके पास एक पोटली थी जिसमें एक लोटा, डोरी एवं चार रोटियाँ थी |

प्राचीन काल में राजसूय यज्ञ, पुत्रेष्टि यज्ञ और अश्वमेघ यज्ञ होते थे |

ध्यान दें – किसी एक यज्ञ का नाम लिखने पर अंक मिलेंगे |

(iv) नहीं , सेठ जी अपना यज्ञ नहीं बेच पाएँ | धन्ना सेठ की पत्नी यज्ञ बेचने आए सेठ से महायज्ञ खरीदना चाहती थी | अपनी दैवी शक्ति से उन्होंने जान लिया था कि यात्रा के मार्ग में सेठ स्वयं भूखे रहकर मरणासन्न कुत्ते को अपनी चारों रोटियाँ खिला दी | इस कार्य के पीछे उनकी भावना निःस्वार्थ थी | अपने कार्य को सेठ मानवीय कर्तव्य मानते थे तो धन्ना सेठ की पत्नी महायज्ञ |

इस कार्य से सेठ के उदात्त चरित्र का पता चलता है | मानव धर्म निभाते हुए उन्होंने अपने कर्तव्य का पालन किया | यज्ञ के समान इस पवित्र कर्म के बदले सेठ ने धन की आवश्यकता होते हुआ भी धन स्वीकार न कर अपने निःस्वार्थ त्याग का परिचय दिया |

पद्य –भाग

## 8. अंक प्राप्त – 8/10

(i) प्रेम गली में अहम् और परम दोनों एक साथ नहीं समा सकते हैं |

ईश्वरीय प्रेम की गली अत्यंत तंग होती है | जिस प्रकार किसी तंग गली में दो व्यक्तियों को स्थान नहीं दिया जा सकता है ठीक उसी प्रकार प्रेम की गली में अहंकार और ईश्वर इन दोनों को स्थान नहीं मिल सकता है | इसमें सिर्फ एक ही स्थान प्राप्त कर सकता है अहम् या परम |

(ii) 'मैं' से तात्पर्य अहम् या अहंकार से है | हरि की भक्ति से इसका सीधा एवं स्पष्ट सम्बन्ध है | जब तक हृदय में अहम् की भावना है तब तक ईश्वर का साक्षात्कार संभव नहीं है | उनकी कृपा प्राप्त नहीं हो सकती है और उनकी सत्ता का बोध नहीं हो सकता | परम अर्थात् ईश्वर की प्राप्ति के लिए अहंकार का विसर्जन आवश्यक है |

(iii) यदि समुद्र के जल को स्याही के रूप में प्रयोग करें, समस्त वन की लेखनी बना लें तथा समस्त पृथ्वी को कागज़ बना लें तब भी इन वस्तुओं के होते हुए भी हरि के गुण लिखे नहीं जा सकते हैं |

उनके गुणों का वर्णन करने के लिए उपर्युक्त समस्त सामग्री कम है क्योंकि वह अद्भुत विभूति हैं, सर्वव्यापी और सर्वशक्तिमान हैं | उनकी महिमा अपरम्पार है | ईश्वर के अलौकिक रूप को शब्दों द्वारा बाँधा नहीं जा सकता है |

(iv) भक्तिकाल के संत कवियों में कबीरदास का सर्वोच्च स्थान है | कबीर हिंदी की संत काव्यधारा की ज्ञानाश्रयी निर्गुण शाखा के प्रमुख एवं उच्च कोटि के सूफी संत थे | इनका जन्म वाराणसी में सन 1938 में माना जाता है | नीमा एवं नीरू ने उनका पालन-पोषण किया था | उनकी मृत्यु के विषय में विवाद है | उनके पदों एवं साखियों में समाज सुधारक का निर्भीक स्वर सुनाई देता है | निर्गुण ब्रह्म के उपासक होने के कारण धर्म में व्याप्त आडंबरों पर तीखा प्रहार कर समाज में आदर्श की स्थापना की | उनका साहित्य जाति, धर्म, वर्ण और सम्प्रदाय से परे मानव धर्म को स्थापित करनेवाला साहित्य है | इनकी वाणी का संग्रह- 'बीजक' नाम से प्रसिद्ध है | इसके तीन भाग हैं- साखी, सबद और रमैनी | इनकी भाषा को सधुक्कड़ी या पंचमेल खिचड़ी कहा जाता है |

## 9. अंक प्राप्त – 8/10

(i) गुण के ग्राहक से कवि का आशय गुण के ग्राहक अर्थात् खरीदार से है | कवि के कहने का अर्थ है कि गुणवान व्यक्तियों की सभी प्रशंसा करते हैं और सभी पसंद भी करते हैं | उसे परिवार एवं समाज में मान-सम्मान प्राप्त होता है | गुणहीन व्यक्ति या वस्तु का कोई ग्राहक नहीं होता है अर्थात् कोई भी स्वीकार नहीं करता है |

(ii) कागा (कौआ) और कोकिला (कोयल) दोनों ही श्याम वर्ण के पक्षी हैं पर दोनों की वाणी में अंतर है | कोयल की वाणी कर्णप्रिय होती है | लोगों द्वारा उसकी मिठास की प्रशंसा होती है | वह लोगों को अपनी ओर आकर्षित करती है | वहीं कौए की वाणी कर्णकटु होती है | इसकी वाणी को कोई पसंद नहीं करता है | यह सबके द्वारा त्याज्य और अपवित्र माना गया है |

(iii) कोयल वसंत ऋतु में बोलती है | वसंत में न वर्षा जैसा कीचड़, न ग्रीष्म जैसी तपन, उमस, और पसीने की बदबू, न हेमंत की हाड़ कँपाती सर्दी होती है | इस मौसम में वातावरण सुहावना और मनभावन होता है | मदमाती कोयल की गान, तन-मन को शीतलता प्रदान करती हवा, तथा पूरे यौवन का जोश लिए प्रकृति की छटा निराली होती है | धरती साकार सौन्दर्य का दर्शन कराने वाली होती है | प्रकृति अपना श्रृंगार करती है | इस ऋतु में नकारात्मक तत्व दूर होते हैं | यह ऋतु मनुष्य, पशु, पक्षी तथा अन्य जीवों को प्रसन्नता प्रदान करती है | राग-रंग और उत्सव के लिए यह ऋतु सर्वश्रेष्ठ है | अनेक विशेषताओं के कारण वसंत ऋतु अन्य ऋतुओं से अलग है और इसी कारण इसे ऋतुराज वसंत भी कहा जाता है |

(iv) ग्राहक, कोई, सभी, सुहावना/सुन्दर, दोनों, अपवित्र |

## 10. अंक प्राप्त – 8/10

(i) धर्मराज पांडु पुत्र युधिष्ठिर हैं।

उन्हें धर्मराज की संज्ञा गंगा पुत्र भीष्म ने दी। युधिष्ठिर ने अपने जीवन में सत्य एवं न्याय का पक्ष लिया। हमेशा धर्म का पालन किया चाहे परिस्थितियाँ कितनी भी विषम क्यों न हो या उनके समक्ष उनके अपने ही भाई क्यों न हो। युधिष्ठिर के विचार एवं कर्म के कारण उन्हें धर्मराज की संज्ञा दी गई।

(ii) कवि हवा, प्रकाश, और पृथ्वी पर समान अधिकार की बात करते हैं।

वायु, प्रकाश, पृथ्वी आदि सभी वस्तुएँ ईश्वर/प्रकृति प्रदत्त हैं। किसी ने इसे अपनी मेहनत से अर्जित नहीं किया है इसलिए इस धरती पर जन्म लेने वाले सभी सजीव प्राणियों का इस पर समान अधिकार है।

(iii) धार्मिक असहिष्णुता, द्वेष, घृणा, स्वार्थपरता जाति एवं वर्ण-भेद आदि संकीर्ण विचारधाराएँ मनुष्य के विकास में बाधक हैं।

मनुष्य एवं समाज के उत्थान के लिए न्याय के आधार पर प्रकृति एवं मानव प्रदत्त सुखों का समान वितरण आवश्यक है। जब मूलभूत सुख-सुविधाएँ सभी को उपलब्ध होगी तब आपसी कोलाहल, संघर्ष एवं असंतोष समाप्त होगा। सभी जियो और जीने दो की भावना से प्रेरित होकर निष्काम कर्म करें।

मनुष्यों को संचय करने की प्रवृत्ति, भय एवं शंका का भी त्याग करना होगा तभी विकास संभव है।

(iv) 'स्वर्ग बना सकते हैं' कविता श्री रामधारी सिंह द्वारा लिखी गई प्रसिद्ध कविता है। भीष्म पितामह द्वारा कुरुक्षेत्र के मैदान में युधिष्ठिर को दिए उपदेश के माध्यम से कवि ने इस तथ्य से परिचित कराने का प्रयास किया है कि इस धरती पर जन्म लेने वाले सभी प्राणियों का प्रकृति प्रदत्त संसाधनों पर समान अधिकार है। यह किसी विशिष्ट व्यक्ति, जाति या वर्ग के अधिकार क्षेत्र में नहीं है। समता एवं न्याय की भावना से प्रेरित होकर असीमित सुख-साधनों का उपयोग कर सकता है। मनुष्य चाहे तो मानवता के विकास में उत्पन्न बाधाओं को समाप्त कर इस धरती को स्वर्ग बना सकता है। यह तभी संभव है जब वह स्वहित का त्याग कर परहित की सोचे।

मूल्यांकन का आधार –उत्तर सटीक, भाषा शैली स्पष्ट, अभिव्यक्ति और वर्तनी पर विशेष ध्यान।

शब्दार्थ में वर्तनी भूल पर अंक कटेंगे।

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**Subject :- History**

**Marking Scheme of History**

**HISTORY AND CIVICS ST. XAVIER'S SCHOOL, DORANDA**

**SELF ASSESSMENT TEST**

**CLASS IX ABCD**

**MARKS: 80 TIME- 2hrs**

**MARKING SCHEME**

*Attempt **all the questions** from this part.*

**Answer 1**

**1x10=10**

(a) 26<sup>th</sup> January 1950

(b) To provide better life to its people.

(c) President

(d) Direct election, indirect election

(e) 12<sup>th</sup> June

(f)- The kind of government (**any two points ½ mark each**)

- The powers and functions of the government
- People's rights and duties
- The working of different government institution

(g) The directive principles are instructions to the state to promote social and economic development.

(h) Respect the constitution, national flag and anthem

- uphold and protect the sovereignty, unity and integrity
- defend the country and render national service
- promote common brotherhood.....renounce derogatory practice
- preserve heritage and composite culture of the nation (**any one point**)

(i) Suffrage **means vote**

(j) Power is held up by the people

- Citizens get a better choice to elect the most suitable candidate
- Right to equality of opportunity

- Right to freedom of speech and expression, freedom to assemble peacefully, freedom of movement
- Right to vote
- People indirectly take part in the running of the government
- Government is kept on a leash
- People get political education
- People come to know of government policies
- Famous personalities asking for votes make people feel important (any one point)

**Answer 2**

**2x10=20**

- (a) Bramhacharya ,grihastya, sanyasa and vanaprastha  $\frac{1}{2}$  **marks each=2**
- (b) It was a fortress on a raised area....all important buildings were situated here
- (c) -Women got same position as men
  - They could attend social and religious ceremonies
  - Could take part in all rituals
  - They were educated
  - Girls could choose their own husband through. Swayamvara
  - Purdah, child marriage and sati did not exist
  - Widow remarriage was not allowed but divorce was not known **(any two)**
- (d) Special class of priest
  - Performed the soma sacrifice
- (e) Brahmans,kshatriyas ,vaishyas and shudras  $\frac{1}{2}$  **mark each**
- (f) Vardhamana and Siddhartha **(one mark each)**
- (g) Rebirth/revival
- (h) Mona lisa, Last Supper, Virgin and the Child **( any two)**
- (i) Vasco da Gama
- (j) He claimed that the sun is at the centre of the universe and the planets move around the sun.

**PART II (50 Marks)**

## SECTION – A (CIVICS)

(Attempt any **two questions** from this section.)

### Answer 3

**‘Elections are a must in a democracy’.**

a)-An election is a form of contest between two or more persons for a political post [1]  
-the candidate may belong to political parties or can be independent [1]

- People vote to elect the members of vidhan sabha ,lok sabha municipal corporation municipalities and panchayats 1/2

-Political party getting majority of candidates wins and forms the government 1/2

**(b) Direct election** –voters vote directly to elect their representatives[1]

Eg. Lok sabha, vidhan sabha, Municipal Corporation, municipalities and various panchayats [1]

- Takes place after every 5 years [1]

(c) The President is elected by the elected members of both houses of parliament and members of legislative assemblies of states [2]

- Vice President is elected by both the houses of parliament [1]

- Both are elected indirectly [1]

### Answer 4.

**The Indian Constitution has certain essential features.**

**(a) single citizenship-** In India we are citizens of one nation only [1]

-All citizens enjoys a common status which permits them equal rights and equal protection [1]

-no discrimination based on living places 1/2

- promotes unity and removes religious and social differences 1/2

**(b) the fundamental rights** -right to equality, right to freedom, right against exploitation, right to freedom of religion, cultural and educational rights , right to constitutional remedies and right to education **(any six1/2 mark each)**

**(c)Universal Adult Franchise** - the word suffrage means vote [1]

- both men and women have equal right to vote [1]

-all citizens above the age of 18 years vote to elect their representatives [2]

## Answer 5

**There are three types of election in India.**

**(a) General Election** - elections conducted all over India to elect MPs of Lok Sabha or election held in state to elect MLAs of Vidhan Sabha of the state. [2]

It is conducted after every 5 years [1].

**(b) By- Election** - Election held to fill in an empty seat in

Lok Sabha or Vidhan Sabha. [1]

If an MP or MLA resigns or dies in office the seat becomes vacant, election is held to fill this empty seat. [1]

The newly MP or MLA will continue to hold the post, till the remaining term of the Vidhan Sabha, as the case may be. [1]

**(c) Mid Term Election**- If Prime Minister and his council of ministers lose the no confidence motion, Lok Sabha is dissolved before the end of 5 years, the election held is mid- term election. The same event may occur in a state. [2]

When the ministry resigns and is not replaced by a new Prime Minister or Chief Minister elections are held to form a new legislature and a new ministry [2]

## (HISTORY)

*(Attempt any **three questions** from this section)*

## Answer 6

**With reference to the Harappa Civilization answer the following questions:**

**(a) construction of roads in urban planning-** [3]

- the roads and streets were wide and straight running from north to south or east to west.
- they cut each other at right angle
- they were automatically cleaned by the prevailing winds
- fire burnt bricks were used
- roads and streets divided the city into square or rectangular blocks
- they had rounded corners for the easy movements of carts
- there was provision of street lighting at regular intervals. **(any three points)**

**(b) Decline of the civilization.(any three)** [3]

- Arrival of the Aryans in the Sapt Sindhu region which led to the mass killing of the citizens.
- Floods
- Drought affected agriculture and cattle breeding
- Climate change might have brought salinity in soil leading to the expansion of neighbouring desert.
- Deforestation which led to change in climate and less rainfall
- Earthquake
- epidemics

(c) **sources of information:**

i. **The Bearded Man** - a stone statue of a bearded man has been found at Harappa and Mohenjo-Daro

- might have been a nobleman or a priest or a leader [2]

ii **The Great Bath** -it was discovered at Mohenjo-Daro.

- It was an open quadrangle with rooms and galleries on three sides.
- the pool might have been used on special occasions.[2]

**Answer 7**

**The Aryans were the first batch of migrants to India. In this context explain:**

(a) **The contents of Rig Veda** [3]

-It was the first literary work of man, consists of 1028 hymns.

-It was divided into ten chapters or mandalas

-these are named after rishis

-Hymns have been composed in praise of different gods and goddesses eg. Agni...

- it also contains the gayatri mantra

-Helps to understand political, social, economic, philosophical and religious conditions of Aryans

- tells us about princely habits, tribal wars and lifestyle of the people [any three points]

(b)**The Sama Veda** [3]

- It contains 1,810 hymns which are meant to be sung during sacrifices
- The *Sama* sacrifice by a special class of priests called **Udgatris**.
- *Sama* Veda may be taken to be the sources of Indian music.

- The Veda shows that Aryans were fond of music from the name '**Sama**' which means melody. **[any three points]**

(c) **The Yajur Veda** (any four points) [4]

- This book of 'sacrificial prayers' contains 2,086 hymns.
- The hymns tell the ways different sacrifices were to be performed.
- This Veda has two parts White (**Shukla**) and the Black (**Krishna**)
- The white Yajur Veda has only hymns. The Krishna has a commentary in prose, as well as the hymns.
- It proves rituals and sacrifices were taking a strong hold on the lives of the people.
- The Yajur Veda Samhita takes us to a complete change of religious and social conditions.

### Answer 8

**Various factors led to the rise of Jainism and Buddhism.**

(a) **Costly Rituals and Ceremonies** [3]

- The nature worship of the early Aryans had already replaced in the later Vedic times.
- Hinduism became further complicated with the Brahman priests introducing new lengthy and costly rites and rituals.
- The simple daily worship had become complex enough to fulfill the spiritual or religious needs of the people.
- They now looked elsewhere for solace. **[any three points]**

(b) **The Caste System** [3]

- The caste system based on occupations had become completely rigid.
- It had become hereditary.
- The Brahmins held the highest position followed by the Kshatriyas the Vaishyas and the Shudras.
- The condition of the Shudras was the worst.
- The protesters were totally against the man made social differences among the people. **[any three points]**

(c) **The Vedic Sanskrit** [4]

- Sanskrit was the language used by the priests to perform the rites, rituals sacrifices and ceremonies.
- Education had become restricted to the two upper castes.
- Common people could not understand the meaning of the different hymns chanted during prayers.
- They demanded a religion where vernaculars could be used for prayers.

## Answer 9

**Gautama Buddha had similar principles as Mahavira.**

**(a) The Theory of Karma. [Any three points] [3]**

- Jainism: to be free from the cycle of birth and rebirth.  
One must follow the 'Triratna' or the 3 Jewels- right faith, right knowledge and right conduct.
- Buddhism: The man gets what he deserves in life.  
Man's status in his present life is because of his actions in his previous life.  
No rituals, sacrifices or prayers could change a man's destiny.

**(b) Nirvana any three points [3]**

- Man's goal in life was to lead a moral life and get nirvana
- the soul would be free from being born again and again
- The best way to reach nirvana was to gain a peaceful state of mind in which there should be no desires
- to reach this state of mind one had to follow the eight fold path

**(c) Eight Fold Path ½ mark for each point [4]**

- Right belief
- Right thought
- Right speech
- Right action
- Right recall
- Right meditation
- Right effort
- Right earning

## Answer 10

**Several causes contributed to Renaissance. (½ mark for any six points)**

**(a) The invention of printing press [3]**

- Gutenberg developed an art which copies could be made with more accuracy than handwritten ones
- Caxton improved upon it on AD 1476
- Books were now published in large numbers
- The price was lesser than handwritten manuscripts
- Common people could afford the books
- People could understand what true religion was
- Thirst for education gave rise to a lot of literary activity
- It broadened the minds of the people

(b) **New trade routes** [3]

- Constantinople was captured by the Turks in AD.1453
- trade between Europe and Asia was affected
- Turks were not bothered but Europeans were eager to continue with trade
- They began to encourage voyages of discovery
- Portugal and Spain played leading role

(c) **Contributions of William Shakespeare** (any 4 names) [4]

- Henry IV –part 1
- Richard III
- The Comedy of Errors
- Andronicus
- Venus and Adonis
- Rape of Lucrece
- Romeo and Juliet
- Love's Labours Lost
- Taming the Shrew
- Julius Caesar
- Hamlet
- Othello
- Antony and Cleopatra
- King Lear
- King Henry VIII
- Merchant of Venice
- A Midsummer Night Dream
- Measure for Measure
- Henry V
- Henry IV Part 2
- As You Like It
- The Tempest
- Much Ado About Nothing
- Troilus and Cressida
- Twelfth Night
- The Two Gentlemen Of Verona

- The Winter's Tale
- Sonnets
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**Subject:- Geography**

**Marking Scheme of Geography**

**ST XAVIER'S SCHOOL, DORANDA  
SELF ASSESSMENT TEST (2020-21)**

**CLASS- IX (A, B, C, D) SUBJECT-GEOGRAPHY (MARKING SCHEME) FULL MARKS- 80**

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**SECTION-A (30 MARKS)**

**Question 1** **[20]**

**a) State two differences between hypocenter and epicenter.** **[2]**

*Hypocenter – The point origin of the earthquake; Found beneath the surface of the earth.*

*Epicentre - The point vertically above the hypocenter; Found on the earth's surface.*

*( The points given for difference must be on a particular point otherwise no marks)*

*(1 mark for each point of difference)*

**b) i. What is meant by the inclination of the Earth's axis?** **[2]**

*The Earth's axis is not at right angles to the plane of the elliptical. It is tilted at an angle which is known as inclination of the Earth's axis.* *(1)*

**ii. At what angle is the Earth's axis inclined?**

*At an angle of  $66\frac{1}{2}^{\circ}$  to the elliptical plane or at an angle of  $23\frac{1}{2}^{\circ}$  from the vertical plane.* *(1)*

**c) i. How do latitudes and longitudes help us to locate the position of a place on a globe?[2]**

*The network of intersection of meridians and parallels (grids) enables us to locate any point on the earth.* *(1)*

**ii. Why the lines of longitudes are also called meridians?**

*They are called Meridians because all places along the same meridian of longitude experience noon or mid-day at the same time.* *(1)*

**d) In what ways are volcanic activities useful to us?** **[2]**

*Gives rise to igneous rocks such as granite and feldspar;*

*Deposits lava and ash and provides valuable minerals to the soil (black soil) making it fertile and good in agriculture;*

*Tourism, thereby boosting the economy of an area;*

*Releases heat (hot springs and geysers) using which geothermal energy can be generated.*  
*(any two)* (2)

**e) What is Standard Meridian? Why is it considered important?** [2]

*The uniform time is based on the central meridian of the country or the meridian on which the most important city is located. This meridian is called the Standard Meridian.* (1)

*As all places cannot follow their own local time, the standard meridian for each country is fixed and the local time of this meridian is followed uniformly in the country.* (1)

**f) What is the significance of Mohorovicic and Gutenberg Discontinuity layers?** [2]

*Mohorovicic Discontinuity - boundary/ discontinuity layer between the crust and mantle.*

*Gutenberg Discontinuity - boundary/ discontinuity layer between mantle and core.(1 mark each)*

**g) i. What causes slight flattening of the Earth at the two poles?** [2]

*The rotation of the Earth* (1)

**ii. Name an effect of the Earth's rotation.**

*Alternate day and night; difference in time between different places on the Earth; apparent movement of Sun and other heavenly bodies; slight flattening of the Earth at the two poles; coriolis effect; occurrence of tides. (any one)* (1)

**h) Define the following:** [2]

**Perihelion, Aphelion**

*Perihelion-The position when the distance between the Earth and the Sun is minimum i.e. 147 million km.* (1)

*Aphelion-The position when the distance between the earth and the sun is maximum i.e. 152 million km.* (1)

**i) i. Name the instrument used to record the intensity of earthquake waves.** [2]

*Seismograph* (1)

**ii. Name the waves that cannot pass through dense molten matter.**

*Secondary waves* (1)

**j) Where do volcanic eruptions generally occur? Give one example.** [2]

*Plate boundaries.* (1)

*Circum - Pacific belt; Mid - World belt (any one)* (1)

**Question 2** [10]

**On the given map of the World, Mark in and Name the following:**

**a) Shade and label River Zambezi.** *River Zambezi*

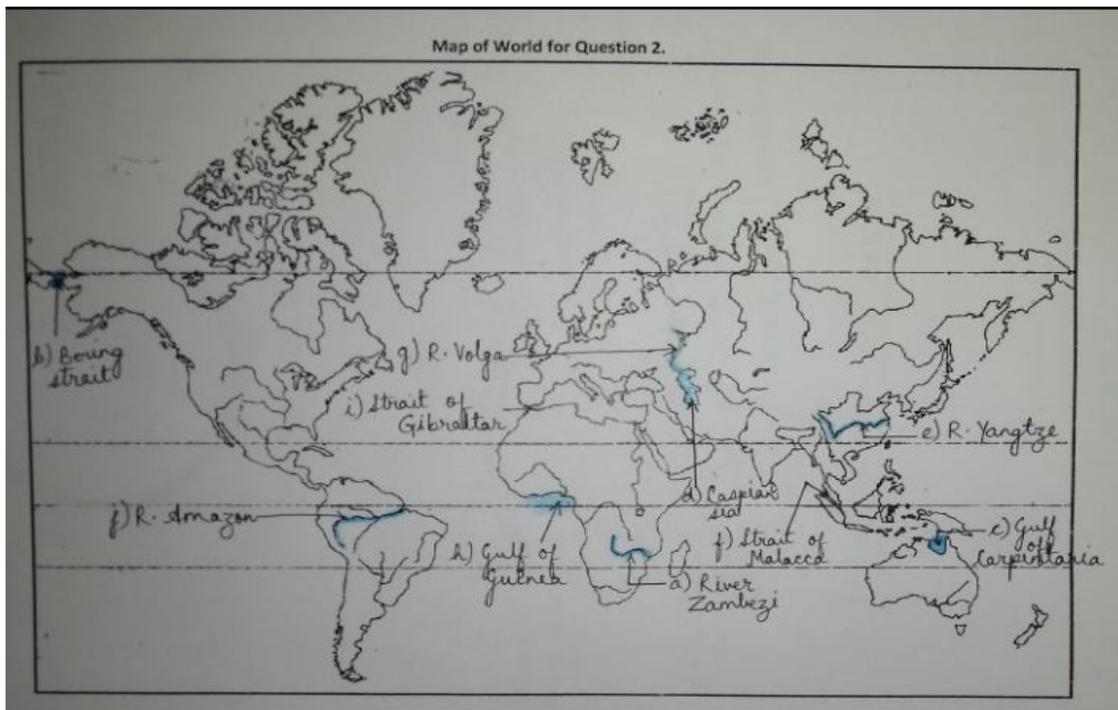
**b) The narrow water body joining the smallest ocean with largest ocean.** *Bering strait*

**c) Shade and label Gulf of Carpentaria.** *Gulf of Carpentaria*

**d) The largest inland sea.** *Caspian sea*

- e) The river draining into the East China Sea. *R. Yangtze*
- f) The longest strait of the world. *Strait of Malacca*
- g) The river draining into the largest inland sea. *R. Volga*
- h) The mouth of river Niger. *Gulf of Guinea*
- i) The narrow stretch of water body separating the most economically developed continent from the least developed continent. *Strait of Gibraltar*
- j) The largest river of the World. *R. Amazon*

(1 mark each for both marking and naming. If only marking is done and no naming or if only naming is done but no marking then no marks.)



### SECTION B (50 MARKS)

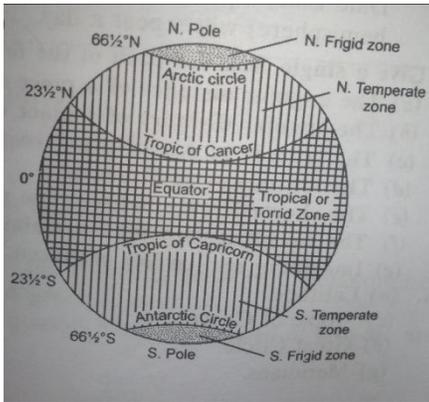
#### Question 3

[10]

- a) Why is 1° latitude equal to 111 km throughout whereas 1° longitude in terms of distance varies? [2]

The length of one degree of longitude is the longest at the equator, i.e. 111km. Away from the equator, the inter longitudinal distance keeps decreasing and at the poles this distance becomes zero. This is because all longitudes converge at the poles. This is unlike the inter- latitude distance which remains almost constant throughout. (2)

- b) Draw a diagram to show the different Heat Zones of the World. [2]



(Specify all the latitudes – 1 mark, all the heat zones – 1 mark)

- c) Give geographical reasons for the following: [3]

- i. Large countries have many time zones.

Large countries have vast longitudinal extent. They do not have a single Standard Time for the whole country because the time difference is very large. Therefore they have many time zone covering about 15 degree longitude. (1)

- ii. London experiences a lower temperature than Singapore throughout the year.

London lies at a higher latitude and thus receives the slanting rays of the Sun so the temperature is low, whereas Singapore is in the equatorial region and therefore receives the direct rays of the Sun and thus the temperature is high.

(comparison must be done between the two places) (1)

- iii. The local time of all the places along a longitude is same even when they are situated at different latitudes.

This is because the Sun is overhead at a particular longitude at the same time. (1)

- d) With reference to the International Date Line answer the following questions: [3]

- i. What is the International Date Line?

It is an imaginary line which follows the 180° meridian. (1)

- ii. Why is it not a straight line like other longitudes?

It is a zig zag line because it is adjusted at the boundaries of the time zones so that it does not pass through any country and each country has only one date at a time. (1)

- iii. Under what circumstances will a traveller repeat a day?

A person crossing the IDL from west to east i.e. from eastern hemisphere to the western hemisphere will repeat a day. (1)

Question 4 [10]

- a) Answer the following questions: [2]

- i. Which are the longest day and the shortest day in the southern hemisphere?

Longest – 22<sup>nd</sup> December and shortest – 21<sup>st</sup> June (½ mark each)

- ii. What is meant by Equinox and Solstice?

Equinox – Equal nights and therefore equal days

Solstice – the Sun standing still or reaching the highest point

(½ mark each)

b) Differentiate between rotation and revolution. [2]

Rotation – Spinning of the Earth on its axis from west to east

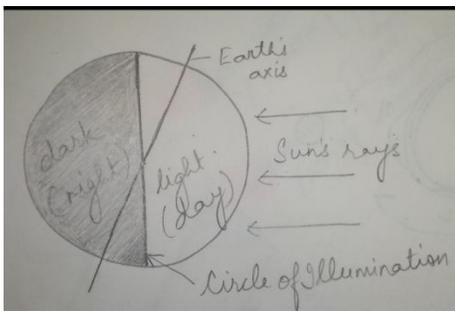
Revolution – Movement of the Earth around the Sun on its orbit

(If both the terms are explained and difference is clear then only 2 marks to be given. If only one term is explained no marks to be given)

c) What causes the formation of day and night? Explain with the help of a neat diagram. [3]

Earth's Rotation

(1)



(Sun's rays, day-night, Earth's axis, circle of illumination must be mentioned. Each carries ½ mark)

d) Give reasons for the following: [3]

i. Days and nights are equal at all places on the Earth on March 21<sup>st</sup>.

As the circle of illumination passes through the poles and thus divides the Earth into two equal halves. (1)

ii. Winds get deflected from their normal path.

Due to Coriolis force which is caused by Earth's rotation. (1)

iii. Every fourth year is a leap year.

The Earth completes its revolution in 365 days and 6 hours. These 6 hours are ignored and 1 day (24 hours) are added to the 4<sup>th</sup> year. This fourth year is called leap year consisting of 366 days. (1)

### Question 5

[10]

a) Differentiate between a vent and a crater. [2]

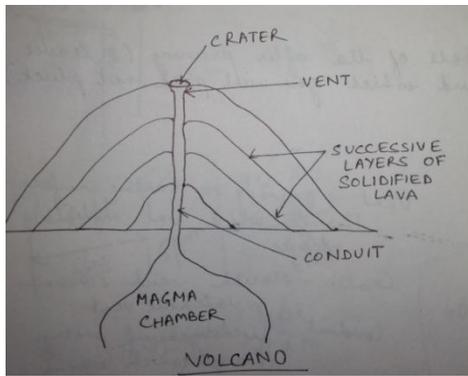
Vent – it is a narrow opening of a volcano from where lava flows out. This opening is usually like a circular pipe.

Crater – it is the upper part of the vent which is often saucer – shaped depression

(If both the terms are explained and difference is clear then only 2 marks to be given. If only one term is explained no marks to be given)

b) Draw a well labeled diagram of the structure of a volcano. [2]

[2]



(Magma chamber, vent, crater and successive layers of solidified lava must be labeled. Each carries ½ mark)

- c) **Define the different types of volcanoes based on their intensity of eruption along with an example for each.** [3]

Volcanoes are of three types:

*Active volcanoes – those which keep erupting periodically. Example: Mt. St. Helena, Mt. Stromboli, Mt. Etna, etc.*

*Dormant volcanoes – Sleeping volcanoes that have erupted in the historic period but have remained inactive for a long time. They might erupt in the future. Examples: Mt. Vesuvius, volcanoes of Japan, etc.*

*Extinct volcanoes – inactive for so long that they are not likely to erupt in the future. Examples: Mt. Kenya, Mt. Kilimanjaro, etc.*

(½ mark for defining and ½ mark for any one example) (1 mark each)

- d) **Give reasons for the following:** [3]

- i. **Volcanic activity and Earthquakes occur in the same belt.**

*Earthquakes are found in areas of volcanic activity as internal activity in volcanic areas cause vibrations in the Earth's crust. These are found in areas of weakness.* (1)

- ii. **The Circum Pacific Belt is known as the "Ring of Fire."**

*A chain of volcanoes surround the Pacific ocean. The volcanoes frequently erupt in explosions therefore this region is called Ring of Fire.* (1)

- iii. **Some volcanic eruptions are followed by rainfall.**

*Along with molten magma there is also an explosion of gases and steam. The steam rises high in the atmosphere and upon cooling leads to rainfall.* (1)

**Question 6** [10]

- a) **What is an earthquake and how is it measured?** [2]

*Earthquakes are tremors or vibrations produced by internal forces and man-made stresses. (1)  
It is measured by Richter Scale. (1)*

- b) **Mention two main causes of an earthquake.** [2]

*Folding and faulting; Movement of Tectonic Plates; Volcanic eruption; man-made causes.(any 2)  
(1 mark each)*

- c) **What are seismic waves? Name and describe any two kinds of seismic waves sent out from the focus.** [3]

*The waves generated by an earthquake are called seismic waves or shock waves.* (1)

*Primary waves- passes through solids, liquids and gases. Travels fastest.*

*Secondary waves- travels only through solids and cannot penetrate through the molten matter.*

*Long waves- travels along the Earth's surface and are slow waves. (any two)*

*( ½ mark for naming and ½ mark for defining) (1 mark each)*

- d) **What is a Tsunami? When and where does the Tsunami disaster usually occur?** [3]

*It is a series of waves in a waterbody caused by the displacement of large volume of water/ when there is an earthquake on the ocean floor.* (1)

*Due to collision of tectonic plates/earthquake/volcanic eruption on the ocean floor.* (1)

*More frequent in the Pacific ocean.* (1)

**Question 7** [10]

- a) **State two characteristics of the mantle.** [2]

*It consists of rocks rich in iron and magnesium; density varies from 3.0 gm/cm<sup>3</sup> to 5.5 gm/cm<sup>3</sup>; average thickness is 2840 km; in semi-solid state (any 2)* (1 mark each)

- b) **Differentiate between the two layers of the crust.** [2]

*SIAL- outer layer of the crust; consists of silicates and aluminium; lighter; thick over continents and thin or absent on the ocean floors.*

*SIMA- inner layer of the crust; consists of silicates and magnesium; denser; forms the ocean floor.*

*(If both the terms are explained and difference is clear then only 2 marks to be given. If only one term is explained no marks to be given)*

- c) **Give reasons for the following:** [3]

- i. **In spite of the high temperature, the Earth is in the solid form in the centre.**

*The temperature in the centre is quite high but pressure of the overlying layers keeps the centre in solid state.* (1)

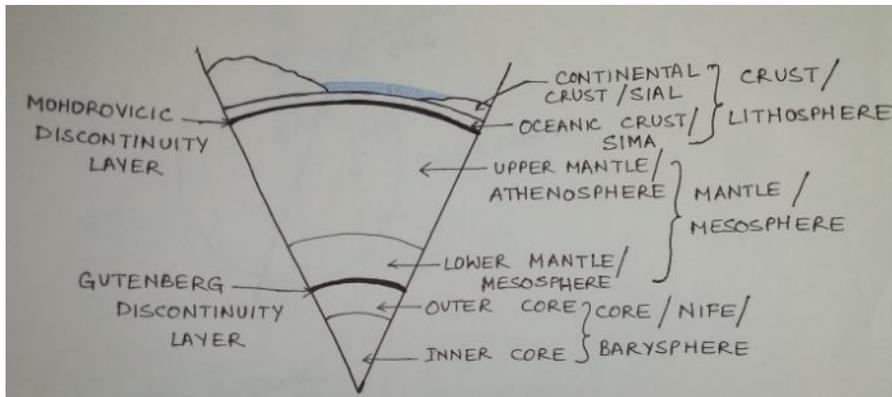
- ii. **The core explains the cause of the Earth's magnetism.**

*It is because of the presence of heavy metals and plenty of iron.* (1)

- iii. **The oceanic crust is said to be basaltic in nature.**

*It is because granite is not found here.* (1)

- d) **Draw a well labeled diagram showing the structure of the Earth.** [3]



(Sial, Sima, Mantle, Core, Mohorovicic discontinuity layer, Gutenberg discontinuity layer must be mentioned. Each carries ½ mark)

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**Subject:- Mathematics**

**Marking Scheme of Mathematics**

**St.Xavier's School Doranda Ranchi**

**Class ix**

**Subject :-Mathematics**

**Q1 (3+3+4)**

**F.M. 80  
Duration 2  $\frac{1}{2}$ hrs.**

a)  $(\frac{1}{4})^{-2} - 3(32)^{2/5} \times 7^0 + (\frac{9}{16})^{-1/2}$

Solution  $2^4 - 3 \times 2^2 \times 1 + \frac{4}{3}$ -----1m

$= 2^4 - 12 + \frac{4}{3}$

$= 16 - 12 + \frac{4}{3}$ -----1m

$= 4 + \frac{4}{3} = 5\frac{1}{3}$  ans-----1m

b) If  $2 \cos(A-B) = 2 \sin(A+B) = \sqrt{3}$ ; Find the values of acute angles A and B.

solution:-  $2 \cos(A-B) = \sqrt{3}$  ,  $\cos(A-B) = \frac{\sqrt{3}}{2}$ ,  $\cos(A-B) = \cos 30^\circ$ -----1m

$A-B = 30^\circ$

$\sin(A+B) = \frac{\sqrt{3}}{2} = \sin 60^\circ$  -----1m ,  $A+B = 60^\circ$  ,  $2A = 90^\circ \rightarrow A = 45^\circ$ ,  $2B = 30^\circ$  ,  $B = 15^\circ$ -----both correct 1m

c) What point on y-axis is equidistant from the points (7,6) and (-3,4)?

$A(0,y)$ -----1m,  $\sqrt{(7-0)^2 + (6-y)^2} = \sqrt{(-3-0)^2 + (4-y)^2}$ -----1m

$85 - 25 = -8y + 12y$ -----1m

$Y = 15$  , Required point is (0,15)-----1m

**Q2 (3+3+4)**

a)  $(\frac{8}{27})^{x-1} = (\frac{9}{4})^{2x+1}$  ; find the value of x

Solution:-  $[(\frac{2}{3})^3]^{x-1} = [(\frac{2}{3})^{-2}]^{2x+1}$ -----1m

$3x-3 = -4x-2$ -----1m

$X = \frac{1}{7}$ -----1m ans

b) For given equation find slope and y-intercept

$$x=3y+2$$

**solution:**  $-y=1x/3 -2/3$ -----1m

slope=1/3-----1m, y intercept=-2/3-----1m

c) Solve:  $\frac{2}{x} + \frac{2}{3y} = \frac{1}{6}$  and  $\frac{3}{x} + \frac{2}{y} = 0$ .

Hence find 'm' for which  $y = mx - 4$

Solution:  $-y=-4$ -----1m,  $x=6$ -----1m,  $m=0$ -----1m

**Q3 (3+3+4)**

a) Prove that:-

$$\sec^2(90^\circ - \theta) - \frac{1}{\cot^2(90 - \theta)} = 1$$

solution:  $-\operatorname{cosec}^2\theta - \frac{1}{\tan^2\theta}$ -----1m

$$\frac{1 - \cos^2\theta}{\sin^2\theta} \text{-----1m} \quad \frac{\sin^2\theta}{\sin^2\theta} \text{-----1m}$$

b) Point P(x, y) is equidistant from the points A(-2,0) and B(3, -4).

Prove that:  $10x - 8y = 21$

Solution:  $-(x+2)^2 + y^2 = (x-3)^2 + (y+4)^2$ -----1m

$$4x+4 = -6x + 8y + 25$$
-----1m

$$10x - 8y = 16$$
-----1m

c) The length of a string between a kite, flying at a certain height and a point on the ground is 90 m. If the string makes an angle  $\theta$  with the ground such that  $\tan\theta = \frac{15}{8}$ . How high is kite, if the string of it always remain tight.

Solution: In triangle ABC,  $\angle B = 90^\circ$

$$AB/BC = 15/8$$
-----1m

$$AC^2 = AB^2 + BC^2, (90)^2 = (15k)^2 + (8k)^2, \text{-----1m, } k=90/17 \text{-----1m, } AB=79.41\text{m} \text{-----1m}$$

**Q4(3+3+4)**

a) Find the value of a,

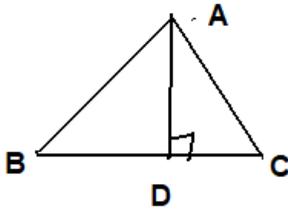
$$2^{a-5} \times 6^{2a-4} = \frac{1}{12^4 \times 2}$$

Solution:  $-2^{a-5+2a-4} \times 3^{2a-4} = 2^{-8} \times 2^{-1} \times 3^{-4}$ -----1m

$$6^{2a} = 6^0$$
-----1m

$$a=0$$
-----1m

b) In the given figure; AD is perpendicular to BC,  $\tan B = \frac{3}{4}$ ,  $\tan C = \frac{5}{12}$  and BC=56 cm. Calculate the length of AD



Solution:-  $\tan B = AD/BD = 3/4$ ,  $BD = 4AD/3$ -----1m;  $DC = 12AD/5$ -----1m;  $56 = AD(20+36)/15$ -----1m  
 $AD = 15\text{cm}$ -----1m

c) Solve the following given equation graphically:-

$$8x + 5y = 9$$

$$3x + 2y = 4$$

Ans:- correct plotting for first equation-----1m; second graph-----1m; solution:  $x = -5, y = 5$ -----1m  
 1m scales-----1m

### SECTION B(40 MARKS)

#### Question 5 (3+3+4)

a) If  $\cot 3x = \sin 45^\circ \cos 45^\circ + \cos 60^\circ$ ; find the value of x between  $0^\circ$  and  $90^\circ$

$$\cot 3x = 1/\sqrt{2} \times \frac{1}{\sqrt{2}} + \frac{1}{2} \text{-----1m}; 3x = 45^\circ \text{-----1m} \quad x = 15^\circ \text{-----1m}$$

b) The circle with centre (x, y) passes through the point (3, 11), (14, 0) and (12, 8). find the values of x and y.

$$OA = OB = OC; x - y = 3 \text{-----1m}; x - 4y = -3 \text{-----1m}; x = 5, y = 2 \text{(both correct 1m)}$$

c) Some money is to be distributed equally among children of a locality. If there are 8 children less, everyone will get Rs. 10 more and if there are 16 children more, everyone will get Rs. 10 less. What is the total amount of money to be distributed?

$$a/b - 8 - a/b = 10 \text{-----1m}; a/b - a/(b+16) = 10 \text{-----1m}; b = 32 \text{-----1m}, a = \text{rs } 960 \text{-----1m}$$

#### Question 6 (3+3+4)

a) Find the value :  $\sqrt{\frac{1 - \sin^2 60^\circ}{1 - \cos^2 60^\circ}}$

$$\sqrt{\frac{\cos^2 60^\circ}{\sin^2 60^\circ}} \text{-----1m}; \sqrt{\left(\frac{1}{\sqrt{3}}\right)^2} \text{-----1m}; 1/\sqrt{3} \text{-----1m}$$

b) Solve:  $\frac{x}{a} + \frac{y}{b} = a + b$

$$\frac{x}{a^2} + \frac{y}{b^2} = 2$$

Standard form of equation-----1m;  $x=a^2$  -----1m , $y=b^2$  -----1m

c)Solve for x: (i)  $9^{x+2}=720+9^x$

(i) $9^x(9^2-1)=720$ -----1m;  $x=1$ -----1m t(ii)  $4^{x-2}-2^{x+1}=0$

solution:- $(2 \times 2)^{x-2} = 2^{x+1}$ -----1m;  $2x-4=x+1$ ;  $x=5$  -----1m

**Question 7 (3+3+4)**

a)If  $A= 30^\circ$  Show that  $\frac{1-\cos 2A}{\sin 2A} = \tan A$  ;  $\frac{1-\cos 60^\circ}{\sin 60^\circ}$ -----1m; value of  $\cos 60^\circ, \sin 60^\circ$  (both correct) -----1m prove ----1m

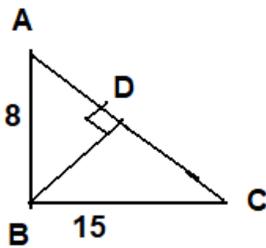
b)Find the magnitude of angles A if:

$$2\cos^2 A - 3\cos A + 1 = 0$$

$2\cos^2 A - 2\cos A - \cos A + 1 = 0$  -----1m;  $\cos A = 1, \cos A = 1/2$  (both correct) -----1m;  $A = 0^\circ, 60^\circ$ -----1m

c) In the adjoining figure ,triangle ABC is right angled at B and BD is perpendicular to AC,find:

(i) $\cos \angle ABD$  (ii) $\tan \angle DBC$ .



Ac---1m; process----1m  $\cos \angle ABD$  -----1m,  $\tan \angle DBC$  -----1m

**Question 8(3+3+4)**

a)Solve, using cross multiplication:

$$2x + 3y - 17 = 0$$

$$2y - 6 = 0$$

3x -

$x/-52 ; y/-39 ; 1/-13$  any one correct 1m

$x=4$ ---1m; $y=3$ -----1m

b) b)Draw graph of linear equation  $4x-3y+12=0$ . Use graph drawn to find (i) y, when  $x= -3$

(ii) x, when  $y=4$

Solution:plotting -----1m ;(i) $y$ ----1m (ii)  $x= 1$ m

c)(i) simplify: i)  $\frac{x^{-1}y^{-1}}{x^{-1}+y^{-1}}$  (ii)  $\sqrt{\frac{p}{q}} = \left(\frac{q}{p}\right)^{1-2x}$

(i) solution:- $(\frac{1}{xy}) / (\frac{1}{x} + \frac{1}{y})$ ----1m; $1/(x+y)$ -----1m

(ii)  $(p/q)^{1/2} = (p/q)^{-(1-2x)}$  -----1m;  $x=3/4$ ---1m

**Subject:- Physics**

**Marking Scheme of Physics**

**MARKING SCHEME**

**CLASS – 9**

**SUB – PHYSICS**

**SESSION – 2020 – 21**

**MARKS – 80**

**SECTION A [40 MARKS]**

Q1. a) i) Any one difference one mark [1]

Fundamental unit	Derived unit
It is independent of any other unit or it can neither be related nor can be changed to any other fundamental unit.	It depend on the fundamental unit or it can be expressed in terms of fundamental units.
Eg. Mass, time ,length, temperature etc.	Eg. Area , volume , speed etc.

- ii) Astronomical unit. [1]
- b) i)  $ms^{-2}$  ii)  $kg\ m\ s^{-1}$  or N s [2]
- c) Frequency =  $0.5s^{-1}$  [1]  
Seconds' pendulum [1]
- d) i) time period gets doubled [1]  
ii) time period gets doubled [1]
- e) i) The time period of oscillation is inversely proportional to the square root of acceleration due to gravity. [1]  
ii) The time period of oscillation does not depend on the mass of the bob. [1]

Q2.

- a) One complete to and fro motion of the pendulum is called one oscillation. [1]  
 $f = \frac{1}{T}$  [1]
- b) Effective length of pendulum , acceleration due to gravity [2]
- c) Frequency =  $0.5\ s^{-1}$  Time period = 1.5 s [2]
- d) Distance = speed × time [1]  
 $= 3 \times 10^8\ m/s \times 60\ s$  [1]  
 $= 1.44 \times 10^8\ km$  [1]
- e) 640 nm [1]  
 $6.4 \times 10^{-7}\ m$  [1]

Q3.

- a) The shortest distance between the final and initial position. [1]  
If a body, after travelling, comes back to its starting point, the displacement is zero but the distance travelled is not zero. [1]
- b) If the velocity of a body moving in a particular direction changes with time, the ratio of displacement to the time taken in entire journey is called its average velocity. [1]  
When the body moves with uniform speed, the instantaneous speed and the average speed are equal. [1]
- c) Speed = 25 m/s [1]  
Velocity = 25 m/s due east [1]
- d)  $u = 0$ ,  $a = 2 \text{ m/s}^2$ ,  $t = 2\text{s}$   
 $S = ut + \frac{1}{2}at^2$   
 $= 0 + \frac{1}{2} \times 2 \times 4$  [1]  
 $= 4 \text{ m}$  [1]
- e)  $v = u - at$  [1]  
 $S = ut - \frac{1}{2}at^2$  or  $v^2 = u^2 - 2aS$  [1]

Q4.

- a) i) it causes a change in its dimensions and produce motion in it. [1]  
ii) it does not change the dimension of the object, but causes only the motion in it. [1]
- b) i)  $m \Delta v$  ii)  $\Delta(mv)$  [2]
- c) Inertia of a body depends upon the mass of the body. [1]  
More the mass, more is the inertia. [1]
- d) Linear momentum of a body is the product of its mass and velocity. [1]  
S.I. unit of linear momentum is  $\text{kg m s}^{-1}$  [1]
- e) According to Newton's second law of motion, the rate of change of momentum of a body is directly proportional to the force applied on it and the change in momentum takes place in the direction in which the force is applied. [1]  
When the mass of the body remains constant. [1]

### **SECTION B [40 MARKS]**

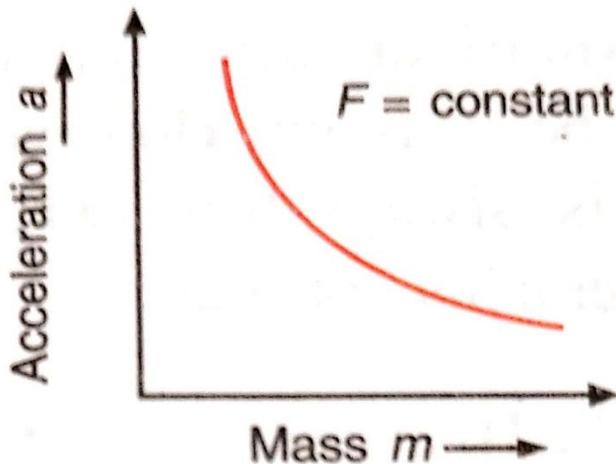
Q5.

- a) Gravitational constant  $G$  is numerically equal to the magnitude of force of attraction between the two masses each of 1 kg placed at a separation of 1 m. [1]  
 $G = 6.67 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$  [2]
- b) The rate at which the velocity of a freely falling body increases, is called the acceleration due to gravity. [1]  
 $g = 9.8 \text{ m s}^{-2}$   $g = \frac{GM}{R^2}$  [2]
- c)  $t = 3\text{s}$   $g = 9.8 \text{ ms}^{-2}$   $u = 0$
- i)  $h = ut + \frac{1}{2}gt^2$   
 $= 0 + \frac{1}{2} \times 9.8 \times 3 \times 3$  [1]  
 $= 44.1 \text{ m}$  [1]
- ii)  $v = u + gt$   
 $= 0 + 9.8 \times 3$  [1]

= 29.4 m/s [1]

Q6.

- a) i) Force exerted on the bullet (action), the gun experiences an equal recoil (reaction). [1]  
 ii) Force that hammer exerts on the nail (action), the force the nail exerts on the hammer (reaction) [1]  
 iii) Force applied by the person by his foot on the ground against the force of friction (action), the ground exerts an equal and opposite force forward on his foot (reaction). [1]
- b) If a given force is applied on bodies of different masses, the acceleration produced in them is inversely proportional to their masses. [1]  
 For writing mass and acceleration along x-axis and y-axis [1]  
 For drawing the curve of the graph. [1]



- c)  $F = 10\text{N}$ ,  $m = 2\text{kg}$ ,  $t = 3\text{s}$ ,  $u = 0$   
 $F = m \times a$   
 $a = \frac{F}{m} = \frac{10\text{N}}{2\text{kg}} = 5\text{ m s}^{-2}$  (one mark along with the unit) [1]  
 $v = u + at$   
 $= 0 + 5 \times 3 = 15\text{ m/s}$  (one mark along with the unit) [1]  
 Change in momentum =  $mv - mu$   
 $= 2 \times 15 - 2 \times 0$  [1]  
 $= 30\text{ kg m s}^{-1}$  (one mark along with the unit) [1]

Q7.

- a) The property of an object by virtue of which it neither changes its state nor it tends to change its state is called inertia. [1]  
 Motion remains unaffected [1]  
 Reason – Net force on the object is zero. [1]
- b) The magnitude of non – contact force depends upon the distance. [1]  
 Magnitude of force decreases as the distance increases. [1]  
 Force will become four times. [1]
- c)  $u = 0$ ,  $s = 270\text{ m}$ ,  $t = 3\text{s}$   
 $S = ut + \frac{1}{2}at^2$   
 $270 = 0 + \frac{1}{2} \times a \times 3 \times 3$  [1]

$$a = 60 \text{ m s}^{-2} \quad [1]$$

$$v = u + at$$

$$= 0 + 60 \times 10 \quad [1]$$

$$= 600 \text{ m/s} \quad [1]$$

Q8.

a) Retardation is the negative acceleration i.e. the velocity of the body decreases with time. [1]

S.I. unit of retardation =  $\text{m s}^{-2}$  [1]

The positive or negative sign of acceleration tells us whether the velocity is increasing or decreasing with time. [1]

b)  $S = 100 \text{ m}$ , avg velocity =  $20 \text{ m/s}$ , final velocity;  $v = 25 \text{ m/s}$

$$\text{Avg velocity} = \frac{v+u}{2}$$

$$20 = \frac{25+u}{2}$$

$$u = 15 \text{ m/s} \quad [1]$$

$$a = \frac{v^2 - u^2}{2s} = \frac{(25)^2 - (15)^2}{2 \times 100} \quad [1]$$

$$= 2 \text{ m s}^{-2} \quad [1]$$

c)  $\text{Time}_1 = \frac{30 \text{ km}}{60 \text{ km/hr}} = 0.5 \text{ hr}$

$$\text{Time}_2 = \frac{30 \text{ km}}{40 \text{ km/hr}} = 0.75 \text{ hr}$$

$$\text{Total time} = 0.5 \text{ hr} + 0.75 \text{ hr} = 1.25 \text{ hr} \quad [2]$$

$$\text{Avg speed} = \frac{\text{Total distance}}{\text{Total time taken}} = \frac{600 \text{ km}}{1.25 \text{ hr}} \quad [1]$$

$$= 48 \text{ km/hr} \quad [1]$$

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## Subject :- Chemistry

### Marking Scheme of Chemistry

SELF ASSESSMENT 1(2020-21)  
ST.XAVIER'S SCHOOL,RANCHI

CLASS:9  
SUB:CHEMISTRY

F.M:80  
TIME:2HRS

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#### SECTION A (40 MARKS)

**Q1. FILL IN THE BLANKS:** (1 marks each)

1. With increase in temperature, solubility of gases \_\_\_\_\_. (**decreases/increases**)
2. The solute particles in a true solution are of the size \_\_\_\_\_. (  **$10^{-10}\text{m}/10^{-10}\text{cm}$** )
3. Metals are good \_\_\_\_\_ agents. ( **oxidising agents/reducing agents**)
4. Magnesium chloride has \_\_\_\_\_ bonding. (**electrovalent/covalent**)
5. The maximum number of electrons that the M shell can have is \_\_\_\_\_. (**8 / 18**)

**Q2. (a) The atom which:**

- (i) contains 7 protons **E** (1)
  - (ii) has electronic configuration 2,7 **B** (1)
- (b) the formula of the compound formed between C and D. **C<sub>2</sub>D** (1)
- (c) (i) metals **A,C** (ii) non-metals **B,D,E** (1+1)

**Q3. For the element  ${}_{17}\text{T}^{35}$  :** (1 mark each)

- (i) the electronic configuration of the element is **2,8,7**
- (ii) the group number of the element is **17**
- (iii) its valency is **1**
- (iv) It is a **non-metal**
- (v) the period number of the element is **3**

**Q4. Name these:** (1 mark each)

- (i) An element whose properties were predicted on the basis of its position in Mendeleev's periodic table **GALLIUM/ GERMANIUM**
- (ii) An element whose atomic weight was corrected on the basis of its position in the periodic table. **GOLD/ PLATINUM**
- (iii) A radioactive element **URANIUM/ THORIUM OR ANY OTHER ACTINIDE**
- (iv) A drying agent **ANHYDROUS CALCIUM CHLORIDE/ANHYDROUS ZINC CHLORIDE/PHOSPHOROUS PENTOXIDE/MAGNESIUM SULPHATE/DRY SODIUM SULPHATE**
- (v) A dehydrating agent **CONC. SULPHURIC ACID, PHOSPHOROUS PENTOXIDE, SILICA GEL/QUICKLIME**

**Q5.Fill in the blanks with suitable words:** (1 MARK EACH)

1. On moving across a period from left to right, the atomic size **INCREASES**, while it **DECREASES** while moving down a group.
2. A noble gas with duplet arrangement of electrons is **HELIUM**.

3. An alkaline earth metal of period 3 is **MAGNESIUM**.
4. The number of valence electrons **REMAINS SAME** as we move down a group.
5. The basis of Mendeleev's periodic table was periodicity in **ATOMIC MASS**.

**Q6. Identify the efflorescent, deliquescent and hygroscopic substances from the following:**

- (i) Zinc chloride **DELIQUESCENT (1)**
- (ii) Epsom salt **EFFLORESCENT (1)**
- (iii) Phosphorus pentoxide **HYGROSCOPIC (1)**
- (iv) Quicklime **HYGROSCOPIC (1)**
- (v) Caustic potash **DELIQUESCENT (1)**

Q7. (a) Name an element of group 18 which can form compounds. **XENON (1 MARKS EACH)**

(b) What do we call the compound formed by halogens with other elements? **HALIDES**

(c) What is the general name of group 1 elements? **ALKALI METALS**

(d) State the number of periods and groups in the modern periodic table.

**7 PERIODS AND 18 GROUPS**

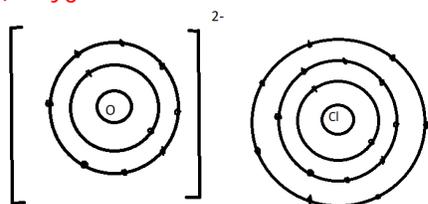
(v) Name the set of elements in the 7<sup>th</sup> period and 3<sup>rd</sup> group which start with actinium. **ACTINIDES**

**Q8. Draw the orbital structure of the following:**

**(1 mark each)**

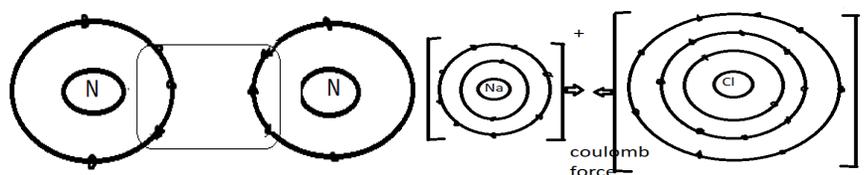
(i) Oxygen ion

(ii) chlorine atom

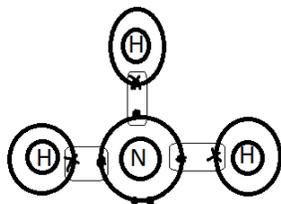


(iii) Nitrogen molecule

(iv) sodium chloride



(v) Ammonia



### **SECTION B (40 MARKS)**

Q1. (a) Isotopes are the atoms of the same element having the same atomic number but different mass numbers. (1)

Electrovalent bond is a bond formed as a result of transfer of electrons from one atom of an element to one atom of another element./Bonds formed between metals and non-metals is called electrovalent bond. (1)

Chemical bond is the force of attraction between the two atoms that binds them together as a unit called molecule. (1)

(b) Give reasons: (1 mark each)

(i) Physical properties of isotopes are different. Because they have different atomic masses and physical properties are dependant on atomic mass.

(ii) Argon does not react. Because it has a stable configuration/ a complete octet

(iii) Isotopes show similar chemical reactions. Because they have the same number of valence electrons

(c) Taking  $MgCl_2$  as an electrovalent compound and  $CCl_4$  as a covalent compound, give four differences between electrovalent and covalent compounds.

(1) Electrovalent compounds conduct electricity whereas covalent compounds do not.

(2) Electrovalent compounds have higher melting points and boiling points than covalent compounds

(3) Electrovalent compounds exist as solids whereas covalent compounds may exist as solid, liquid or gas

(4) Electrovalent compounds are formed by the transfer of electrons whereas covalent compounds are formed by sharing of electrons.

Q2. (a) What is the difference between deliquescence and hygroscopy? Explain with an example.

Deliquescence is a property in which certain substances absorb moisture from the atmospheric air, become moist, lose their crystalline form and ultimately dissolve in the absorbed water to form a saturated solution. eg. Caustic soda, caustic potash etc.. (1 ½)

Hygroscopy is a property in which certain substances absorb moisture from the atmosphere when they are exposed to it. eg. quicklime, conc. Sulphuric acid etc.. (1 ½)

(b) Give three factors which affect the solubility of a solid solute in a solvent.

(1) size of solute particles (1)

(2) stirring (1)

(3) temperature (1)

(c) What are hydrated and anhydrous substances? Give two examples of each.

Hydrated substances are the crystals of certain salts which contain water of crystallisation. eg.  $Na_2CO_3 \cdot 10H_2O$ ,  $CuSO_4 \cdot 5H_2O$  (2)

Anhydrous substances are the substances which do not contain any water of crystallisation. Eg.  $NH_4Cl$ ,  $KNO_3$  (2)

Q3. (a) Name the method by which alkali metals can be extracted. Electrolysis (1)

Which are the first two alkali metals? Sodium, potassium (1)

What is their valency? one (1)

(b) Give reasons: (1 mark each)

(i) Group 17 elements are highly reactive. Because they have 7 electrons in their valence shell and require only 1 electron to complete their octet.

(ii) Group 18 elements are monoatomic. Because they have a complete octet

(iii) Group 2 elements are called alkaline earth metals. Because they form alkalis when dissolved in water and are obtained from the Earth.

(c) State four defects of Mendeleev's periodic table. (Any 4 points) (1 mark for each point)

(i) There were anomalous pairs. eg. Argon with atomic mass 39.9 precedes potassium with atomic mass 39.1

(ii) Isotopes were not assigned separate places

(iii) Grouping of Chemically dissimilar elements

(iv) Separation of chemically similar elements

(v) It does not explain electron arrangement of elements

(vi) Hydrogen was not given a fixed position

Q4. (a) Why did Mendeleev leave certain gaps in his periodic table of elements? Explain your answer with an example. Mendeleev left certain gaps in his periodic table to ensure that elements having similar properties fell in the same vertical column or group. These gaps were left for subsequent inclusion of elements not known at that time. (2)

eg. Eka aluminium was predicted whose properties are similar to gallium. (1)

(b) A, B and C are the elements of a Dobner's triad. If the atomic mass of A is 7 and that of C is 39, what should be the mass of B? 23 (1)

Why was Dobner's triad discarded?

It was discarded because

(i) Dobner failed to arrange all the then elements in the form of triads (1)

(ii) The law did not fully apply even within the same family. (1)

(c) State the following with reference to elements of first three periods of the periodic table: (1 mark each)

(i) A covalent compound formed by an element in period 2 and a halogen.  $\text{CCl}_4$

(ii) An electrovalent compound formed by an alkaline earth metal and a halogen.  $\text{MgCl}_2/\text{CaF}_2$

(iii) Metalloid in period 3. Si

(iv) Noble gas having configuration 2,8,8 Ar

## Subject :- Biology

### Marking Scheme of Biology

#### ST. XAVIER'S SCHOOL, DORANDA

SAT - 2020

CLASS-IXBIOLOGY

Time : 2 HRS

TOTAL MARKS- 80

Attempt all questions from Section A and any four questions from section B  
The intended marks for the questions or parts of questions are given in brackets ( )

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**NOTE:** While correcting the answers, if a scientific name (eg. *Mangifera indica*) is mis-spelled then no marks shall be allotted. In case of a technical/scientific term (eg. Ptyalin, Sclerenchyma, Ileum) if the spelling is wrong but you are able to make out the term through its pronunciation, marks shall not be deducted otherwise no marks shall be allotted.

#### SECTION I

Attempt all the questions

Question 1:

(A) Fill in the blanks: (1 x 5 =5)

1. Absorption of food nutrients takes place in Small intestine/Ileum.
2. The enzyme present in saliva is Ptyalin/Salivary amylase
3. Cold blooded animals are also called as Poikilotherms
4.  $I_2C_1PM_2M_3/I_2C_1PM_2M_3 \times 2 = 32$  is the dental formula of human adult.
5. Double fertilisation takes place in Embryosac

(B) State whether following statements are true or false. If false then **rewrite** the correct statement by changing the underlined word. (1 x 5 = 5)

**NOTE: IF THE STATEMENT IS FALSE AND ITS NOT STATED EVEN THOUGH THE CORRECT STATEMENT IS WRITTEN, STILL NO MARKS SHALL BE ALLOTTED**

1. Plasma membrane is made up of cellulose. (False, lipid and protein/lipo-protein)
2. Sclerenchyma is present in soft parts of plants. (false, Parenchyma)
3. Pollination by insects is termed as anemophily. (False, Entomophily)
4. Striated muscles are also known as involuntary muscles. (False, Unstrained or smooth)
5. In Pistillate flowers stamen and carpel both are absent. (false, Neuter)

(C) Define following Terms: (1 x 5 = 5)

1. Emulsification : Process of breakdown of fat molecules into tiny droplets.
2. Balanced Diet: The diet which contains all the principal constituents of food in proper quantity.
3. Fertilisation: Process of fusion of nuclei of male and female gamete.
4. Antagonistic muscle: The muscles which cannot return to its original position without the action of another muscle.

5. Conducting tissue: The tissue which is responsible for conduction of water, minerals and food in plants.

(D) Match the Column

(1 x 5 = 5)

- |                              |                         |
|------------------------------|-------------------------|
| a. Endoplasmic Reticulum (2) | 1. Suicide bags         |
| b. Centrosome (3)            | 2. Structural Framework |
| c. Mitochondria (5)          | 3. Aster rays           |
| d. Lysosome (1)              | 4. cellulose            |
| e. Cytoplasm (4)             | 5. ATP                  |

(E) Differentiate between following:

(1 x 5 = 5)

**NOTE: MARKS SHALL BE ALLOTTED ONLY IF BOTH THE TERMS ANSWERED ARE CORRECT**

1. Pelvic and Pectoral girdle ( Location): in hip / in shoulder
2. Autogamy and Geitonogamy (process): pollination in same flower /pollination between two different flower of same plant.
3. Albinism and Leucoderma (colour of skin): complete loss of melanin pigment/ melanin lost in patches.
4. Trypsin and Steapsin (Action): Digest protein / digests lipid or fat
5. Ribosome and Lysosome (function): Protein synthesis / intracellular digestion.

(F) Write one specific function performed by the following:

(1 x 5 = 5)

1. Liver ( in digestion): secretes bile which helps in emulsification of fats.
2. Nucleolus: Synthesis of RNA so participates in protein synthesis
3. Epiglottis: it closes the opening of wind pipe during swallowing of food
4. Nectaries: It secretes nectar to attract insects for pollination.
5. Ribs: protects the delicate lungs and heart. It helps in inhalation and exhalation.

(G) Choose the odd one out of the following terms given and name the category to which other belong:-

(1 x 5 = 5)

**NOTE: BOTH THE ODD TERM AND CATEGORY SHOULD BE CORRECT THEN ONLY ONE MARK SHALL BE ALLOTTED**

1. Herkogamy, Dichogamy, Heterostyly, Cleistogamy, Self sterility.- (Cleistogamy, rest are conditions for cross pollination)
2. Niacin, Retinol, Glycogen, Ascorbic acid, Folic acid: (Glycogen, rest are vitamins)
3. Lumbar, Sacral, Scapula, Cervical, Thoracic.: (Scapula, rest are vertebrae or bones of vertebral column)
4. Capsule, Mesosome, Nucleus, Flagella, Ribosome.( Nucleus, rest are components of Prokaryotic cell/Bacterial cell)
5. Companion cell, Tracheid, Sieve tube, Sieve plate.(Tracheid, rest are components of phloem)

(H) Give the biological terms for the following:- (1 x 5 = 5)

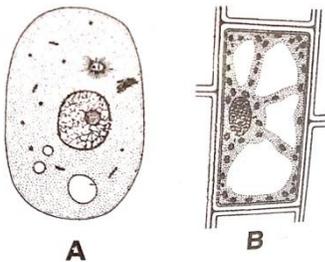
1. The principle heat regulating centre located in the brain. (Hypothalamus)
2. If stamens are united in one group by their filament then condition is termed as (Monoadelphous)
3. The pattern of arrangement of ovules in the wall of ovary is termed as (Placentation)
4. The process of conversion of the absorbed digested food into body material is termed as (Assimilation)
5. The plant tissue responsible for growth in girth is (Cambium or lateral meristem)

### Section II

#### Attempt any four questions

Question 2:

(A) Study the given diagram and answer the following questions



- a. Identify the given cells A & B, give reasons for identification.
- b. Write two similarities common to both the cells.
- c. Write 4 major differences between A & B

a. cell A is animal cell because it has centrosome and cell membrane is absent, Cell B is plant cell due to presence of cell wall plastids and large vacuole. (2)

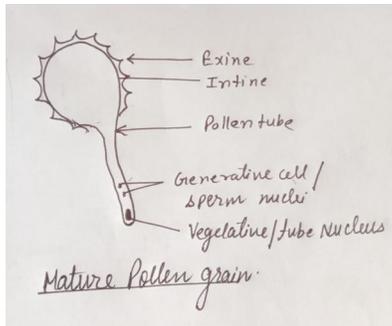
b. both have cell membrane and nucleus, vacuole. (1)

c. A	B	(½ X4 = 2)
Cell wall is not present	cell wall is present	
Centrosome present	centrosome is not present	
Plastids are not present	plastids are present	
Vacuoles are smaller in size	vacuoles are larger in size	

(B) Name the kind of tissue found

- a. In the inner lining of intestine (Columnar Epithelium) (½)
- b. At the joint between two long bones ( Ligament) (½)
- c. As gritty masses in the pulp of pears. (Sclereid/ stone cells) (½)
- d. Surface of the human skin (stratified epithelium) (½)
- e. Duct of Salivary gland (Cuboidal Epithelium) (½)
- f. Inner lining of the wind pipe. (Ciliated columnar epithelium) (½)

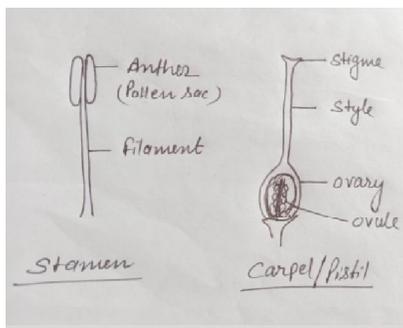
(C) Draw a well labelled diagram of Mature pollen grains (1 + 1)



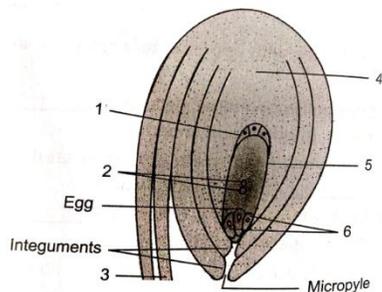
Question 3:

(A) Draw well labelled diagrams of a Stamen and a Carpel. Show their parts and state the function of each of them. Give one example of a hermaphrodite flower.

{(Stamen Diagram+ Produces pollen grain) 2, (Pistil, produces egg) 2, Mustard, china rose 1}



(B) Observe the given figure and answers the following questions:



a. Identify the given figure (ovule) (1)

b. Label the parts 1 to 6

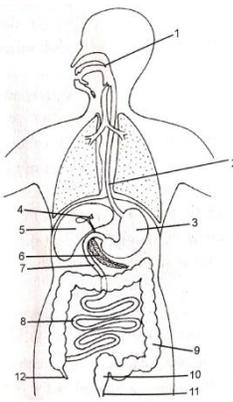
1- Antipodals, 2- polar nuclei, 3 – Funicle, 4 – Nucellus, 5 – embryonic sac, 6 – synergids (3)

c. What is the fate of given structure 4 and 2 after fertilisation (½ + ½ = 1)

4= food laden cells

2= formation of endospermic nucleus/secondary nucleus.

Question 4:



Observe the figure given below and answer following questions :(10)

a. What does this figure show (Digestive system) (1)

b. Label the parts 1 to 12.

1- Pharynx

2- Oesophagus

- 3- Stomach
- 4- Gallbladder
- 5- Liver
- 6- Pancreas
- 7- Duodenum
- 8- Ileum
- 9- Descending colon
- 10- Rectum
- 11- Anus
- 12- Vermiform appendix

(½ X 12 = 6)

c. Mention the functions of part 1,3,4,6,8 and 9

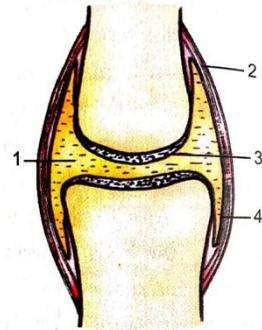
- 1- Common passage for food and water
- 3- digestion of protein/ storage of food
- 4- stores bile juice
- 6- releases pancreatic juice for digestion of sugar, protein and fat
- 8- final digestion of all food nutrients and absorption of digested food
- 9- Absorption of excess of water

(½ X 6 = 3)

Question 5:

(A) Study the given figure and answer the following questions:

(5)



a. Name the type of joint shown in figure (synovial joint) (1)

b. Label the parts 1 to 4

1- Synovial fluid

2- Ligament

3- Cartilage

4- Synovial membrane

(2)

c. Where does the above type of joint found in human body

(knee and elbow)

(1)

d. Differentiate between true ribs and false ribs. (pair)

True

false

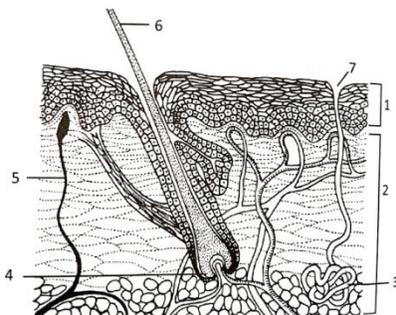
ribs 1-7 pairs

8,9&10<sup>th</sup> pair

(1)

(B) Study the given figure and answer the following questions

(5)



a. Label the parts 1 to 7

1. Epidermis

2. Dermis

3. Sweat gland

4. Hair bulb

5. Sensory corpuscle

6. Hair shaft

7. Sweat pores (3.5)  
 b. State the function of part 1, 3, & 5 (1.5)  
 1- Protection 3- production of sweat 5- sensation

Question 6

(A) Fill in the blanks in table (5)

Regions of Alimentary Canal	Digestive glands	Digestive juice produced	Enzymes in the juice	Class of food acted upon	Substances produced
Mouth	Salivary glands	Saliva	Salivary amylase (ptyalin)	I	Maltose
Stomach	Gastric glands (in stomach)	Gastric juice	II	Proteins milk protein	Peptides coagulation of milk (curdling)
Duodenum	Pancreas	Pancreatic juice	Trypsin	Proteins and peptides	III
			Amylase	IV	Maltose
			Lipase	Fats	V

- 1- Starch (1)  
 2- Pepsin and Rennin ( $\frac{1}{2}+\frac{1}{2}$ )  
 3- Smaller peptides and amino acids ( $\frac{1}{2}+\frac{1}{2}$ )  
 4- Starch (1)  
 5- Fatty acids and glycerol ( $\frac{1}{2}+\frac{1}{2}$ )

(B) Write the significance of the following (1 x 5 =5)

- a. Presence of curved vertebral column in humans.  
 To maintain body balance in an erect position, absorbs pressure and shock while walking and protects the vertebral column from breaking.
- b. Lacteals in the intestinal villi.  
 Helps in absorption of fatty acid and glycerol.
- c. Biceps and triceps working as antagonistic muscles.  
 These muscles are present in pair which work oppositely.
- d. In maize flowers stamens are long, anthers are loosely attached and pollens are produced in large quantities.  
 Long stamens = to be exposed to wind, Anthers loosely attached = lightest wind may move them, many pollen grains = as many may be lost on the way and few may be only reaching another flower.
- e. Bone are hard porous tissue.

Hard= due to deposition of calcium salts in the matrix, Porous= due to supply of blood vessels and nerves.

**COMPUTER APPLICATIONS**  
**SECTION A**  
*Attempt all questions*

**Question 1.**

[2x4=8]

a) What is an Operator?

**Operators are the entities or symbols that tell the compiler that what operation has to be performed with one, two or three number of operands within a given expression. Ex. +, -, &&, ||**

b) Mention any 2 Differences between Prefix and Postfix.

PREFIX	POSTFIX
the value of the operand is first increased or decreased as the case may be and then used.	Decrement the value of the operand is first used and then increased or decreased as the case may be.
int a = 5; System.out.println(a++); Output: 5	int a = 5; System.out.println(++a); Output: 6

c) Mention any 2 arithmetic & 2 logical operator.

Arithmetic Operator: + -

Logical operator: &&, ||

d) What is ternary operator? Give one example.

**It is also known as a conditional operator, it is based on 3 operand. It checks a condition and depending upon a condition it excutes expression.**

**Example: bonus=sales>15000?250:50;**

e) Write syntax of nested if .. else?

```
if(condition 1)
{
    if(condition 2)
        Statement 1;
    else
        Statement 2;
}
else
{
    if(condition 3)
        Statement 3;
    else
        Statement 4;
}
```

**Question 2.**

[2x4=8]

a) Write any 2 differences between if..else and switch..case?

if .. else	switch..case
➤ <b>Results in a boolean type value i.e. true or false</b>	➤ <b>It results in int/char type value</b>
➤ <b>Any type of data can be used including floating.</b>	➤ <b>It is not suitable for floating point test.</b>

b) What is the difference between = and ==?

=	==
It is an Assignment operator.	It is a relational operator.
It stores a value,variable expression in a variable.	It is used for compare two entities.

c) What is fall through?

**The term "fall through" refers to the way the switch statement executes its various case sections. Every statement that follows the selected case section will be executed unless a break statement is encountered.**

d) What is case keyword?

**The case keyword is followed by an integer constant and a colon. This begins the statements that are executed when the switch expression has that case value.**

**Question 3.**

[2x4=8]

Write output of:

a) int a=2, b=6, c=10;

**a+=a++ + ++b + --c + b + b++ + ++b + c;**

System.out.println(a+" "+b+" "+c);

**Output: 52 9 9**

b) int k=1, m=6, r=4;

**k+=(--m%5)\*(m++ \* (10 + r++))**

**=1+**

**Output: 1 6 5**

c) int deposit=25000, interest=10;

System.out.println (deposit>25000? deposit-=5000 : (interest>=10 ? deposit+=15000 : 30000));

**Output: 40000**

d) int a=3,b=4,c=5,x=1;

```

switch(x)
{
    case 1:
        a++;
    case 2:
        b--;
    case 3:
        c+=2;
}
System.out.println(a+ " "+b+" "+c);
Output: 4 3 7

```

#### Question 4.

[2x4=8]

- a) State true or false :  $3-6 > -2 \ \&\& \ 7+2 < 16 \ || \ 2 >= 4-2$

**Output: true**

- b) Re-write the following code using switch code:

```

if(opt==1)
    System.out.println("Java");
else if (opt==2 || opt==3)
    System.out.println("C++");
else
    System.out.println("Python");

```

```

switch(opt)
{
    case 1:
        System.out.println("Java"); break;
    case 2: case 3:
        System.out.println("C++"); break;
    default:
        System.out.println("Python");
}

```

- c) Re-write the following code using if..else

```

switch(num)
{
    case 5:          num++;
        System.out.print(num);
    case 6:
        System.out.print("six");
    case 0: case 7:
        System.out.print("zero");
        break;
    case -1:
        System.out.print(num);
    default:

```

```

        System.out.print("case not matching");
    }
Answer:
if(num==5)
{
    num++;
        System.out.print(num);
        System.out.print("six");
        System.out.print("zero");
}
else if(num==6)
{
        System.out.print("six");
        System.out.print("zero");
}
else if(num==0 || num==7)
    System.out.print("zero");
else if(num== -1)
    System.out.print(num);
else
    System.out.print("case not matching");

```

d) Write expression of  $(a+b)^3 + (m+n)^{\frac{1}{3}}$   
**expression:** `Math.pow(a+b,3) + Math.pow(m+n,1/3)`

### SECTION B

**(Attempt any four questions from this Section.)**

*The answers in this Section should consist of the Programs in either Blue J environment or any program environment with Java as the base. 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. [ 12 x 4 = 48]*

Steps	Marks distribution
Class declaration	1
BufferedReader	1
Variable declaration	1
Correct input/function header	1
Correct calculation processing	3
correct condition	3
Correct output	2

#### Question 5.

Write a program to input principle, rate and time. Calculate and display the difference between Simple interest and compound interest.  $A = P \left( 1 + \frac{R}{100} \right)^T$

```

import java.io.*;
class q5

```

```

{
    public static void main(String args[]) throws IOException
    {
        BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
        double A,P,r,t,ci,si;
        System.out.println("Enter Principle, rate & time");
        P=Double.parseDouble(inp.readLine());
        r= Double.parseDouble(inp.readLine());
        t= Double.parseDouble(inp.readLine());
        A=P*(Math.pow(1+r/100,t);
        ci=A - P;
        si=(P*r*t)/100;
        System.out.println("Compound Interest = "+ci);
        System.out.println("Simple Interest = "+ci);
    }
}

```

#### Question 6.

Write a program for admission in a school following criteria is used. Input marks in English, maths and science and decide stream for admission:

Marks obtained in different subjects	Stream
English, Maths and Science >=80	Pure Science
English and Science>=80% Maths>=60%	Bio Science
English, Maths and Science>=60%	Commerce

```

import java.io.*;
class q6
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
        int eng,math,sci;
        System.out.println("Enter marks in English,maths & science");
        eng= Integer.parseInt(inp.readLine());
        math= Integer.parseInt(inp.readLine());
        sci= Integer.parseInt(inp.readLine());
        if(eng>=80 && math>=80 && sci>=80)
            System.out.println("Pure Science");
        else if(eng>=80 && sci>=80 && math>=60)
            System.out.println("Bio Science");
        else if(eng>=60 && math>=60 && sci>=60)
            System.out.println("Commerce");
    }
}

```

#### Question 7.

Write a program which will input month number and print season's name using switch..case according to the month number:

Month Number	Season's name
11,12,1	Winter
2,3	Spring
4,5,6	Summer
7,8	Rainy
9,10	Autumn.

```
import java.io.*;
class q7
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
        System.out.println("enter month number");
        int mn=Integer.parseInt(inp.readLine());
        switch(mn)
        {
            case 11: case 12: case 1:
                System.out.println("winter"); break;
            case 2: case 3:
                System.out.println("spring"); break;
            case 4: case 5: case 6:
                System.out.println("summer"); break;
            case 7: case 8:
                System.out.println("rainy"); break;
            case 9: case 10:
                System.out.println("autumn"); break;
            default:
                System.out.println("invalid input");
        }
    }
}
```

### Question 8.

Write a program using menu to convert Celcius to Fahrenheit and vice versa.

$$\frac{C}{5} = \frac{F-32}{9}$$

```
import java.io.*;
class q8
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
        double c,f; int ch;
        System.out.println("1. Celcius to Fahrenheit");
```

```

System.out.println("2. Fahrenheit to celcius");
System.out.print("Enter your choice ");
ch=Integer.parseInt(inp.readLine());
switch(ch)
{
case 1:
System.out.print("Enter celcius");
C=Double.parseDouble(inp.readLine());
f=9*c/5+32;
System.out.print("Fahrenheit "+f);
break;
case 2:
System.out.print("Enter Fahrenheit");
f=Double.parseDouble(inp.readLine());
c=5*(f-32)/9;
System.out.print("celcius "+f);
break;
default: System.out.println("invalid choice");
}
}

```

#### Question 9.

Write a program which will input a number of pen drive bought. The cost of each pen drive is Rs. 350 if the quantity is 10 or more, otherwise Rs. 400. Find the amount to be paid. (use ternary operator)

```

import java.io.*;
class q9
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
        int n,r,amt;
        System.out.println("enter number of pen drive");
        n=Integer.parseInt(inp.readLine());
        r=n>=10:350:400;
        amt=n*r;
        System.out.println("amount="+amt);
    }
}

```

#### Question 10.

Write a program which will input 3 separate single digit numbers between 1 to 9. Display the greatest and smallest 3 digit number.

Sample Input: 2, 7, 4  
 Greatest 3 digit number : 742  
 Smallest 3 digit number: 247

```

import java.io.*;
class q10
{
    public static void main(String args[]) throws IOException

```

```

{
BufferedReader inp=new BufferedReader(new InputStreamReader(System.in));
int a,b,c,s1,s2,s3;
System.out.println("Enter 3 number");
a= Integer.parseInt(inp.readLine());
b= Integer.parseInt(inp.readLine());
c= Integer.parseInt(inp.readLine());
if(a>b && b>c)
{ s1=a; s2=b; s3=c; }
else if( a>c && c>b )
{ s1=a; s2=c; s3=b; }
else if( b>a && a>c )
{ s1=b; s2=a; s3=c; }
else if( b>c && c>a )
{ s1=b; s2=c; s3=a; }
else if( c>a && a>b )
{ s1=c; s2=a; s3=b; }
else if( c>b && b>a )
{ s1=c; s2=b; s3=a; }
int mx=s1*100 +s2*10 +s3;
int mn=s3*100 + s2*10 + s1;
System.out.println("Greatest 3 digit number :"+mx);
System.out.println("smallest 3 digit number :"+mn);
}}

```

