ST. MICHAEL'S SR. SEC. SCHOOL, PUSA ROAD, NEW DELHI
FINAL TERM EXAMINATION (2023-24)
SAMPLE PAPERS, CLASS: VIII

TIME: 2hrs. 30min.   **MM: 60**
ENGLISH
General Instructions:
1. The question paper consists of four sections.
2. All questions are compulsory to attempt.
3. You may attempt any section at a time.
4. All questions of that particular section must be attempted in the correct order.

(READING COMPREHENSION– 10 Marks)
1. Read the following passage carefully and answer the questions that follow: (5 Marks)

The most characteristic feature of spiders is their ability to produce silken threads. Spiders normally have six finger-like silk glands, called 'spinnerets' located beneath their abdomen. To spin a web, the spider squeezes the silk out of its body through two small holes. The liquid silk is thicker than water and dries into a fine thread as soon as it comes in contact with air. Spider silk is much stronger than steel and resists breakage because of its elasticity. It can stretch up to 140 percent of its original length. The diameter of these silken threads is about 10,000 of an inch.

Spiders use this silk to make webs to trap their prey. The egg sacs of some spiders are also made of silk which protects the unborn spider. Sometimes the spider can also use its silk as a safety feature. A certain species of spider 'phidippus apacheanecs' trails a safety line of fine silk as it jumps. It uses the silk line to recover if it misses its target. The silk of 'Naphils Spider' is the strongest natural fiber known.

The spinning of webs is a remarkable example of instinctive behavior. A spider does not have to learn how to make a web, although spinning itself can be adopted to unique circumstances. For example 'orb' webs are circular in shape and take about an hour to build. Funnel spiders spin a net-like entrance to their homes, which helps to trap food. Similarly, trap door spiders dig their homes and spin a trap door out of their silk for trapping insects.

A. On the basis of your reading, answer these questions by choosing the most appropriate option: **(2x1=2)**

a) Which of the following can be a suitable title for this passage?
- i)   Spiders and their Web-Craft
- ii) Different Species of Spider
- iii) Silk and Spiders
- iv) No Pain, No Gain

b) **Assertion**: Spiders use the silk that comes out of their bodies to make webs to trap their prey.
   Reason: It's easy to trap the insects in webs than catching them other ways.
- i)   Both the Assertion and the Reason are correct.
- ii) Both the Assertion and the Reasoning are incorrect.
- iii) The Assertion is True but the Reasoning is False.
- iv) The Assertion is False but the Reasoning is True.

B. Answer the following question: (1)
a) What qualities of spider's silk gives it more strength than steel? Mention any two.

C. State True or False. (1)
a) Spider Silk is a good example of elasticity and stretchability.

D. Find the antonym of the given word from the passage: (1)

a) free

Q2. Read the poem carefully and answer the questions given below: **(5x1=5)**

Weavers, weaving at break of day,
Why do you weave a garment so gay?
Blue as the wing of a bluebird wild,
We weave the marriage-veils of a queen.

Weavers, weaving at fall of night,
Why do you weave a garment so bright?
Like the plumes of a peacock, purple and green,
We weave the robes of a new-born child.

Weavers, weaving solemn and still,
What do you weave in the moonlight chill?
White as a feather and white as a cloud,
We weave a dead man's funeral shroud.
                    -   Sarojini Naidu

A.On the basis of reading the poem, choose the correct option: **(1)**
  a) What do the weavers weave in the early morning?
  (i) a bright blue cloth   (ii) a dull grey cloth
  (iii) a soft white cloth   (iv) a red coloured veil

B. Fill in the blank: **(1)**
  a)The _____ is purple and green coloured.

C. Answer the following questions: **(2)**
  a)Whom does the poetess address in the poem?
  b)What do the weavers weave in the chilly moonlight?

D. Find the antonym of the given word from the passage: dull   **(1)**

SECTION B   (WRITING – 10 Marks)

Q3. Highlight the importance of proper garbage disposal with an aim to create awareness among the city residents. Write a letter regarding the same to the Editor of a local daily. You are Rubal of Karol Bagh, New Delhi.   **(5 marks)**

Q4. It was the happiest day of your life when your class teacher informed you that you have been selected as the 'Best Sportsperson of the Year'. You are thrilled as now you will receive the award at the Annual Day Celebration. Make a diary entry recording your feelings in it.
                                    Or
Advertisements have become a big business. They are promoted by celebrities drawn from various field like films, sports etc., leaving their influence on all people specially the young. Write an article on 'The Impact of Advertisements on the younger generation.'   **(5 marks)**

SECTION C (GRAMMAR – 20 Marks)

Q5. Identify the following whether they are positive, comparative or superlative *adjectives*: (2x1=2)

a) My brother's handwriting is worse than mine.

b) Friday is the best day of the week.

Q6. Fill in the blanks with correct *adverbs*: (2x1=2)

a) This dress is _____ long for me. (too/enough).

b) The audience was _____ moved by his performance. (rather/fairly)

Q7. Fill in the blanks with suitable *Prepositions*: (2x1=2)

a) I reached _____ the station safely.

b) He excels _____ teaching.

Q8. Fill in the blanks with suitable *Conjunctions*: (2x1=2)

a) I will help you _____ you tell the truth.

b) Walk carefully _____ you will trip on the rocks.

Q9. Do as directed: (2x1=2)

a) The teachers _____ (go) home. (Future Perfect Tense)

b) My mother _____ (cook) dinner. (Present Continuous Tense)

Q10. Fill suitable *verbs* in the following sentences: (2x1=2)

a) Annie and her brothers _____ at school. (is/are)

b) Either my mother or my father _____ coming to the meeting. (is/are)

Q11.Fill suitable *modals* in the following sentences: (2x1=2)

a) Take the raincoat as it _____ rain later. (would/might)

b) This is a hospital, and you _____ not talk loudly here. (must/could)

Q12. Fill in the blanks with the suitable form of *verbs* in the brackets: (2x1=2)

a) If you _____ (meet) Siya, _____ (give) her my best wishes. (First conditional)

b) If he _____ (invited) me I _____ (attend) his wedding. (Third conditional)

Q13. Identify whether the following sentences are simple, compound or complex: (2x1=2)

a) The sun looks amazing today.

b) If you are not ready with the song, it is better to let them know.

Q14. Change the following sentences into *indirect* form: (2x1=2)

a) She said, "Riya may come tomorrow."

b) She said to me, "Have you done your homework?"

SECTION D   (LITERATURE – 20 Marks)

Q15. Read the given extract and answer the following questions: (3x1=3)

> *"Thus, in the stilly night,*
> *Ere slumber's chain has bound me,*
> *Sad Memory brings the light*
> *Of other days around me."*

a) Name the poem and the poet of the above lines. (1)

b) Explain: 'slumber's chain'.   (1)

c) Why is the memory referred to as 'sad'? (1)

Q16. Read the given extract and answer the following questions: (3x1=3)

  'Well, he certainly likes kindergarten. He talks about it all the time.'

  a) Name the chapter and the writer of the above lines. (1)
  b) Who said the above line and to whom?   (1)
  c) What did the listener say then? (1)

Q17. Give meanings: (2x1=2)
  a) Smarting
  b) Obnoxious

Q18. Short answer-type questions: (3x2=6)
  a) Why does Swami decide to hand over the letter only in the evening?
  b) What was the news that first disappointed and later excited Chaplin? Why?
  c) How did the blossom respond to the poet's query?

Q19. Long answer-type questions: (2x3=6)
  a) 'The children are not given up for adoption. She treats them as her own…'- What is
     the significance of this fact and what does this tell us about Sindhutai's character?
  b) *All children in some form or another have genius; the trick is to bring it out.* Do you
     agree with Chaplin's views? Give reasons.

<u>विषय-हिंदी</u>

निर्देश- 1) प्रश्नों के क्रमांक सही लिखें।
       2) उत्तर सुंदर लेख में लिखें।

प्रश्न-1 निम्नलिखित अपठित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए- (1X4=4)

किसी ने सच कहा हैं कि संसार फूलों कि नहीं,काँटों कि शैय्या हैं। जीवन रुपी संग्राम में केवल वे ही मनुष्य विजय प्राप्त करते हैं , जो संतोष ,धैर्य ,बुद्धि और वीरता से काम लेते हैं। जीवन में पग पग पर बाधाएं तथा कठिनाइयाँ आती हैं। उनको पार कर सफलता प्राप्त करना सरल कार्य नहीं हैं। मनुष्य का बचपन तो खेलकूद में ही व्यतीत हो जाता हैं। उस अवस्था में किसी प्रकार कि चिंता नहीं होती। परन्तु जब वह कुछ बड़ा होता हैं ,तो विद्या -अध्ययन आरम्भ होता हैं। इसी समय में उसका जीवन संग्राम आरम्भ हो जाता हैं। जिसका संकल्प सच्चा हैं, वही इस संघर्ष में विजयी होता हैं। जीवन में विपत्तियां सभी को सहनी पड़ती हैं। जीवन में भले ही कितने संकट आएँ ,परन्तु जो व्यक्ति अपने मार्ग से विचलित नहीं होता, जो कष्टों का साहस से सामना करता हैं , जो यह मानता हैं कि कर्म ही जीवन हैं और यह जानकार सदा कर्म ,प्रयत्न ,साहस और उद्योग में लगा रहता हैं,वस्तुतः उसी मनुष्य का जीवन सफल होता हैं।

    प्रश्न-i)जीवनरूपी संग्राम में किस प्रकार के मनुष्य विजय प्राप्त करते हैं ?
    प्रश्न-ii) जीवन कि किस अवस्था में किसी भी प्रकार कि चिंता नहीं रहती ?
    प्रश्न-iii)जीवनरूपी संघर्ष में कौन विजयी होते हैं ?
    प्रश्न-iv)किस मनुष्य का जीवन सफल हैं ?

प्रश्न-2 निर्देशानुसार उत्तर दीजिए -
i) निर्देशानुसार उत्तर दीजिये - (1+1)
      1) अनेक शब्दों के लिए एक शब्द लिखिए -क)जिसका अंत न हो
      2)एकार्थक प्रतीत होने वाले शब्दों के केवल अर्थ लिखिए -क)अभिमान ,अहंकार
ii)क)काल से आप क्या समझते है ? (2)
   ख)मुरारी भजन गा रहा है। (वर्तमान काल में परिवर्तन कीजिये)

iii)क)क्रिया -विशेषण किसे कहते है ?उदाहरण सहित स्पष्ट कीजिये - (2)

   ख)क्रिया-विशेषण शब्द छाँटकर लिखिए - सुमित बहुत हँसता है।

iv)क)अनुप्रास अलंकार की परिभाषा उद्धरण सहित लिखिए ? (2)

   ख)अलंकार का भेद पहचान कर लिखिए – तीन बेर कहती थी ,वे तीन बेर कहती है।

v)निम्नलिखित मुहावरों का अर्थ लिखे - (1)

   क)दांत खट्टे करना

vi)अशुद्ध वाक्यों को शुद्ध कीजिये - क)लड़का ने पत्र लिखा (1)

vii)संधि कीजिये - (2)

      क) पो + इत्र

      ख) यथा + एव

viii)नीचे दिए गए शब्द समूह के लिए समस्त पद लिखिए – (2)

      क)पुरुषों में उत्तम है जो

      ख)सत्य के लिए आग्रह

ix) क)उपसर्ग से एक शब्द बनाये – कु (2)

   ख)प्रत्यय से एक शब्द बनाये - वाला

x) क)वर्णमाला किसे कहते है ? (2)

   ख)वर्ण विच्छेद कीजिये -प्रसाद

xi) दो-दो पर्यायवाची शब्द लिखिए -कपड़ा, आकाश। (2)

प्रश्न-3 निम्नलिखित पद्यांश को पढ़कर उस पर आधारित प्रश्नों के उत्तर लिखिए- (1X3=3)

    मैं उन्मत्त प्रेम कि लोभी हृदय दिखाने आयी हूँ।

    जो कुछ है, वह यही पास है ,इसे चढ़ाने आयी हूँ।।

    चरणों पर अर्पित है ,इसको चाहो तो स्वीकार करो।

    यह तो वस्तु तुम्हारी ही है। ठुकरा दो या प्यार करो।।

    प्रश्न-i)कवयित्री स्वयं को क्या कहती है ?

    प्रश्न-ii)काव्यांश कि कवयित्री का नाम क्या है ?

    प्रश्न-iii)कवयित्री लोभी हृदय को कहाँ अर्पित करना चाहती हैं ?

प्रश्न-4 निम्नलिखित पठित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए- (1X3=3)

    मनु को दया आ गयी और पानी में अपने हाथों की अंजलि बना कर उन्होंने नन्हीं मछली को उसमे भर लिया। फिर वे घर गए और एक छोटे से मिट्टी के पात्र में उसे डाल दिया। प्रतिदिन वे उसे भोजन लाकर देते और एक बच्चे के सामान उसकी देखभाल करते। नन्हीं मछली दिन दूनी रात चौगुनी बढ़ने लगी और जल्दी ही इतनी बड़ी हो गयी कि मनु ने उसे मिट्टी के पात्र से निकाल कर एक तालाब में डाल दिया। शीघ्र ही तालाब भी मछली के लिए छोटा पड़ने लगा। वह बढ़ती ही गई।

    प्रश्न- i)मनु ने मछली को किस में भर लिया ?

    प्रश्न – ii)नन्हीं मछली कैसे बढ़ने लगी ?

    प्रश्न – iii)मनु मछली कि देखभाल कैसे करते थे ?

प्रश्न-5 निम्नलिखित शब्दों में से किन्हीं 3 शब्दों के अर्थ लिखिए- (1X3=3)

    पोषक ,आस, लता ,अल्पकाल , लोचन , सहिष्णु

प्रश्न-6 निम्नलिखित प्रश्नों में से किन्हीं चार प्रश्नों के संक्षिप्त उत्तर लिखिए- (1X4=4)

    i)राज पुरोहित ने नर्तकी से क्या प्रार्थना की ?

ii)अन्य धर्म वालों ने चौबेजी को मद्रास से दूर रखने के लिए क्या किया गया ?

iii)बापू का पूरा नाम क्या था ?

iv)लेटर बॉक्स को लाल ताऊ नाम किसने दिया?

v)रेलों के होने से भी यात्राएँ कष्टप्रद क्यों हैं ?

प्रश्न-7 निम्नलिखित प्रश्नों में से किन्हीं 3 प्रश्नों के उत्तर लिखिए- (2X3=6)

i)समय का महत्त्व तुलसी ने कैसे बताया हैं ?

ii)झोपड़ी में घुसते ही लेखक ने क्या देखा ?छोटा -जादूगर पाठ के आधार पर बताएं।

iii)भूखे अतिथि के आने पर ब्राह्मण ने क्या किया ?

iv)किसी भी देश के लिए चिह्न क्यों महत्वपूर्ण हैं ?

प्रश्न-8 निम्नलिखित बहुविकल्पीय प्रश्नों के उत्तर छाँटकर लिखिए- (1X3=3)

i)दवाई लेने ले लिए पंडित जी को कितनी दूर जाना पड़ा ?

   1)5मील   2)15मील   3)20मील   4)25मील

ii)मनुष्य शब्द कैसे बना ?

   1)मनु से   2)मानुष से   3)आदमी से   4)देव से

iii)सब लोग किसका स्वार्थ साधने में लगे रहते हैं ?

   1)अपना अपना   2)दूसरों का   3)तुलसी दास का 4)किसी का नहीं

प्रश्न-9 निर्देशानुसार उत्तर दीजिए- (2)

क) निम्न शब्दों के दो-दो पर्यायवाची शब्द लिखिए-

सूर्य

ख) उचित समुच्चयबोधक शब्द लगाकर रिक्त स्थानों की पूर्ति कीजिए-

i) भेड़ _____ बकरियों को घास चराने लेकर जाओ।

प्रश्न-10 विद्यालय में दशहरे की छुट्टियों में लगने वाले विज्ञान मेले के लिए सूचना लिखिए। (3)

या

आपकी साइकिल की चाबी विद्यालय में कही गिर गई हैं। चाबी पुनः पाने के लिए सूचना लिखिए। तैयार कीजिए।

प्रश्न-11 निम्न में से किसी एक विषय पर अनुच्छेद लिखिए- (3)

   i)समय का महत

   ii)ग्रामीण जीवन और भारत

   iii)20-20 क्रिकेट

प्रश्न-12 अपने मित्र को पत्र लिखकर नववर्ष की शुभकामनायें दीजिये। (3)

या

स्वच्छता का महत्व बताते हुए मित्र को पत्र लिखिए।

प्रश्न-13 दीपावली मेले के लिए विज्ञापन बनाइये। (3)

या

स्कूल बैग बनाने वाली किसी कंपनी के लिए विज्ञापन बनाइये।

MATHEMATICS

GENERAL INSTRUCTIONS:

1. This question paper consists of five sections.

2. Section A (**Multiple choice questions)** consists of Q. No. 1 to 12 carrying 1 mark each.

3. Section B (**Competency based questions)** consists of Q. No. 13 to 18 carrying 2 marks each.

4. Section C (**Short answer questions)** consists of Q. No. 19 to 22 carrying 3 marks each.
5. Section D (**Long answer questions)** consists of Q. No. 23 to 25 carrying 4 marks each.
6. Section E (**Case study questions)** consists of Q. No. 26 to 28 carrying 4 marks each. Each case study-based question has three subparts: two 1 mark each and 1 question of 2 marks.

SECTION A

Q1. If $\frac{m}{n} = \frac{4}{3}$ and $\frac{r}{t} = \frac{9}{14}$, the value of $\frac{(3mr-nt)}{4nt-7mr}$ is:

(a) $-5\frac{1}{2}$ (b) $-\frac{11}{14}$ (c) $-1\frac{1}{4}$ (d) $\frac{11}{14}$

Q2. The value of $x + x(x^x)$ when x = 2 is:

(a) 10 (b) 16 (c) 18 (d) 36

Q3. Sum of the first n odd natural numbers is:

(a) $2n + 1$ (b) n^2 (c) $n^2 - 1$ (d) $2n^2 + 1$

Q4. $3^3 + 3^3 + 3^3 =$

(a) 3^4 (b) 9^3 (c) 3^9 (d) 27^3

Q5. The degree of the polynomial $6a^3 + 7a^2 + 10^4$ is:

(a) 2 (b) 3 (c) 4 (d) 0

Q6. Highest common factor of $144x^2$, $180xy$ and $192xy^2$ is:

(a) $2x^2$ (b) $6xy$ (c) $12x$ (d) $10xy^2$

Q7. If m = $\frac{cab}{a-b}$ then b equals:

(a) $\frac{m(a-b)}{ca}$ (b) $\frac{cab-ma}{-m}$ (c) $\frac{ma}{m+ca}$ (d) $\frac{m+ca}{ma}$

Q8. The price of floor having risen by 50%, by what fraction must a house holder reduce his consumption of flour so as not to increase his expenditure?

(a) 2/3 (b) 1/2 (c) 1/4 (d) 1/3

Q9. The simple interest on a certain sum for 6 years at 14% per annum is ₹470.40. The sum is:

(a) ₹720 (b) ₹650 (c) ₹480 (d) ₹560

Q10. In the case of a trapezium, the ratio of its angles taken in order cannot be:

(a) 1:2:3:4 (b) 7:13:2:8 (c) 6:3:4:2 (d) 4:5:2:3

Q11. If the radius of a circle is increased two times its original value, then the circumference of the circle will increase to:

(a) Two times the original value
(b) Three times the original value
(c) Four times the original value
(d) Will not change.

Q12. The point (-3,-3) is:
(a) Nearer to x axis (b) nearer to y axis (c) near to origin (d) none of these

SECTION B

Q13. Write:
    (a) Two rational numbers greater than -2.
    (b) Two rational numbers less than 2

Q14. Find the square root of the following: $(a) \dfrac{36}{49}$ $(b) \dfrac{80}{405}$

Q15. Solve the equation and verify it:

$$\frac{2x - (7 - 5x)}{9x - (3 + 4x)} = \frac{7}{6}$$

Q16. The value of a car depreciates 20% every year. If after two years, the price of a car is ₹420000, find the original price of the car.

Q17. If y is directly proportional to x and y = 24 when x = 10, then find:
    (a) The constant of proportionality.
    (b) The value of y when x = 24.

Q18. Find the length of the diagonal of a square if its area is 484cm^2.

SECTION C

Q19. If $\dfrac{x}{y} = \left(\dfrac{-1}{3}\right)^{-3} \div \left(\dfrac{2}{3}\right)^{-4}$, find the value of:

    (a) $\left(\dfrac{x}{y}\right)^{-1}$ (b) $\left(\dfrac{x}{y} + \dfrac{y}{x}\right)^{-1}$

Q20. What are three consecutive integers whose sum is 63?

Q21. PQRS is a rhombus in which the altitude from S to side PQ bisects side PQ. Find the angles of the rhombus.

Q22. A metallic pipe whose internal and external diameters are 6cm and 8cm, has a length of 2.1cm. Find the volume of the metal.

SECTION D

Q23. Factorise:
    (a) $P^2 - 11p - 42$
    (b) $25a^2 - 4b^2 + 25bc - 49c^2$

Q24. The radii of two right circular cylinders are in the ratio 2:3 and their heights are in the ratio 5:4. Calculate the ratio of their curved surface areas and the ratio of their volumes.

Q25. The side of an equilateral triangle is 4cm, its perimeter is 12cm.
Plot a graph of perimeter against length of side, with the side increasing at interval of 2cm.
Show on your graph-
    (a) What will the perimeter be when the side is 7cm.
    (b) What will the side be when the perimeter is 15cm.

SECTION E

Q26. The number of listeners to a radio station in 1995 was 350000. In 1996, there were 392000 listeners. Each year, the radio station invites its listeners to vote for their favourite pieces of music. In 1995, 18% of the listeners

voted. In 1997, the number of listeners was 460000 and 91000 of these voted. The number who voted in 1997 was 40% more than in 1996.

    (a) Find the percentage increase in the number of listeners from 1995 to 1996.

    (b) Calculate the number who voted in 1995.

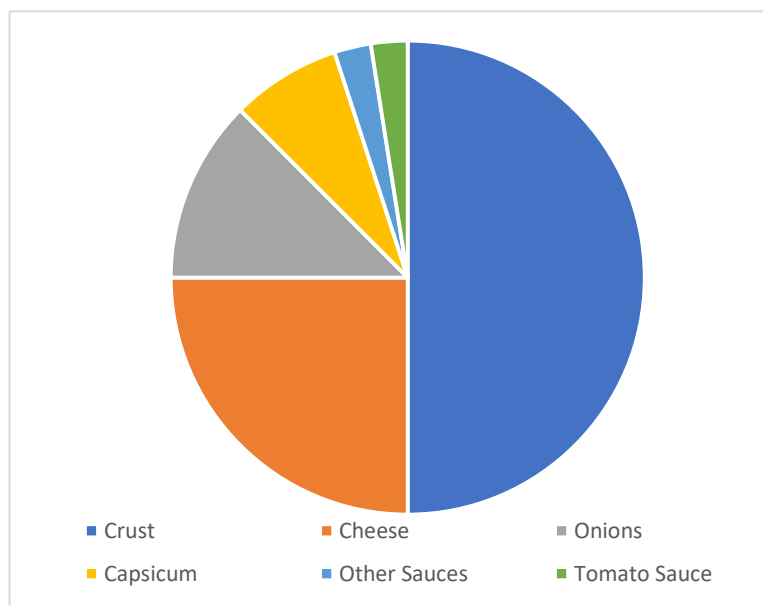   (c) Find the percentage of listeners who voted in 1997 and calculate the number who votes in 1996.

Q27. Three children of class 8th grade were playing with the wire. One bent the wire in the form of square which encloses an area of 81cm^2. The other two bent them in the shape of a circle and triangle respectively. Answer the questions:

    (a) What will be the length of each side of the square?

    (b) What will be the length of wire?

    (c) What will be the area of same wire if:

        (i)   It is bent to form a circle.

        (ii)   It is bent to form a triangle.

Q28. The chart below shows the ingredients used to make a capsicum and onion pizza. The decimal fraction of each ingredient by weight is shown in the pie chart:

Quantity	Decimal fraction by weight
Tomato sauce	0.025
Onion	0.125
Cheese	0.25
Capsicum	0.075
Crust	0.5
Other sauces	0.025
Total	**1.0**

Read the pie chart carefully and answer the following questions:

    (a) What is the sum of decimal sizes of each slice equal to?

    (b) What makes the largest amount of pizza by weight?

    (c) What fraction of the total weight comes from the onion and quarter of the pizza's weight comes from which ingredient?

SCIENCE

General Instructions:

1. *The question paper comprises of Five Sections.*
2. *Section A- Questions 1 to 24(MCQ) carry one mark each(competency based, source based, experiment based, picture based)*

3. *Section B- Questions 25 to 27(Case Study) carry four marks each.*
4. *Section C- Questions 28 to 32(Short Answers) carry two marks each(any four questions to be attempted)*
5. *Section D- Questions 33 to 35(Short Answers) carry three marks each(any two questions to be attempted)*
6. *Section E- Questions 36 to 38(Long Answers) carry five marks each(any two to be attempted)*
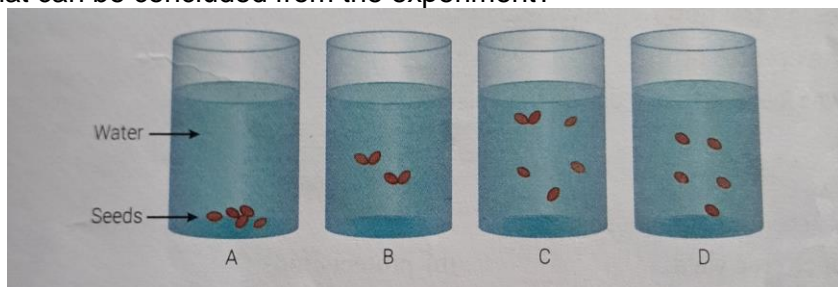
SECTION A

Choose the correct option: (1x24)

Q1. The term used for the process of separation of grains from chaff is
a) Sieving
b) Threshing
c) Winnowing
d) Hand picking

Q2. A farmer was turning the soil in the field constantly to loosen it. What is the likely reason for this agricultural practice?
a) This prevents growth of weeds in the soil.
b) This increases the amount of soil in the field.
c) This allows penetration of roots in soil easily.
d) This allows water to stay in soil for longer duration.

Q3. A student does an experiment with wheat seeds. For the experiment, few seeds of wheat were kept in each of the four glasses that were filled with 200ml of water and stirred well. After 10 minutes, the student measures the level at which the seeds were found in all the glasses as shown. What can be concluded from the experiment?
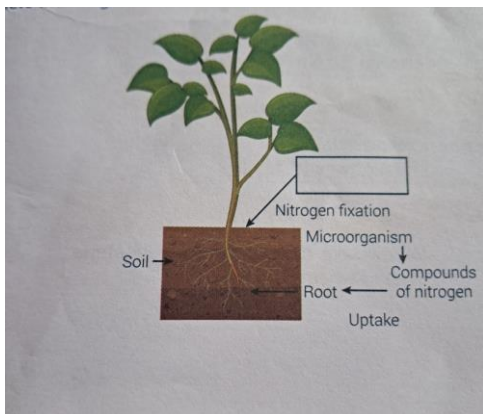

a) Seeds that sink are healthy and clean.
b) Floating seeds are damaged with holes.
c) Bottom seeds are heavy as they absorbed more water.
d) Seeds at the middle have small air bubbles thus lighter in weight.

Q4. Which of the following is an antibiotic?
a) Sodium bicarbonate
b) Streptomycin
c) Alcohol
d) Yeast

Q5. A student is making an image to show the process of nitrogen fixation. What will be added to the empty box to complete the image?

a) Nitrogen molecule in the soil
b) Atmospheric nitrogen
c) Nitrogenous compounds
d) Nitrogen gas in the soil

Q6. The table shows the ignition temperature of four substances.

Substance	Ignition Temperature(^{0}C)
A	80
B	39
C	110
D	25

Which substance will catch fire when heated at 50^0C
a) A &C
b) B &D
c) C &D
d) A &D

Q7. Which of the following is not a combustible substance?
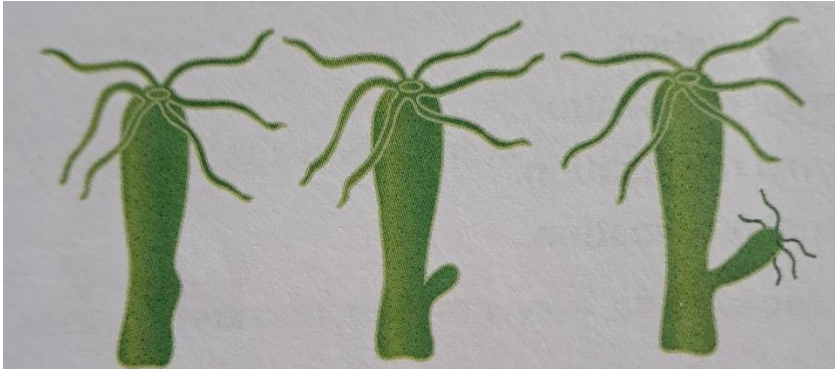a) Camphor
b) Glass
c) Wood
d) Coal

Q8. The calorific value of wood and coal is 20000 kJ/kg and 30000 kJ/kg respectively. Which will produce the most heat?
a) 500g of coal
b) I kg of coal
c) 500g of wood
d) 2 kg of wood

Q9. A tadpole develops into an adult frog by the process of
a) Fertilization
b) Metamorphosis
c) Embedding
d) Budding

Q10. The image shows reproduction in hydra.

What can be inferred about the type of reproduction in hydra?
a) It reproduces through fission, which is a sexual mode of reproduction.
b) It reproduces through budding, which is a sexual mode of reproduction.
c) It reproduced through fission, which is an asexual mode of reproduction.
d) It reproduces through budding, which is an asexual mode of reproduction.

Q11. In the list given below, hen is the odd one out.
Human being, cow, dog, hen, monkey
The reason for this is
a) It is oviparous
b) It undergoes internal fertilization
c) It is viviparous
d) It undergoes external fertilization

Q12. The table describes the reproductive phase in three females (X, Y and Z) of different ages.

X	Y	Z
A stop in the process of release of unfertilized egg from the uterus.	The beginning of the process of release of unfertilized egg from the uterus at this age.	The release of unfertilized eggs from the uterus once in a month.

Which phases X, Y and Z represent respectively?
a) X- menopause, Y- menstruation, Z- menarche
b) X- menstruation, Y- menarche, Z- menopause
c) X- menarche, Y- menopause, Z- menstruation
d) X- menopause, Y- menarche, Z- menstruation

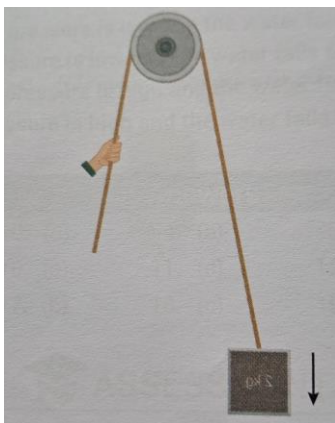Q13. The force cannot change the
a) Speed of the object
b) Mass of the object
c) Shape of the object
d) The direction of a moving body

Q14. A porter put a box on a round cloth of area 200 cm^2 over his head. The pressure exerted by the box is 0.25 N/cm^2. If the porter increases the area of round cloth to 300 cm^2, what will be the reduced pressure on his head?
a) 0.10 N/cm^2
b) 0.16 N/cm^2
c) 0.25 N/cm^2
d) 0.50 N/cm^2

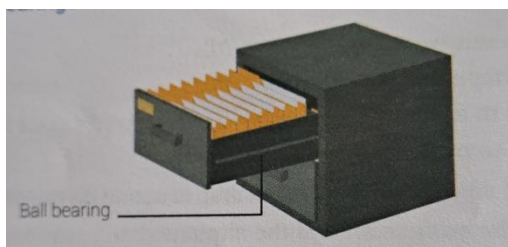Q15. A block of mass 2 kg tied with a rope is going down under the force of gravity of 20 N.

How much force is required by the hand to stop the motion of the block?
a) 10 N
b) 20 N
c) 30 N
d) 40 N

Q16. Four children were asked to arrange forces due to rolling, static and sliding frictions in decreasing order. Their arrangements are given below. Choose the correct arrangement.
a) Rolling, static, sliding
b) Rolling, sliding, static
c) Static, sliding, rolling
d) Sliding, static, rolling

Q17. A student observes ball bearings in the slide track of his drawer as shown.

Why are ball bearings used in the drawer?
a) It reduces friction.
b) It increases the surface area.
c) It reduces the mass of the drawer.
d) It increases the interlocking between the surfaces.

Q18. Which of the following voices is likely to have minimum frequency?
a) Baby girl
b) A man
c) Baby boy
d) A woman

Q19. Which of these phenomena might result in the occurrence of a tsunami?
a) Lightning strike
b) Collision of plates
c) Percolation of ground water
d) Condensation of water vapour

Q20. Major earthquakes are less likely to occur in
a) Rajasthan
b) North- East India
c) Rann of Kutch
d) Odisha

Q21. Rakhi switched on a torch light and pointed it towards a mirror. She calculated the angle of incidence and found it to be 50^0. What is the angle of reflection?
a) 40^0
b) 45^0
c) 50^0
d) 100^0

Q22. Which resource is an inexhaustible natural resource?
a) Coal
b) Petroleum
c) Solar energy
d) Natural gas

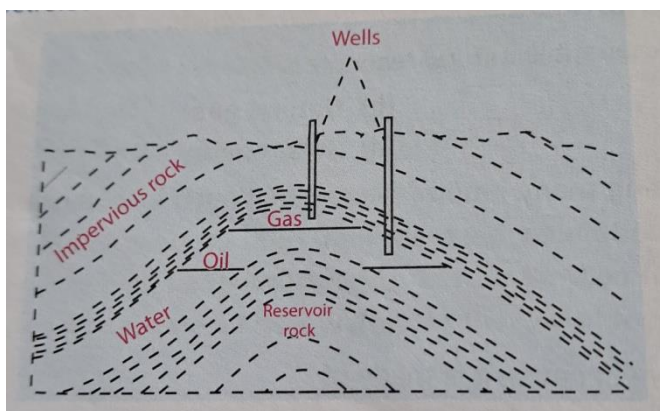Q23. The table lists petroleum products.

1.	Petrol
2.	Diesel
3.	LPG
4.	Lubricating oil
5.	Paraffin wax
6.	Bitumen

Which petroleum product is used as a fuel?
a) 1, 2 and 3
b) 2, 4 and 5
c) 1, 3 and 4
d) 3, 5 and 6

Q24. The image shows petroleum and natural gas deposits.

Why is the layer of oil formed between natural gas and water?
a) Because reservoir rocks allow only water to pass through it
b) Because different rock layers separate the three substances.
c) Because oil releases natural gas that forms a new layer over oil.
d) Because gas and oil are lighter than water and the three substances do not mix.

SECTION B
Read the case study and answer the questions that follow: (4x3)

Q25. The term biodiversity includes variety of biological life forms from all land, air and aquatic ecosystems. An ecosystem comprises of all the living beings in an area along with abiotic components like soil, water, climate etc. Biodiversity comprises of variety of plants and animals living in their habitats. The microscopic organisms to the largest living blue whales are the essential elements of biodiversity.
i)   What does a biodiversity include?
ii)   The abiotic components of an ecosystem are;
        a) Soil
        b) Water
        c) Climate
        d) All of these
        Choose the correct option.
iii)   What are the biotic components of an ecosystem?
iv)   All plants and animals live in their _____.

Q26. Every human individual, male or female, possess 23 pairs of chromosomes. Of these 23 pairs, 22 pairs of chromosomes are similar in all aspects. The 23rd pair is different and is called sex chromosome. In females these chromosomes are 22 + XX pairs and in males they are 22 + XY pairs. The process by which the sex of a person is determined is called sex determination.
i)   Every individual possess _____ pairs of chromosomes
        a) 22
        b) 23
        c) 24
        d) 25
        Choose the correct option.

ii)   A female has the following pairs of chromosomes.
        a) 22 + XY
        b) 22 + XX
        c) 22+ YY
        Choose the correct option.

iii)   The sex of an unborn baby depends on the kind of _____ by which the egg is fertilized.
iv)   It is a myth that a _____ is responsible for the sex of her baby.

Q27. Electrolysis is defined as the chemical decomposition of constituents of solution on passage of electric current. In the year 1800, the British chemist, William Nicholson (1753-1815), had shown that if electrodes were immersed in water, and a current was passed, bubbles of oxygen and hydrogen were produced. Oxygen gas is formed at positive electrode (called Anode) and Hydrogen gas at negative electrode (called Cathode).
i)   Define Electrolysis.
ii)   During electrolysis of water, which gases are evolved at cathode and anode?
iii)   Who discovered Electrolysis?
iv)   Electrolysis is based on the _____ effect of electric current.

SECTION C

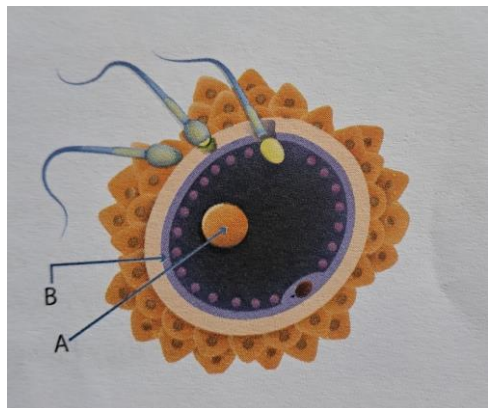**Write short answers: (Attempt any four) (2x4)**

Q28. Does pure water conduct electricity? If no, what can we do to make it conducting?

Q29. What is coke? How is it obtained?

Q30. What will happen to friction if
   a) Weight of an object is doubled
   b) Surface area of an object is doubled but weight remains the same.

Q31. In the given diagram

   a)   Identify A and B
   b)   Identify the process
Q32. What is Red Data Book?

SECTION D
Write short answers: (Attempt any two) (3x2)

Q33. What happens after fertilization of the egg till the child is born?
Q34. Write a short note on electroplating. Draw the diagram
Q35. What is an Electroscope? How is it used?
SECTION E
Write long answers: (Attempt any two) (5x2)

Q36. List five ways in which you would act to avert energy crisis.
Q37. Enlist three defects of vision. How can they be corrected? Draw the diagrams to Explain
Q38. Write three differences between pitch and loudness. Draw wave diagram to show
   a) High pitch and shrill sound
   b) Low pitch and flat sound

SOCIAL SCIENCE

Q.1 MULTIPLE CHOICE QUESTIONS: (1X8=8M)
 1. In Mahalwari system, land revenue was collected by _____.
   a. Peasants   b. Mallahs   c. Village headman   d. Planters
 2. Lord Dalhousie was the Governor General of India from-
   a.1848 – 1850   b. 1848- 1854   c. 1848 – 1856   d. 1848 -1858
 3. One of the leading centres of geothermal energy in India is –
   a. Manikaran   b. Mandi   c. Mumbai   d. Sambhar Lake

4. The two most important staple food crops of the world are-
   a. Millets, Maze   b. Tea, Coffee   c. Ragi, Bajra   d. Rice, Wheat
5. The National Human Rights Commission was set up in –
   a. 1903   b. 1933   c. 1990   d. 1993
6. Who is the Ex-officio Chairman of the Rajya Sabha?
   a. President of India   b. Vice- President of India
   c. Prime Minister of India   d. Chief Justice of India
7. What was the strength of the judges of Supreme Court when Indian Constitution was enacted?
   a. Four   b. Six   c. Eight   d. Ten
8. I founded the Asiatic Society of Bengal, who am I? Identify me.

Q.2 FILL IN THE BLANKS: (1X6=6M)
  1. The sepoy mutiny broke at _____.
  2. _____farming helps preventing soil erosion through construction of steps on hill slopes.
  3. Extensive agriculture is done on _____ fields.
  4. The word law is derived from the teutonic word _____.
  5. The Minimum Wages Act was implemented in the year _____.
  6. The first Lok Adalat was held in _____ in 1985.

Q.3 VERY SHORT ANSWER QUESTIONS: (2X3=6M)
  1. How did Gandhi ji contribute to the upliftment of the untouchables of India? Mention 2 points.
  2. List two factors responsible for the rapid growth of world population.
  3. What are marginalised groups? Mention two catagories of people belonging to this group.
(1+.5+.5=2M)

Q.4 SOURCE BASED QUESTIONS: (1x4=4M)
   Read the given sources and answer the following questions: (1x4=4M)
  1. Mother Teresa was an Albanian born Indian Roman Catholic religious sister. She founded the
     Missionaries of Charity, a Roman Catholic religious congregation, having operations in more than 133
     countries with above 4500 sisters in number. Throughout her life she worked for the poorest, the
     severely ill,orphans, and for many other social causes to meet the human needs.
     i.   Who founded the Missionaries of Charity? Write something about the founder. (1+1=2M)
     ii.   The Missionaries of Charity operates in more than _____ countries with above _____
             members.(2M)

  2. The Information Technology industry refers to the storage, processing and distribution of information. It
     is developed all over the world due to the development of science and technology. The most important
     locational factors influencing the location of this industry are availability of resources, viable costing and
     infrastructure. The two leading centres of information technology industries of the world are the Silicon

Valley of California and Electronic capital Bengaluru in India which is also known as the information capital of India due to the establishment of many IT companies here.

   i.   What led to development of IT industry? (1M)
   ii. Mention two factors that influence the location of this industry. (2M)
   iii. Name the information capital of India. (1M)

3. The term 'Manual' means work done with hand and 'Scavenging' means to clean by removing waste or refuse. Hence, the term manual scavenging stands for the removal of human excreta by hand. The workers who clean the excreta include women and young boys. They are referred to as "night soil workers".

The Constitution of India has made certain provisions to discourage the practice of manual scavenging. For example, the Scheduled Castes and Scheduled Tribes Act 1989 and Bonded Labour System Act, 1976 played an important role in abolishing this inhuman practice.

   i.   Define 'manual scavenging'. (1M)
   ii. What are the workers who clean human excreta referred to as? (1M)
   iii. Name two provisions given by our constitution to discourage the practice of manual scavenging.

(2M)

Q.5 SHORT ANSWER QUESTIONS: (3X3= 9M)
   1. Which leaders formed Swaraj Party and why? (1+2=3M)
   2. Distinguish between productive and dependent population. Mention three points. (3M)
   3. Why are reservation policies considered necessary? (3M)

Q.6 LONG ANSWER QUESTIONS: (5X3=15M)
   1. What according to Gandhiji were the qualities of a true Satyagrahi? (5M)
   2. Manufacturing industries are important for the economic development of the country. Discuss. (5M)
   3. Discuss the constitutional measures taken to abolish untouchability. (5M)

Q.7 MAP- SKILL: (7.1 HISTORY -2M & 7.2 GEOGRAPHY -2M [2+2=4M])
   7.1 On an outline political map of India, locate the following: (1x2=2M)
      i. The place where the Indian National Congress session held in December 1920.
      ii. Locate this important centre of Non Cooperation Movement– Chauri–Chaura.
   7.2 On an outline political map of India, locate the following: (1x2=2M)
      i. Most populous state of India.
      ii. State with the highest literacy rate.

विषय- संस्कृत

समय-1 घंटे 30 मिनट   अंक-40

प्रश्न-1 निर्देशानुसार उत्तर दीजिये - (4.5)
   i) फल शब्द रूप द्वितीया विभक्ति -सभी वचन लिखिए
   ii) लता शब्द रूप तृतीया विभक्ति -सभी वचन लिखिए
   iii) गुरु -शब्द रूप षष्ठी विभक्ति -सभी वचन लिखिए
प्रश्न-2 निर्देशानुसार उत्तर दीजिये - (4.5)
   i) कथ् धातु रूप -लङ् लकार-प्रथम पुरुष -सभी वचन लिखिए
   ii) नृत् धातु रूप -लट् लकार -उत्तम पुरुष -सभी वचन लिखिए
   iii) नृत् धातु रूप -लृट् लकार-प्रथम पुरुष -सभी वचन लिखिए
प्रश्न-3 विलोम शब्द लिखिए -जयः ,सत्यं, एकः (3)
प्रश्न-4 संस्कृत में संख्या लिखिए - 32 ,40 ,45 ,50 (4)

प्रश्न-5 एक शब्द में उत्तर दीजिये – (4)

i) नरः कदा न शोभन्ते ?

ii) पुरा किम् नाम श्रेष्ठी आसीत् ?

iii) बकः कान खादति स्म ?

iv)परोपकार : कस्मै भवति ?

प्रश्न-6 रेखांकित पदों पर आधारित प्रश्न निर्माण कीजिये - (3)

क)सः तान शिलायाम् अक्षिप्त।

ख)पापाय परपीडनम्।

ग)अहो गुरौ श्रद्धाया: प्रभावः।

प्रश्न-7 निम्नलिखित प्रश्नों के उत्तर दीजिये – (पूरे वाक्य में) (3)

i)संन्यासी तृप्तिविषये किम् उक्तवाद ?

ii)बकस्य किम् उत्तरम् आसीत् ?

iii)एकलव्य किम् अर्चयत्?

प्रश्न-8 उचित पद से रिक्त स्थान की पूर्ति कीजिये – (2)

i)देवः शीघ्रम् न ....।

ii)विनाशकाले .... बुद्धि।

iii)सिकंदर ....गुरुभक्त आसीत्।

iv)अनुजः प्रतिदिनं ....(9 :00) भोजनम् करोति।

प्रश्न-9 विभक्ति वचन लिखिए – क) दानरूपेण ख)शिलायम् ग)भगवत् (3)

प्रश्न -10 उचित मिलान कीजिये – (2)

महिमा क्षोभ:

प्रकोप: अंगूठा

अंगुष्ठ भयंकर

विकराले गौरव:

प्रश्न-11 निम्नलिखित का अनुवाद कीजिये – (3)

1.अहम् प्रतिदिनं विद्यालयम् गच्छेयं।

2 सः भोजनाय एकम् उपायम् अचिंतयत् ।

3 सर्वे भयभीता: अभवन

प्रश्न-12 निम्नलिखित शब्दों के अर्थ लिखिए-शयनम् ,अप्रियम् ,तुल्य , शुष्कः (2)

प्रश्न- 13 विपरीत अर्थ लिखिए -ज्ञानं ,सत्यम् (2)

COMPUTER

TIME-1 Hour   **MM 30**

GENERAL INSTRUCTIONS:

1. This question paper has 4 sections –Section A,B,C and D
2. Section A has 5 Questions Fill in the blanks carrying 1 mark each.
3. Section B has 5 Questions True or False carrying 1 marks each.
4. Section C has 5 Questions carrying 2 marks each.
5. Section D has 3 Questions – one question of 4 marks and other two Questions of 3marks each.

SECTION A

Fill in the blanks:- (5x1=5)

1. _____ is a non-volatile memory.
2. _____is a less than or equal to operator.
3. While, For, nested are types of _____
4. Functions can be individually_____

5. When an operation is performed inside a function it gives back_____

SECTION B

State True or False:- (5x1=5)
1. Adobe Photoshop is database software.
2. Function variables are variables global to function.
3. Loops do not repeat a portion of code.
4. A loop in a program may contain another loop inside it.
5. Relational operator compares value of two variables.

SECTION C

Give Short Answer for the following Questions: (5x2=10)
1. What are logical Operators?
2. What is difference between While loop and For loop?
3. What are loops? Name different types of loops
4. What is the use of Magic Wand tool?
5. What are function parameters?

SECTION D

Write Long answer for the following Questions:
1. What do you mean by arguments? Explain with an example. (3)
2. Write a program in Python to check divisibility of a number by 7 or 9 or by both 7 and 9. (3)
3. Write full form of (4)
   a. HTML
   b. IMG
   c. PNG
   d. GIF

GENERAL KNOWLEDGE

Time: 50 min.   **M.M.:25**

Q.1 Fill in the blanks: (1X6=6M)
1. _____ is a speech made without any preparation.
2. The literary character 'Antonio' was created by _____.
3. The book, 'The Guide' was written by _____.
4. The capital of Tipu Sultan was _____.
5. Jataka is a collection of fables associated with _____.
6. The largest temple of the world is _____.

Q.2 Choose the correct answer: (1X6=6M)
1. The terrorist attack on World Trade Center (New York) was in –
       a. 1999   b. 2000   c. 2001   d. 2002
2. Pizza was probably invented in the city of _____ in southern Italy.
       a. Thailand   b. Egypt   c. Naples   d None of these
3. Lal Bahadur Shastri died in harness. The meaning of the underlined words are –
       a. died in hospital
       b. died in poverty
       c. died in sick bed
       d. died while at work
4. Who wrote the Grammar of Sanskrit in ancient India?
       a. Sushruta   b. Valmiki   c. Panini   d. Ashoka
5. The first (interim) President of the constituent Assembly was –

a. Rajendra Prasad b. Sacchidanand Sinha c. Mohd. Iqbal d. Maulana Azad
6. This is the second most widely spoken language in India
   a. Telugu   b. Bengali   c. Hindi   d. Punjabi

Q.3 State whether True or False: (1X6 =6M)
   1. The currency of Bangladesh is 'Taka'.
   2. Rocky mountains are located in China.
   3. Meditation helps in cultivating power of concentration.
   4. Mother Teresa's acceptance speech for 1979 Nobel Peace Prize includes the line
   'Love begins at home'.
   5. The famous character 'David Copperfield' was created by Charles Dickens.
   6. One who knows everything is called omniscient.

Q.4 Answer these very short answer type questions: (1X7=7M)
   1. Who once remarked, 'Nehru is a patriot while Jinnah is a politician'?
   2. Which Indian ruler was defeated by the British in the Battle of Plassey in 1757?
   3. Which kingdom did Chand Bibi, the famous queen who fought against Akbar belong to?
   4. Who is an indigenous inhabitant of Australia?
   5. He is a close-fisted man. What does the underlined expression mean?
   6. What is the skill of making powerful and effective speeches in public called?
   7. Who is the Roman God of agriculture and wine?

___

MORAL SCIENCE
Time: 50 min.   **M.M.:25**

Q-1 Answer the following questions: (3x5=15)
   a) What was the narrator's point of view around the piece of communication Deepak
   shared?
   b) What did the sword decide from there on? How did the sword behave and formed a
   league of weapons? What was the result?
   c) What surprised the young man in the castle?
   d) What did Warren Buffett spend time at an early age?
   e) What is decision making?

Q-2 Fill in the blanks: (1x6=6)
   a) _____is a critical component of a healthy relationship.
   b) Two non-verbal signs of Active Listening are _____ and _____
   c) Posture can tell a lot about the sender and _____ in interpersonal interactions.
   d) The young man had imagined the wise man to live like a _____,
   e) _____ is a process of exchanging things with other people to gain a
   mutual benefits.

Q-3 Write True or False: (1x4=4)
   a) Warren Buffett is one of the most discussed share market investors of times.
   b) Happiness is an inner feeling, it is not dependent on material prosperity.
   c) There are five main types of reciprocity.
   d) Equanimity is a form of mental stability that can be enhanced through mindfulness
      practice.