



General Instructions:

- > The question paper is divided into 3 sections. Section A, B and C.
Section A : Reading (20 marks),
Section B : Writing and Grammar (20 marks)
Section C : Literature (40 marks)
> Separate instructions are given with each section and question, wherever necessary.
Read these instructions very carefully and follow them.
> All the questions of that particular section must be attempted in correct order.

SECTION - A : READING (20 Marks)

Q.1 Read the passage given below carefully and answer the questions that follow: (10 marks)

- 1. Have you ever failed at something so miserably that the thought of attempting to do it again was the last thing you ever wanted to do?
2. If your answer is yes, you are "not a robot." Unlike robots, we human beings have feelings, emotions, and dreams. We are all meant to grow and stretch despite our circumstances and our limitations. Flourishing and trying to make our dreams come true is great when life is going our way. But what happens when it is not? What happens when you fail despite all of your hard work? Do you stay down and accept the defeat or do you get up again and again until you are satisfied? If you have a tendency to persevere and keep going, you have what the experts call, grit.
3. Falling down or failing is one of the most agonizing, embarrassing and scariest human experiences. But it is also one of the most educational, empowering and essential parts of living a successful and fulfilling life. Did you know that perseverance (grit) is one of the seven qualities that have been described as the keys to personal success and betterment in the society? The other six are: curiosity, gratitude, optimism, self-control, social intelligence, and zest. Thomas Edison is a model for grit for trying 1,000 plus times to invent the light bulb. If you are reading this with the lights on in your room, you know well that he succeeded. When asked why he kept going despite his hundreds of failures, he merely stated that they were not failures. They were hundreds of ways not to create a light bulb. This statement not only revealed his grit but also his optimism for looking at the brighter side.
4. Grit can be learnt to help you become more successful. One of the techniques that help is mindfulness. Mindfulness is a practice that helps the individual stay in the moment by bringing awareness of his or her experience without judgement. This practice has been used to quiet the noise of their fears and doubts. Through the simple practice of mindfulness, individuals will have the ability to stop the self-sabotaging downward spiral of hopelessness, despair and frustration.
5. What did you do to overcome the negative and self-sabotaging feelings of failure? Reflect on what you did, and try to use those same powerful resources to help you today.

On the basis of your understanding of the passage, answer any ten questions from the twelve that follow: (1x10=10)

- (i) The reason why you are not a robot is that:
(a) You fail miserably at tasks (b) Failure and success can affect your emotions
(c) You work hard (d) You have limitations
(ii) Choose the option that best captures the central idea of the passage from the given quotes.

Table with 4 columns containing quotes and their authors: John Green, James Joyce, Denis Waitley, Albert Einstein.

- (a) Option (1) (b) Option (2) (c) Option (3) (d) Option (4)

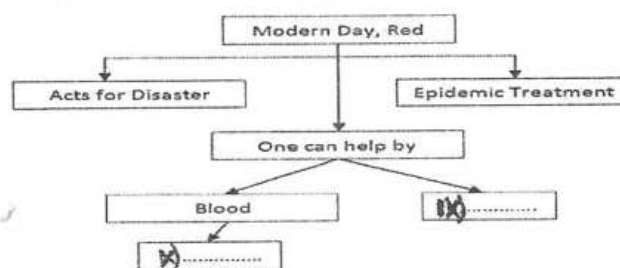
- (iii) What is the tone of the following context: "Falling down or failing is one of the most... educational, empowering, and essential parts of living a successful and fulfilling life."?
(a) Humorous (b) Optimistic (c) Horrifying (d) Solemn
(iv) Which of the following is relevant for the title of the passage?
(a) Dreams Always Come True (b) Failure and Grit Go Hand in Hand
(c) Humans vs Robots (d) Falling Down and Getting Up
(v) was created after many attempts.
(a) Electricity (b) Light bulb (c) Current (d) Tube light

- (vi) Which of the following sentences makes the correct use of "grit", as used in the passage?
 (a) Get rid of that grit in your shoes. (b) She had a bit of grit in her eye.
 (c) The road had been covered with grit. (d) Her grit never made her give up.
- (vii) To develop perseverance, one must:
 (a) become more aware (b) work hard
 (c) fill with optimism for looking at the brighter side (d) seek guidance
- (viii) How does mindfulness help?
 (a) It creates doubts (b) be in the moment and be aware without judgement
 (c) It helps one become successful (d) It helps develop focus
- (ix) What do you understand from this line, "Falling down or failing is one of the most agonizing, embarrassing, and scariest human experiences."?
 (a) Falling down makes us angry. (b) Failure can deeply affect our emotions
 (c) Stay positive and be optimistic (d) Self-control is empowering
- (x) Choose the option that correctly states the meaning of 'social intelligence' as implied in the passage:
 (a) Knowing others (b) Knowing oneself and others
 (c) Knowing oneself (d) Knowing one's surroundings
- (xi) The importance of perseverance and optimism for a successful and fulfilling life is explained using the example of-
 (a) Thomas Edison (b) Flourishing (c) Grit (d) Limitations
- (xii) What is the message conveyed in the last paragraph of the passage?
 (a) Always aim for the best
 (b) Live life king size
 (c) Through mindfulness we can overcome the negative impact of failure
 (d) Social intelligence is crucial for a successful life

Q.2 Read the passage given below:

10 Marks

- On 24 June 1859, Emperors Napoleon III and Franz Joseph I were engaged in the Battle of Solferino, commanding a combined total of about 2,70,000 troops onto the field for a single day of battle. Nearly 40,000 were either dead, injured, or missing and many of them were simply left to die on the battlefield. Later, spectators crowded the fields, looking for loved ones, searching for items they could sell, or for simply taking in the horrors of the battle. A Swiss businessman and social activist Jean Henri Dunant, who was travelling in Solferino, witnessed all this.
- Jean Henri Dunant witnessed the atrocities of war as well as the helplessness of the countries not prepared or equipped to ease the suffering of those who had been injured in the Battle of Solferino. Dunant organised a group of volunteers to help bring water and food to the injured, to assist with medical treatment, or to write letters to the families of those who were dying. He also urged the public to create an organisation which would assist the wounded, regardless of which side they fought for during the times of war. From that moment, he wrote the book, A Memory of Solferino. His writing inspired countless others to rally behind him in the creation of the International Federation of the Red Cross.
- The modern-day Red Cross began by devoting itself largely to the acts of disaster relief and epidemic treatment. This effort continues to this day. One of the easiest ways you can help the Red Cross is to make sure you are able to donate blood and make an appointment at the Red Cross website. But donating blood isn't the only way you can help out-the Red Cross also encourages you to donate your time if you can. This is what the Red Cross wants everyone to know.



On the basis of your understanding of the passage, answer the questions that follow:

Attempt any four of the following :

(1x4=4)

- Who were engaged in the battle of Solferino?
- Who was Jean Henri Dunant?
- What did Dunant's volunteers do to help the injured?
- Name the book that was written by Dunant.
- What did Dunant urge the public?
- How did the modern -day Red Cross begin its work with?

Attempt all the questions given below:

(1x6=6)

- soldiers fought in the Battle of Solferino on June 24.
 (a) 2,70,000 (b) 40,000 (c) 2,30,000 (d) 23,000
- Choose the correct order of the information given below:
 I. Dunant organised a camp of volunteers.
 II. Emperor Napoleon III and Franz Joseph I fought a battle.
 III. The book 'A Memory of Solferino' was written.
 IV. Dunant travelled in Solferino.

- (a) IV, III, II, I (b) I, II, III, IV
 (c) II, I, IV, III (d) II, IV, I, III
- ix) You can donate your blood and to the Red Cross.
 (a) water (b) time (c) meals (d) books
- x) To donate blood one should:
 (a) make an appointment with society members (b) make an appointment at the Red Cross website
 (c) collect information from patients (d) collect information from neighbourhood
- xi) The word 'inspire' in para 2 is the antonym of-
 (a) devote (b) disaster (c) indulge (d) discourage
- xii)means 'an individual or group who freely gives time to benefit others'.
 (a) Troop (b) Volunteer (c) Public (d) Organisation

SECTION-B (WRITING AND GRAMMAR) : 20 Marks

Q.3 Attempt any one of the following: 5

Write a descriptive paragraph on the famous Indian Scientist, Sir C.V. Raman in about 100-120 words, using the clues given below:

- Born on 7 November 1888 in Chennai
- Physician by profession
- worked in the field of light scattering—the discovery is known as 'Raman Effect'
- won Nobel Prize in 1930 for his discovery
- elected 'Fellow of the Royal Society' in 1924
- in 1954 India honoured him with its highest civilian award 'Bharat Ratna'
- breathed his last on 21 November 1970.

OR

Write a descriptive paragraph on the personality shown in the picture given below in about 100-120 words.



Q.4 Attempt any one of the following: 5

You had recently participated in the All India CBSE National Quiz Competition and reached the finals. The final round was telecasted over the national channel where you and your team won the quiz. Describe your feelings in about 100-120 words through a diary entry.

OR

Write a story in about 100-120 words with the help of the following outline:

Tushar – joins school football team – won matches- got hurt before the final match – lost all hope – met a handicapped person – filled with zest again – got new hope – tried next year – won- brought laurels to school.

Q.5 Complete the following passage (any four) by choosing the most appropriate options given below: (1x4=4)

There (i) _____ a survey (ii) _____ the popular forms of music and how the taste (iii) _____ music differs (iv) _____ age. About one hundred persons (v) _____ in three age groups (vi) _____ interviewed on their musical preferences.

- | | | | | |
|-------|--------------|---------------|--------------|-----------|
| (i) | (a) has been | (b) have been | (c) had been | (d) was |
| (ii) | (a) for | (b) about | (c) on | (d) in |
| (iii) | (a) in | (b) on | (c) at | (d) about |
| (iv) | (a) in | (b) on | (c) at | (d) with |
| (v) | (a) each | (b) every | (c) all | (d) some |
| (vi) | (a) was | (b) is | (c) were | (d) are |

Q.6 The following paragraph has not been edited. There is an error in each line. Write the error along with its correction in the space provided. (1x3=3)

An inter-school football match is been	eg.	Incorrect	correct
organized among our school and City		been	being
Montessori School. The match will be playing	(a) _____	_____	_____
on 18 th March on ours school ground	(b) _____	_____	_____
from 5 pm onwards.	(c) _____	_____	_____

Q.7 Read the following conversation and complete the given passage: (1x3=3)

Preeti : Where did you spend your holidays?
 Naman : I went to many hill stations. '
 Preeti : Which one did you like the most?

Preeti asked Naman (a) holidays. Naman replied, (b) to many hill stations. Preeti then asked him (c)the most.

SECTION – A : LITERATURE (40 Marks)

Q.8 Read the extracts given below and answer the questions that follow: (1x5=5)

I. When India gained Independence on 15 August 1947, he became the first Indian to greet the nation with his shehnai. He poured his heart out into Raag Kafi from the Red Fort to an audience which included Pandit Jawaharlal Nehru, who later gave his famous 'Tryst with Destiny' speech.

- Who is 'he' in the given extract?
- On which occasion did he play Raag Kafi for the audience?
- Which instrument did he play upon on this occasion?
- Explain the expression: "He poured his heart out."
- Where was the event held?

OR

In 1900, at the age of 21, he was a university graduate and unemployed. He worked as a teaching assistant, gave private lessons and finally secured a job in 1902 as a technical expert in the patent office in Bern. While he was supposed to be assessing other people's inventions, he was actually developing his own ideas in secret. He is said to have jokingly called his desk drawer at work the "bureau of theoretical physics."

- Who does 'he' refer to?
- What did he do after his graduation?
- What was the nature of his job?
- What name did he give to his drawer?
- Name the lesson.

II. Now in memory comes my mother, (1x5=5)

As she used in years ago,
To regard the darling dreamers
Ere she left them till the dawn:
O! I feel her fond look on me
As I list to this refrain
Which is played upon the shingles
By the patter of the rain.

- What memory comes in the poet's mind?
- Who are the 'darling dreamers'?
- What does 'ere' refer to?
- What does the poet listen?
- Name the poem and the poet.

OR

Away, away in the Northland,
Where the hours of the day are few,
And the nights are so long in winter
That they cannot sleep them through;
Where they harness the swift reindeer
To the sledges, when it snows;
And the children look like bear's cubs
In their funny, furry clothes.

- Which place is the poet talking about?
- What does 'the hours of the day are few' mean?
- What would people do when it snows?
- Why do the children look like bear cubs?
- Name the poetic device used in the 7th line?

Q.9 Answer any four of the following questions in 40 -50 words each: (4x3=12)

- Why did the County Inspector's visit disappoint Margie?
- Describe the 'old' kind of school and teacher that Tommy told Margie about?
- What does the diversion of roads refer to in life?
- What plea does the poet make when he addresses the wind?
- What is the central idea of the poem 'Wind'?

Q.10 Answer any two of the following questions in 40-50 words: (2x3=6)

- How did the child react when there was no sign of his parents?
- What were the two strange things the guru and his disciple find 'In the Kingdom of Fools'?
- Who was finally blamed for the thief's death?

Q.11 Answer any one of the following questions in 100-120 words. (6)

When and how does the little girl come to know about her father's real self? Does she appreciate and understand the compassion her father has for her? Explain.

OR

A fearful situation makes us lose our senses. Express your views, with reference to 'The Snake and the Mirror', on the doctor's reaction when the snake coiled his left arm.

Q.12 Answer any one of the following questions in about 100-120 words: (6)

Iswaran had all the qualities of a good story teller. Justify.

OR

How can you say that Grandfather was a great lover of animals? Describe with reference to 'The Adventures of Toto'.



सामान्य निर्देश :-

- इस प्रश्नपत्र में चार खण्ड हैं - क, ख, ग और घ।
- चारों खण्डों के प्रश्नों के उत्तर देना अनिवार्य है।
- यथासंभव प्रत्येक खण्ड के उत्तर क्रमशः दीजिए।

खण्ड - 'क'

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

(2+2+2+2+1+1=10)

महिला सशक्तीकरण, भौतिक या आध्यात्मिक, शारीरिक या मानसिक, सभी स्तर पर महिलाओं में आत्मविश्वास पैदा कर उन्हें सशक्त बनाने की प्रक्रिया है। महिलाओं के सामाजिक सशक्तीकरण में शिक्षा की अहम भूमिका है। ग्रामीण महिलाएँ सदियों से घर-खेत में पुरुषों के बराबर ही काम करती आई हैं, लेकिन वहाँ उन्हें सामंती सोच के कारण दूसरे दर्जे का नागरिक ही माना जाता रहा है। ग्रामीण समाज की सोच बदलने का वक्त अब आ गया है। महिलाओं की बेहतरी के लिए गाँवों में पहल की जानी चाहिए। नारी सशक्तीकरण के इस वर्तमान दौर में महिलाएँ केवल आर्थिक रूप से सुदृढ़ ही नहीं हुईं, अपितु समाज एवं परिवार की सोच में भी सकारात्मक परिवर्तन दिखाई देने प्रारंभ हो गए हैं। आज महिलाएँ प्रत्येक क्षेत्र में स्वयं के बल पर आगे बढ़ रही हैं चाहे सामाजिक क्षेत्र हो, राजनीति हो, शिक्षा हो, रोजगार हो, सभी जगह महिलाओं ने अपना परचम फहराया है। वर्तमान समय में लोग बेटियों को बोझ नहीं समझें और दुनिया में आने से पहले मारे नहीं इसलिए सरकार ने बहुत सारी योजनाओं: जैसे-लाडली लक्ष्मी, बेटा बचाओ-बेटी पढ़ाओ, उड़ान, उज्वला आदि की शुरुआत की है।

- महिला सशक्तीकरण से क्या तात्पर्य है?
- ग्रामीण क्षेत्रों में महिलाओं को किस तरह का नागरिक माना जाता रहा है और क्यों?
- गद्यांश के अनुसार वर्तमान समय में महिलाओं के लिए सरकार ने कौन-कौन-सी योजनाएँ चलाई हैं?
- 'अंधकार' और 'सकारात्मक' शब्दों के विलोम शब्द लिखिए।
- प्रस्तुत गद्यांश के लिए उचित शीर्षक सुझाइए।
- 'आर्थिक रूप से सुदृढ़' का अर्थ बताइए।

खण्ड - 'ख'

- 'शब्द' क्या है? परिभाषा लिखिए। (1)
 - 'शब्द' कब 'पद' में बदल जाते हैं? (1)
- किस शब्द में अनुस्वार का प्रयोग है- (1)
बन्धन, तंबू, लॉण्डी, सम्बन्ध
 - किस शब्द में अनुनासिक का सही प्रयोग है- (1)
उंगली, आँख, यंत्र, कैम्प
- निम्नलिखित शब्दों में से उपसर्ग एवं मूल शब्द अलग-अलग करके लिखिए- (2)
सुपुत्र, प्रतिकूल
 - निम्नलिखित शब्दों में से प्रत्यय एवं मूल शब्द अलग-अलग करके लिखिए- (2)
सहनशीलता, ईमानदार
- निम्नलिखित शब्दों का संधि-विच्छेद कीजिए- (2)
हिमालय, सूर्योदय
 - निम्नलिखित शब्दों की संधि कीजिए- (1)
मर्म + इक
- निम्नलिखित वाक्य में उचित स्थानों पर विराम-चिह्न लगाइए- (3)
कल पत्नी ने धीरे से पूछा था कब तक टिकेंगे ये
- तुमने इतनी बड़ी जोखिम क्यों ली बचेंद्री? (अर्थ की दृष्टि से वाक्य का भेद बताइए) (1)
 - मैं धोबी को कपड़े देना चाहता हूँ। (निषेधवाचक वाक्य में बदलिए) (1)

खण्ड - 'ग'

प्र.8. निम्नलिखित प्रश्नों के उत्तर लगभग 30-40 शब्दों में लिखिए-

(3+3+2=8)

- लड़के को बचाने के लिए बूढ़ी माँ ने क्या-क्या उपाय किए? आपकी दृष्टि से वे सभी उपाय सही थे या गलत?
- लेखिका ने एवरेस्ट विजय करते ही किन-किनको श्रद्धापूर्वक नमन किया?
- जब अतिथि चार दिन तक नहीं गया तो लेखक के व्यवहार में क्या-क्या परिवर्तन आए?

प्र.9. एवरेस्ट पर चढ़ने के लिए कुल कितने कैम्प बनाए गए? उनके नाम लिखते हुए संक्षिप्त परिचय दीजिए। (5)

अथवा

'तुम कब जाओगे, अतिथि' पाठ का संदेश आधुनिक युग के संदर्भ में अपने शब्दों में लिखिए।

प्र.10. निम्नलिखित प्रश्नों के उत्तर लगभग 30-40 शब्दों में लिखिए- (3+3+2=8)

- (क) रैदास ने अपने पद में 'गरीब निवाजु' किसे और क्यों कहा है? स्पष्ट कीजिए।
(ख) रहीम ने अपने दोहे में 'एकै साथे सब सधै' के माध्यम से क्या संदेश दिया है?
(ग) जब शुक गाता है, तो शुक की के हृदय पर क्या प्रभाव पड़ता है?

प्र.11. 'मोती, मानुष, चून' के संदर्भ में पानी के तीन अलग-अलग अर्थ बताते हुए रहीम के इस दोहे में निहित शिक्षा को लिखिए। (5)

अथवा

'गीत-अगीत' कविता के केन्द्रीय भाव को लगभग 50 शब्दों में लिखिए।

प्र.12. (क) गिल्लू की किन चेष्टाओं की वजह से यह आभास मिलने लगा था कि अब उसका अंत समय समीप है? (3)
(ख) किन कारणों से लेखक ने चिट्ठियों को कुएँ से निकालने का निर्णय लिया? (3)

खण्ड - 'घ'

प्र.13. निम्नलिखित में से किसी एक विषय पर दिए गए संकेत बिंदुओं के आधार पर लगभग 100 शब्दों में अनुच्छेद लिखिए- (6)

- (क) इंटरनेट की दुनिया
(i) इंटरनेट का तात्पर्य (ii) सूचना का मुख्य साधन
(iii) लाभ तथा हानि
- (ख) कोरोना : लक्षण और बचाव
(i) कोरोना का संक्रमण (ii) लक्षण
(iii) शरीर पर प्रभाव (iv) बचाव के उपाय
- (ग) मानव संस्कृति का शत्रु-आतंकवाद
(i) आतंकवाद का अर्थ (ii) आतंकवाद के कारण
(iii) भारत में आतंकवाद (iv) विश्व में आतंकवाद

प्र.14. आप 135-ए, महीपनगर, चंडीगढ़ के निवासी दीपक/दीपिका हैं। दिल्ली में रहकर उच्च शिक्षा प्राप्त कर रहे अपने बड़े भाई को अपनी पढ़ाई और भविष्य की योजना के संबंध में बताते हुए एक पत्र लिखिए। (6)

अथवा

आप 208, महेशनगर, नागपुर में निवासरत शिवानी/शिवांश हैं। छात्रावास में रहकर पढ़ाई करने वाली अपनी छोटी बहन को फैशन और बनाव-शृंगार में व्यर्थ समय न गँवाने की सलाह देते हुए एक पत्र लिखिए।

प्र.15. 'स्वच्छ भारत अभियान' विषय पर दो नागरिकों के मध्य होने वाले वार्तालाप को लगभग 60 शब्दों में संवाद के रूप में लिखिए। (5)

अथवा

'पालक शिक्षक संवाद' (पीटीएम) में शिक्षक और पालक के बीच हुए वार्तालाप को लगभग 60 शब्दों में संवाद के रूप में लिखिए।

प्र.16. दिए गए चित्र को ध्यान से देखिए तथा चित्र के संबंध में अपने विचारों को लगभग 50 शब्दों में लिखिए- (5)





समय: -होरा त्रयम्
कक्षा- नवमी

दिल्ली-पब्लिक-स्कूल, भिलाईनगरम्
अर्धवार्षिकी परीक्षा- 2022-23
विषय: - संस्कृतम्

दिनाङ्कः 12.09.2022
पूर्णाङ्कः- 80

सामान्य-निर्देशाः-

- (i) अस्मिन् प्रश्नपत्रे चत्वारः खण्डाः सन्ति।
(ii) प्रश्नानाम् उत्तराणि संस्कृतभाषयामेव लेखनीयानि।
(iii) प्रश्नानाम् उत्तराणि क्रमानुसारं लिखत।
- 'क' खण्डः - अपठित-अवबोधनम् - 10 अङ्काः
'ख' खण्डः - रचनात्मकं कार्यम् - 15 अङ्काः
'ग' खण्डः - व्याकरणम् - 25 अङ्काः
'घ' खण्डः - पठित-अवबोधनम् - 30 अङ्काः

'क' खण्डः - अपठित-अवबोधनम् - 10 अङ्काः

1. अधोलिखितं गद्यांशं पठित्वा प्रश्नानाम् उत्तराणि लिखत-

एकदा राजकुमारः सिद्धार्थः विहाराय उद्यानं गतवान्। सहसा सः क्रन्दनध्वनिम् अशृणोत्। तदैव एकः हंसः तस्य सम्मुखे भूमौ अपतत्। तं दृष्ट्वा सिद्धार्थः करुणापूर्णः संजातः। पुनश्च सः हंसस्य शरीरात् बाणं निष्कास्य यावत् पश्यति तावत् देवदत्तः तत्र समागतः। सः सिद्धार्थम् उक्तवान् भो सिद्धार्थ ! एषः हंसः मया हतः। इमं हंसं मह्यं देहि। सिद्धार्थः उच्चैः अवदत्-न दास्यामि इमं हंसं यतः अहम् अस्य रक्षकः। तौ परस्परं विवादमानौ राजसभां गतवन्तौ। राजा सर्वं वृत्तान्तं श्रुत्वा आदिष्टवान्। यस्य समीपे हंसः गमिष्यति स तस्य एव भविष्यति। हंसः तु सानन्दं सिद्धार्थमेव उपगतः। उक्तं हि-“रक्षकः भक्षकात् श्रेष्ठः”।

- I. एकपदेन उत्तरत- (केवलं प्रश्नद्वयम्) (1x2=2)
- (i) भक्षकात् कः श्रेष्ठः?
(ii) सिद्धार्थः विहाराय कुत्र गतवान्?
(iii) तौ परस्परं विवादमानौ कुत्र गतवन्तौ?
- II. पूर्णवाक्येन उत्तरत- (केवलं प्रश्नद्वयम्) (2x2=4)
- (i) राजा वृत्तान्तं श्रुत्वा किम् आदिष्टवान्?
(ii) देवदत्तः सिद्धार्थं किम् उक्तवान्?
(iii) सिद्धार्थः उच्चैः किम् अवदत्?
- III. अस्य अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत- (1x1=1)
- IV. निर्देशानुसारम् उत्तरत- (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) 'भक्षकः' इति पदस्य विलोमपदं किम्?
(क) धावकः (ख) सेवकः (ग) रक्षकः
(ii) 'अपतत्' इति क्रियायाः कर्तापदं किम्?
(क) देवदत्तः (ख) हंसः (ग) सिद्धार्थः
(iii) 'इमं हंसम्' अनयोः पदयोः विशेषणपदं किम्?
(iv) 'राजा' इति कर्तृपदस्य क्रियापदं किम्?
(क) वृत्तान्तम् (ख) श्रुत्वा (ग) आदिष्टवान्

'ख' खण्डः- रचनात्मकं कार्यम् - 15 अङ्काः

2. भवान् सोमदत्तः अस्ति। भिलाईनगरस्थ-दिल्ली-पब्लिक-स्कूल-नाम्नि विद्यालये पठति। गतमासे भवतः विद्यालये स्थापनादिवसस्य आयोजनम् अभवत्। तस्य वर्णनं कुर्वन् स्वमित्रं सोमेशं प्रति मञ्जूषातः पदानि चित्वा पत्रं पूरयत- (½x10=5)

(i).....

दिनाङ्कः.....

प्रिय मित्र (ii).....!

सादरं नमोनमः।

अत्र कुशलं (iii).....। मित्र! इदं ज्ञात्वा भवान् अतीव प्रसन्नः भविष्यति यत् अगस्तमासस्य (iv).....तारिकायां अस्माकं (v).....स्थापना दिवसः आसीत्। (vi).....मुख्यातिथिः जिलाधिकारी श्रीमान् पुष्पेन्द्र-कुमार-मीणा-महोदयः आसीत्। विद्यालयस्य छात्राः अतीव (vii)..... कार्यक्रमं प्रस्तुतवन्तः। मुख्यातिथिः कार्यक्रमस्य (viii).....अकरोत्। कार्यक्रमस्य मुख्यविषयः “आजादी के अमृत महोत्सवः” आसीत्। विस्तारेण पुनः (ix).....।

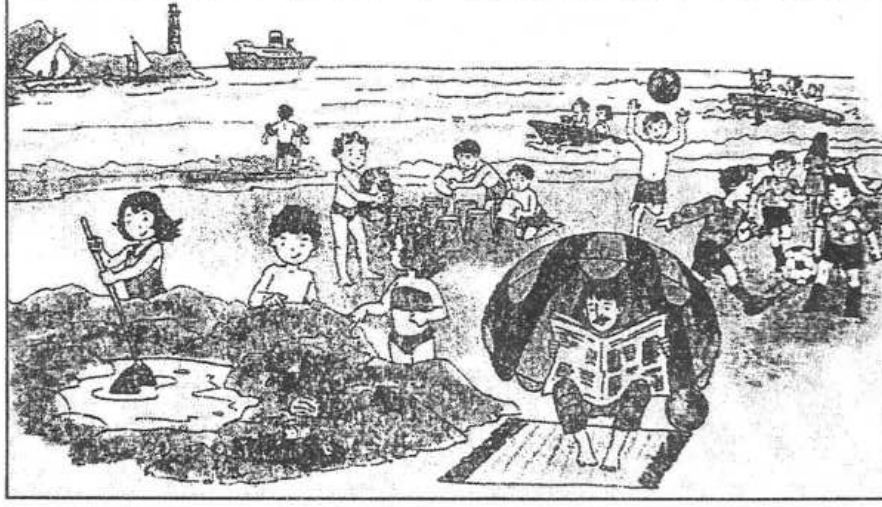
(x).....मित्रम्

सोमदत्तः

मञ्जूषापदानि - कार्यक्रमस्य, भिलाईतः, विंशतिः, सोमेश, विद्यालयस्य, तत्रास्तु, प्रशंसाम्, लेखिष्यामि, भवतः, मनोहरम्

3. मञ्जूषायां प्रदत्तशब्दानां सहायतया पञ्चवाक्येषु चित्रवर्णनं कुरुत-

(1×5=5)



मञ्जूषापदानि - समुद्रतटः, बालाः, कन्दुकम्, तरङ्गैः, नौकाः, क्रीडन्ति, समाचारपत्रं, नरः,
बालुकाभिः रचयन्ति, पादेन, गृहम्, समुद्रविहारम्, मित्रैः, सह, पठति, कुर्वन्ति

अथवा

मञ्जूषायां प्रदत्तशब्दानां सहायतया 'मम कक्षा' इति विषयम् अधिकृत्य संस्कृत-भाषायां पञ्चवाक्यानि लिखत-

मञ्जूषापदानि - मित्राणि, अध्यापकाः, अध्यापिकाः, मम, प्रियः, छात्राः, कक्षाकार्यं,
नवमीकक्षा, प्रतिदिनम्, स्वच्छम्, मित्रस्य नाम, आसन्दिका

4. मञ्जूषायां प्रदत्तशब्दानां सहायतया संवादपूर्तिं कुरुत-

(1x5=5)

भावना - सरिते! एताः महिलाः किम् आनयन्ति?

सरिता - एताः महिलाः आनयन्ति।

भावना - ताः जलं कुतः.....?

सरिता - ताः जलंआनयन्ति।

भावना - किंभोजनं पचन्ति?

सरिता - आम्, महिलाःपचन्ति।

मञ्जूषापदानि - भोजनं, जलं, महिलाः, आनयन्ति, कूपात्

'ग' खण्डः- अनुप्रयुक्तव्याकरणम् - 25 अङ्काः

5. यथानिर्देशम् उत्तरत- (केवलं प्रश्नचतुष्टयम्)

(½ x4=2)

(क) 'क्' वर्णस्य उच्चारणस्थानं किम्?

(ख) 'द्' इति वर्णस्य उच्चारणस्थानं किम्?

(ग) 'क्, च्, ट्, प्' एषु कः वर्णः मूर्धन्यवर्णः अस्ति?

(घ) 'ज्, ग्, झ्, ल्' एषुवर्णेषु तालव्यः वर्णः कः अस्ति?

(ङ) 'म्' वर्णस्य उच्चारणस्थानं किम्?

6. रेखाङ्कितपदानां सन्धिं विच्छेदं वा कुरुत- (केवलं प्रश्नचतुष्टयम्)

(1x4=4)

(i) अत्र बालस्य + अत्र कोऽपि रक्षकः नास्ति।

(ii) नरेन्द्रः कुत्र गच्छति?

(iii) हित + उपदेशः नामकः ग्रन्थ प्रसिद्ध अस्ति।

(iv) त्वं सदैव परिश्रमं कुरु।

(v) रमा मधरं गै + अति।

7. प्रदत्तविकल्पेभ्यः समुचितं पदं चित्वा रिक्तस्थानानि पूरयत- (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i)उभयतः नदी अस्ति।
 (क) नगरम् (ख) नगरः (ग) नगरेय
- (ii)सह श्रोतारः न आगच्छन्।
 (क) कविः (ख) कविना (ग) कवेः
- (iii) शिक्षकः.....ज्ञानं ददाति।
 (क) छात्रात् (ख) छात्रः (ग) छात्रेभ्यः
- (iv)नमः अस्तु।
 (क) गुरवे (ख) गुरुः (ग) गुरौ
- (v)निकषा उद्यानम् अस्ति।
 (क) विद्यालयः (ख) विद्यालयम् (ग) विद्यालयात्
8. उचितधातुरुपैः रिक्तस्थानानि पूरयत- (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i) वयं गुरुं.....।
 (क) नमामि (ख) नमामः (ग) नमन्ति
- (ii) अद्य वर्षा न.....।
 (क) भवति (ख) भवामि (ग) भवसि
- (iii) छात्राः परीक्षायां परिश्रमं.....।
 (क) करिष्यावः (ख) करिष्यथः (ग) करिष्यन्ति
- (iv) पुत्रः पितरं.....।
 (क) सेवते (ख) सवेते (ग) सेवन्ते
- (v) रमा चित्रकलायां पुरस्कारं।
 (क) लप्स्यते (ख) लप्स्येथे (ग) लप्स्यध्वे
9. उचितशब्दरूपैः रिक्तस्थानानि पूरयत- (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i)विद्यालयं गच्छामि।
 (क) अहम् (ख) माम् (ग) वयम्
- (ii)कालिदासः श्रेष्ठः आसीत्।
 (क) कविभ्याम् (ख) कविषु (ग) कविना
- (iii)कुत्र गच्छतः?
 (क) तौ (ख) सः (ग) तान्
- (iv) जलं शीतलम् अस्ति।
 (क) नदीम् (ख) नद्याः (ग) नदी
- (v) शिष्याः.....आश्रमे पठन्ति।
 (क) साधुः (ख) साधोः (ग) साधुम्
10. रेखाङ्कितपदेषु समुचितं प्रत्ययं विभज्य संयोज्य वा लिखत- (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) छात्राः पठ्+तुमुन् विद्यालयं गच्छन्ति।
 (क) पाठतुम् (ख) पठतुम् (ग) पठितुम्
- (ii) सः कार्यं कृत्वा विश्रामं करोति।
 (क) कृ+तुमुन् (ख) क्री+त्वाम् (ग) कृ+क्त्वा
- (iii) वानरः धाव्+क्त्वा फलानि खादति।
 (क) धावित्वा (ख) धावत्वा (ग) धावितुम्
- (iv) जनाः चलचित्रं दृश्+तुमुन् गच्छन्ति।
 (क) दर्शितुम् (ख) द्राशितम् (ग) द्रष्टुम्
11. मञ्जूषातः समुचितम् अव्ययं चित्वा रिक्तस्थानानि पूरयत- (केवलं प्रश्नचतुष्टयम्) (½ x4=2)
- (i) अस्माकं कक्षायां.....बालकाः पठन्ति।
- (ii)बालकौ खेलतः।
- (iii) अद्य रविवासरः अस्ति.....सोमवासरः भविष्यति।
- (iv) लता रमा.....नृत्यतः।
- (v) यथा गुरु.....शिष्यः।

मञ्जूषापदानि - श्वः, कति, तत्र, तथा, च

12. अङ्कानां स्थाने संस्कृतपदं लिखत- (केवलं प्रश्नचतुष्टयम्)

(½ x4=2)

- (i) अत्र (3)बालकाः क्रीडन्ति।
 (क) त्रियः (ख) त्रयः (ग) त्रिणि
- (ii) अहं (1)सिंहम् अपश्यम्।
 (क) एका (ख) एकम् (ग) एकः
- (iii) सप्ताहे (7)दिनानि भवन्ति।
 (क) सप्त (ख) सप्तानि (ग) सप्ताः
- (iv) (4)बालकाः धावन्ति।
 (क) चत्वारि (ख) चत्वारः (ग) चतस्रः
- (v) (70)जनाः मन्दिरं प्रति गच्छन्ति।
 (क) सप्ताः (ख) सप्ततिः (ग) पञ्चाशत्

‘घ’ खण्डः - पठित-अवबोधनम्- 30 अङ्काः

13. अधोलिखितं गद्यांशं पठित्वा प्रश्नानाम् उत्तराणि लिखत-

किन्तु बालस्य अत्र रक्षकः नास्ति। तत् किं करोमि? भवतु चिरकालपालितम् इमं पुत्रनिर्विशेषं नकुलं बालरक्षायां व्यवस्थाप्य गच्छामि। तथा कृत्वा गतः। ततस्तेन नकुलेन बालसमीपम् उपसर्पन् कृष्णसर्पः दृष्टः। स तं व्यापाद्य खण्डशः कृतवान्। अनन्तरे ब्राह्मणोऽपि श्राद्धं गृहीत्वा गृहम् उपावृतः। ब्राह्मणं दृष्ट्वा नकुलः रक्त-विलिप्त-मुख-पादः तस्य चरणयोः अलुठत्। विप्रः तथाविधं तं दृष्ट्वा बालकोऽनेन खादितः इति अवधार्य कोपात् नकुलं व्यापादितवान्। अनन्तरं यावत् उपसृत्य अपत्यं पश्यति तावत् बालकः सुस्थः सर्पश्च व्यापादितः तिष्ठति। ततः तम् उपकारकं नकुलं मृतं निरीक्ष्य आत्मानं मुषितं मन्यमानः ब्राह्मणः परं विषादम् अगच्छत्।

- I. एकपदेन उत्तरत- (केवलं प्रश्नद्वयम्) (½x2=1)
- (i) कस्य रक्षकः नास्ति?
 (ii) किं गृहीत्वा ब्राह्मणः गृहम् उपावृतः?
 (iii) बालसमीपं कः आगच्छत्?
- II. पूर्णवाक्येन उत्तरत- (केवलं प्रश्नद्वयम्) (1x2=2)
- (i) ब्राह्मणं दृष्ट्वा नकुलः किम् अकरोत्?
 (ii) ब्राह्मणः किं कृत्वा गच्छति?
 (iii) ब्राह्मणः कथं विषादम् अगच्छत्?
- III. भाषिककार्यम् - (केवलं प्रश्नद्वयम्) (1x2=2)
- (i) ‘अलुठत्’ इति क्रियायाः कर्तापदं किम्?
 (क) नकुलः (ख) ब्राह्मणः (ग) तस्य
- (ii) ‘उपकारकं नकुलम्’ अनयोः पदयोः विशेषणपदं किम्?
 (iii) ‘ब्राह्मणः’ अस्य पर्यायपदम् अनुच्छेदे किम् अस्ति?
 (क) विप्रः (ख) रक्तः (ग) निरीक्ष्य

14. पद्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत-

भवन्ति नम्रास्तरवः फलोद्गमैः

नवान्भुभिर्भूरिविलम्बिनोघनाः।

अनुद्धताः सत्पुरुषाः समृद्धिभिः

स्वभाव एवैष परोपकारिणाम्॥

- I. एकपदेन उत्तरत- (½x2=1)
- (i) फलोद्गमैः के नम्राः भवन्ति?
 (ii) घनाः कैः भूरिविलम्बिनः भवन्ति?
- II. पूर्णवाक्येन उत्तरत- (केवलं प्रश्नद्वयम्) (1x2=2)
- (i) सत्पुरुषाः समृद्धिभिः कथं भवन्ति?
 (ii) तरवः कथं नम्राः भवन्ति?
 (iii) सत्पुरुषाः कैः अनुद्धताः भवन्ति?
- III. निर्देशानुसारम् उत्तरत - (1x2=2)
- (i) ‘वृक्षाः’ अस्य पर्यायपदं श्लोके किम् अस्ति?
 (क) घनाः (ख) तरवः (ग) अनुद्धताः
- (ii) ‘नम्राः तरवः’ अनयोः पदयोः विशेष्यपदं किम्?

15. अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत-

- राजपुत्रः - (राजोचितं प्रणम्य) विजयतां महाराजः, विजयताम्।
 प्रतापः - (समाश्वस्य) अयि भ्रातः! कथं जयघोषं कृत्वा मां लज्जयसे?
 राजपुत्रः - देव! कथं भवान् वदति एवम्? किं न खलु कृतं भवता राज्यत्राणाय? स्वदेशं स्वाधीनं कर्तुं भवता किं न सोढम्?
 विजेष्यते ननु भवान्।
 प्रतापः - कुतस्तावद् विजयः! स्वदेशमेव त्यक्तुं तत्परोऽहम्।
 भटः - (अञ्जलिं बद्ध्वा) महाराज! नैवं तावत्। स्वामिभाग्यानाम् अनुगन्तारः वयम्। वयं सर्वे त्वाम् अनुगमिष्यामः।
 प्रतापः - एवं न वक्तव्यम्। कृतज्ञोऽस्मि भवताम् अहम्। वीरैः धीरैः बहु उपकृतं देशस्य। स्वदेशे एव तिष्ठद्भिः देशस्य स्वतन्त्रतायै प्रयत्नः समाधेयः।

I. एकपदेन उत्तरत- (½x2=1)

- (i) 'विजयतां महाराजः' इति कः वदति?
 (ii) प्रतापः कम् त्यक्तुं तत्परः आसीत्?

II. पूर्णवाक्येन उत्तरत- (केवलं प्रश्नद्वयम्) (1x2=2)

- (i) भटः अञ्जलिं बद्ध्वा किम् अवदत्?
 (ii) स्वदेशे एव तिष्ठद्भिः सैनिकैः किमर्थं प्रयत्नः समाधेयः?
 (iii) कैः देशस्य बहु उपकृतम्?

III. निर्देशानुसारम् उत्तरत - (1x2=2)

- (i) 'कृतघ्नः' अस्य विलोमपदं नाट्यांशे किम् अस्ति?
 (क) भवान् (ख) कृतज्ञः (ग) भवताम्
 (ii) 'अनुगमिष्यामः' इति क्रियायाः कर्तृपदं किम्?
 (क) वयम् (ख) प्रतापः (ग) भटः

16. रेखाङ्कितपदानि आधृत्य प्रश्ननिर्माणं कुरुत- (केवलं पञ्चप्रश्नाः) (1x5=5)

- (i) वृक्षस्य उपरि बलाका आसीत्।
 (ii) मुनिः ब्राह्मणगृहं गत्वा भिक्षामयाचत।
 (iii) राजा पुत्राणाम् आचारहीनतया उद्विग्नमनाः आसीत्।
 (iv) विद्यया बालकस्य पुनर्जन्म भवति।
 (v) भामाशाहः धनराशिम् आदाय आगच्छति।
 (vi) मूढैः पाषाणखण्डेषु रत्नसंज्ञा विधीयते।
 (vii) नकुलः समीपम् आगच्छन्तं कृष्णसर्पम् अमारयत्।

17. मञ्जूषातः समुचितं पदं चित्वा अन्वयपूर्तिं कुरुत- (½x4=2)

क्रीटोऽपि सुमनः सङ्गादारोहति सतां शिरः।
 अश्मापि याति देवत्वं महद्भिः सुप्रतिष्ठितम्॥

अन्वयः - सुमनः सङ्गात्अपि सताम्आरोहति। महद्भिःअश्मा अपियाति।

मञ्जूषापदानि- देवत्वम्, क्रीटः, सुप्रतिष्ठितः, शिरः

अथवा

अधोलिखितस्य श्लोकस्य भावार्थं मञ्जूषातः पदानि चित्वा लिखत-

गौरवं प्राप्यते दानात् न तु वित्तस्य सञ्चयात्।
 स्थितिरुच्चैः पयोदानां पयोधीनामथः स्थितिः॥

भावार्थः - जनाःएव समाजे सम्मानं गौरवं चधनस्य संचयात् न प्राप्नुवन्ति। यथा
 स्थितिः उच्चैः भवति सागरणां चअथः भवति।

मञ्जूषापदानि- स्थितिः, पयोदानाम्, त्यागेन, प्राप्नुवन्ति

18. मञ्जूषातः पदानि चित्वा कथां पूरयत-

(1x4=4)

भागीरथीतीरे पाटलिपुत्र नाम.....आसीत्। तत्र सुदर्शनः नाम राजा आसीत्। तस्य चत्वारः पुत्राः।
ते सर्वे एव मूर्खाः आसन्। राजा चिन्तितः आसीत्। स पण्डितसभां कारितवान्। राजा अवदत्- कोऽपि एवं विद्वान् अस्ति यः
मम.....नीतिशास्त्रे निपुणः करिष्यति। तदा विष्णुशर्मा अवदत्- अहं भवतः पुत्रान् योग्यान् करिष्यामि। राजा तस्य हस्ते
स्वपुत्रान्.....समर्पितवान्।

मञ्जूषापदानि-

पुत्रान् , आसन् , नगरम् , ससम्मानम्

19. प्रसङ्गानुसारं रेखाङ्कितपदानां विकल्पेभ्यः अर्थं चित्वा लिखत-

(केवलं प्रश्नचतुष्टयम्)

(1x4=4)

- (i) वित्तस्य संचयात् गौरवं न प्राप्यते।
(क) धनस्य (ख) दानात् (ग) फलस्य
- (ii) अहं भर्तुः परिचर्यां करोमि।
(क) हानिः (ख) सेवाम् (ग) दानम्
- (iii) मूढैः पाषाणखण्डेषु रत्नसंज्ञा विधीयते।
(क) सज्जनैः (ख) मूर्खैः (ग) पशुभिः
- (iv) खन्यमाना भूमिः तोयं ददाति।
(क) जलम् (ख) फलम् (ग) बलम्
- (v) येन आशु श्रेयः अवाप्स्यसि।
(क) बिलम्बेन (ख) शीघ्रम् (ग) रात्रौ



CLASS IX
16.09.2022

MATHEMATICS

GENERAL INSTRUCTIONS:

- This question paper contains two parts, A and B.
- Both Part A and Part B have internal choices

PART A:

- It consists of two sections I and II.
- Section-I has 16 questions of 1 mark each. Internal choice is provided in 5 questions.
- Section-II has 4 questions on case study. Each case study has 5 case based sub parts.
- Students have to attempt any 4 out of 5 sub-parts.

PART B:

- Question numbers 21 to 26 are very short answer type questions of 2 marks each.
- Question numbers 27 to 33 are short answer type questions of 3 marks each.
- Question numbers 34 to 36 are long answer type questions of 5 marks each.
- Internal choice is provided in 2 questions of 2 marks, 2 questions of 3 marks and 1 question of 5 marks.

PART A (Section-I)

1. Evaluate $(1^3 + 2^3 + 3^3)^{\frac{1}{2}}$
2. Write any two rational numbers between $\frac{2}{3}$ and $\frac{5}{3}$.
3. What is the degree of a constant polynomial? OR If $\frac{x}{y} + \frac{y}{x} = -1$, then find $x^3 - y^3$.
4. What is the point of intersection of the coordinate axes known as?
5. What measure of an angle is equal to 8 times its complementary angle?

OR

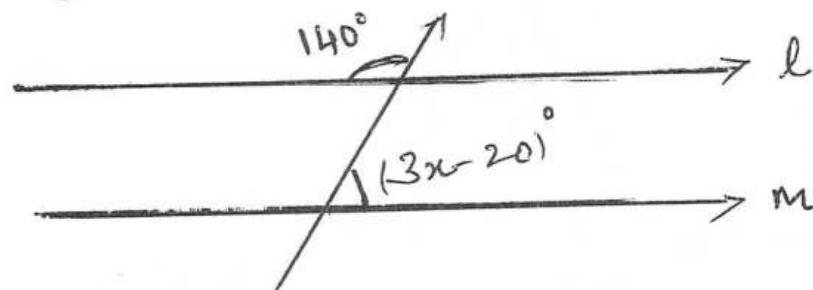
The two supplementary angles are in the ratio of 2:7. Find the angles.

6. ΔABC is an isosceles triangle with $AB=AC$ and $\angle A = 50^\circ$. Find $\angle B$ & $\angle C$.
7. Write the abscissa of the point $(-1, 2)$

OR

What is the perpendicular distance of the point $P(4, 3)$ from X axis?

8. Express $0.\bar{9}$ in the form of p/q .
9. What is the simplest rationalising factor of $\sqrt{50}$?
10. On solving $a - 15 = 25$ we get $a = 40$. State the Euclid's axiom used.
11. Write any one of the Euclid's axioms.
12. In the given figure if $l \parallel m$, then find the value of x .



13. If one angle of a triangle is equal to the sum of the other two angles, then what is the type of triangle formed?
14. If $\Delta PQR \cong \Delta EFD$ then the side ED of ΔEFD is equal to which side of ΔPQR ?
15. In ΔABC , if $AB=AC$ and BC is produced to D such that $\angle ACD = 100^\circ$, then find $\angle A$.

OR

In an isosceles triangle if the vertex angle is twice the sum of the base angles then, what is the measure of vertex angle of the triangle?

16. If $x + 2$ is a factor of $x^2 + mx + 14$, then find the value of m .

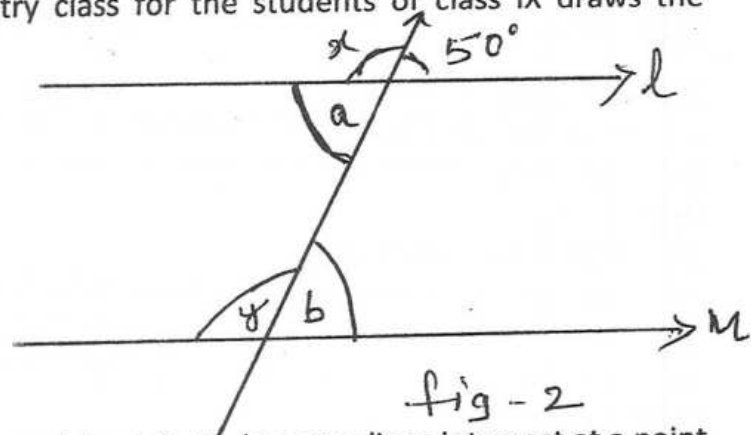
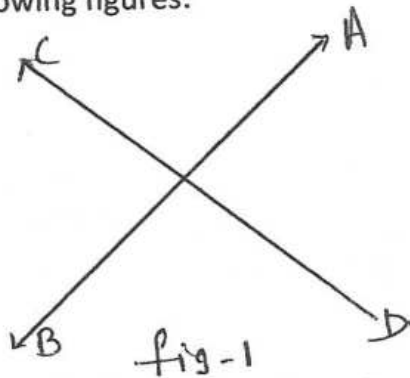
OR

What is the coefficient of x in the expansion of $(3x + 2)^2$?

SECTION-II

CASE STUDY-1

19. A Maths teacher while taking a geometry class for the students of class IX draws the following figures:



With reference to the above figures, she explained that when two lines intersect at a point, they are said to be intersecting lines and two lines which do not intersect each other in a plane are said to be parallel lines. Using the knowledge of intersecting lines and parallel lines answer the following questions:

- i. In figure (1) $\angle AOD$ and $\angle BOC$ are said to be:

(a) linear pair angles	(b) vertically opposite angles
(c) adjacent angles	(d) supplementary angles
- ii. $\angle AOC + \angle AOD$ is equal to:

(a) 360°	(b) 180°	(c) 90°	(d) 270°
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- iii. In the given figure (2) if one angle is 50° , then $\angle y$ is equal to:

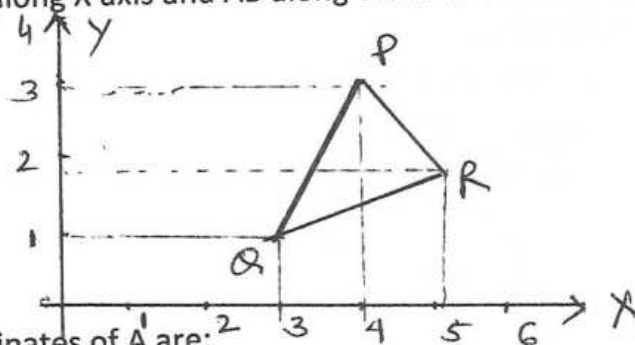
(a) 130°	(b) 50°	(c) 30°	(d) 60°
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- iv. In figure (2) $\angle x$ and $\angle y$ are known as:

(a) alternate angles	(c) corresponding angles
(iii) Linear pair angles	(d) supplementary angles
- v. In figure (2) if $\angle a = \angle b$ and $\angle a = 50^\circ$ then $\angle a + \angle b$ is equal to:

(a) 180°	(b) 50°	(c) 100°	(d) 90°
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CASE STUDY-2

18. In a rectangular garden, saplings of sunflowers are planted on the boundary at a distance of 1m from each other. There is a triangular grass lawn in the garden as shown in the figure. The gardener sows different flowering seeds in the remaining area of the garden. Considering A as origin, AD along X axis and AB along Y axis answer the following questions:



- i. The coordinates of A are:

(a) (0, 3)	(b) (3, 0)	(c) (0, 0)	(d) (0, 5)
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- ii. The coordinates of point P is (4, 3), it lies in which quadrant?

(a) I	(b) II	(c) III	(d) IV
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- iii. The coordinates of Q are:

(a) (1, 3)	(b) (3, 1)	(c) (-1, -3)	(d) (-3, -1)
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- iv. The perpendicular distance of point R from X axis is:

(a) 2 units	(b) 5 units	(c) 4 units	(d) none of the above
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- v. The ordinate of point P is:

(a) 5	(b) 3	(c) 0	(d) none of the above
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CASE STUDY-3

17. Renu and Venu decided to visit world book fair which is organised every year. During their visit Renu was fascinated by the cover page of a book which has different mathematical constants like π , Q , σ , α , β etc. The constant π is defined as the ratio of a circle's circumference to its diameter. Q is the symbolic representation of rational number. e is known as the Euler's number. Now using the knowledge of rational numbers, answer the following questions:

- i. π represents:
 - (a) an integer (b) a rational number (c) an irrational number (d) a natural number
- ii. Sum of two irrational numbers are:
 - (a) always rational (b) always irrational
 - (b) sometime rational and sometime irrational (d) an integer
- iii. A rational number lying between $\sqrt{3}$ and $\sqrt{5}$ is:
 - (a) $\frac{\sqrt{3}-\sqrt{5}}{2}$ (b) $\frac{\sqrt{3}+\sqrt{5}}{2}$ (c) $\sqrt{3} + \sqrt{5}$ (d) none of the above
- iv. A recurring and non-terminating decimal can be expressed as:
 - (a) an irrational number (b) a rational number
 - (c) rational and irrational both (d) none of the above
- v. The decimal representation of an irrational number is:
 - (a) terminating (b) non-terminating recurring
 - (c) non-terminating non-recurring (d) not possible

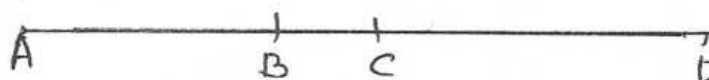
CASE STUDY-4

20. After a Maths class, few students of class IX were found discussing on the topic of polynomials which they were taught. They discussed about different types of polynomials and, zeroes of the polynomials. Test your knowledge of polynomials by answering the following questions:

- i. How many real zeroes does a quadratic polynomial have?
 - (a) 1 (b) 2 (c) at most 2 (d) 4
- ii. Which of the following is not a polynomial?
 - (a) x^2 (b) $x^2 + \frac{1}{x}$ (c) 3 (d) $4x^2 + 3x + 1$
- iii. The polynomial of the type $ax^2 + bx + c$, $a = 0$ is called _____ polynomial.
 - (a) linear (b) quadratic (c) cubic (d) constant
- iv. The zero of the polynomial $3x - 2$ is:
 - (a) $-2/3$ (b) $2/3$ (c) $3/2$ (d) $-3/2$
- v. If $p(x) = x^3 + 3x^2 + 2x - 1$, then $p(0) - p(-1)$ equals to:
 - (a) 0 (b) 1 (c) 2 (d) -1

PART-B

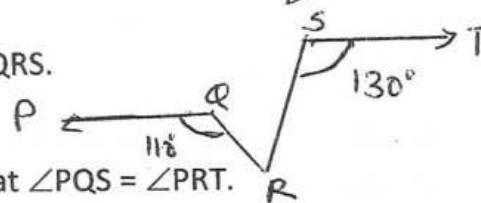
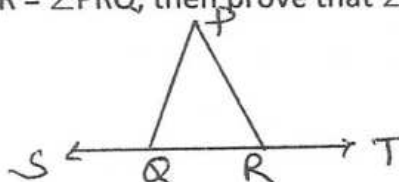
- 21. Factorize: $8x^3 + y^3 + 27z^3 - 18xyz$. OR Evaluate: $(99)^3$
- 22. In the given figure, if $AC = BD$, then prove that $AB = CD$. (write the axiom used)



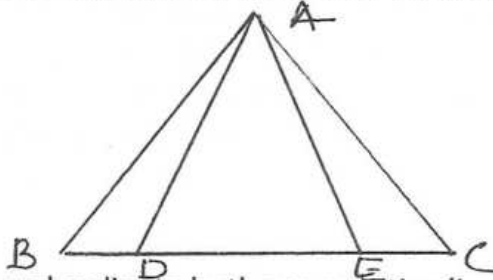
23. If $PQ \parallel ST$, $\angle PQR = 110^\circ$ and $\angle RST = 130^\circ$ find $\angle QRS$.

OR

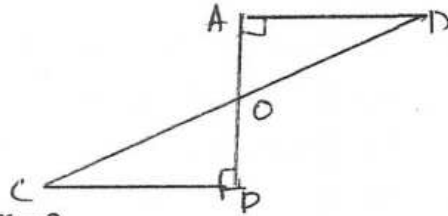
In the given figure $\angle PQR = \angle PRQ$, then prove that $\angle PQS = \angle PRT$.



24. Simplify by rationalizing the denominator of: $\frac{7+4\sqrt{3}}{7-4\sqrt{3}}$.
25. In an isosceles $\triangle ABC$ with $AB = AC$, D and E are points on BC such that $BE = CD$. Show that $AD = AE$.



26. (a) A point whose abscissa and ordinate both are negative lies on which quadrant?
 (b) What is the perpendicular distance of the point $(0, 5)$ from the origin?
27. Without actually calculating the cubes, evaluate $27^3 - 32^3 + 5^3$ using identity.
28. In an isosceles $\triangle ABC$, where $AB = AC$, side BA is produced to D . Such that $AD = AB$. Prove that $\angle BCD$ is a right angle.
29. AD and BC are equal perpendiculars to a line segment AB . Show that CD bisects AB .

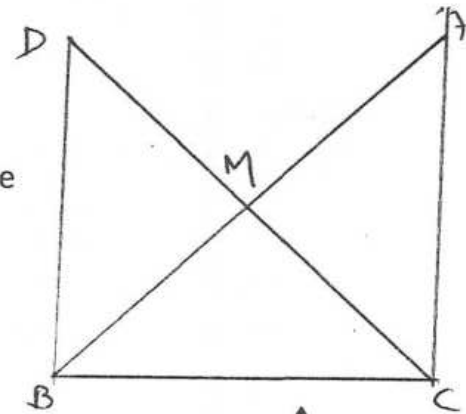


30. Find the remainder when $x^3 - ax^2 + 6x - a$ is divided by $x - a$.

OR

Check whether $7 + 3x$ is a factor of $x^3 + 7x$.

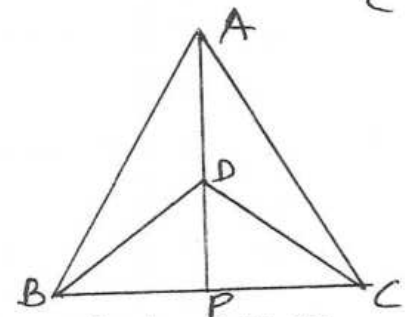
31. State Euclid's fifth postulate with figure.
32. In right $\triangle ABC$ right angled at C , M is the midpoint of hypotenuse AB . C is joined to m and produced to point D , such that $DM = CM$. Point D is joined to point B . Show that:
 (a) $\triangle AMC \cong \triangle BMD$ (b) $\angle DBC$ is a right angle



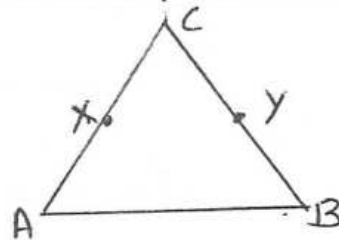
OR

$\triangle ABC$ and $\triangle DBC$ are two isosceles triangles on the same base BC and vertices A and D are on the same side of BC . If AD is extended to intersect BC at P , show that:

- (a) $\triangle ABD \cong \triangle ACD$ (b) $\triangle ABP \cong \triangle ACP$
 (c) AP is the perpendicular bisector of BC



33. In the given figure, we have X and Y as the midpoints of AC and BC respectively and $AX = CY$. Show that $AC = BC$.



34. (a) If $x = 2 + \sqrt{3}$, then find the value of $x + \frac{1}{x}$
 (b) Represent $\sqrt{2}$ on the number line.
35. If a transversal intersects two lines such that the bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel.

OR

POQ is a line. Ray OR is perpendicular to line PQ . OS is another ray lying between rays OP and OR . Prove that $\angle ROS = \frac{1}{2}(\angle QOS - \angle POS)$.

36. In which axes or quadrants do these points lie?
 $(-1, 0)$, $(2, 3)$, $(3, -1)$, $(-2, -3)$, $(-1, 2)$

* * * * *



GENERAL INSTRUCTION:

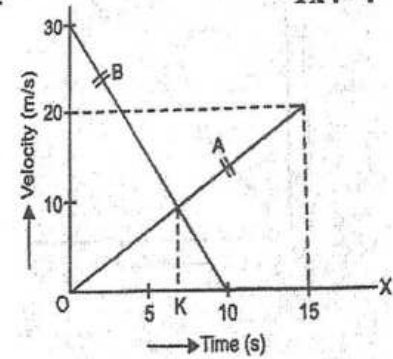
- 1) This question paper contains three sections A, B and C.
- 2) You have to solve all the section.
- 3) All questions are compulsory. However internal choice has been given in some question you have to solve any one of them.
- 4) For Assertion and Reasoning questions following are the options.
 - a) Both A and R are true and R is the correct explanation of A.
 - b) Both A and R are true but R is not the correct explanation of A.
 - c) A is true but R is false.
 - d) A is false but R is true.

SECTION – A (PHYSICS) : 27 Marks

01. This question has five sub questions and you have to answer any **four** of them.

1x4=4

Car A is moving with 30m/s applies breaks and reduces its velocity to zero in 10s, while car B starts from rest and increased its velocity to 20m/s in 15s. A student draw velocity time graph for the two cars as in figure. Observe these graphs carefully and answer the following questions:



- a) From the shape of graphs, what is the nature of motion of A and B?
- b) How much is acceleration of A?
- c) How much is acceleration of B?
- d) What is the distance travelled by the car A in 15s?
- e) What is the distance travelled by the car B before coming to rest?

02. **ASSERTION :** When astronauts throw something in space, that object would continue moving in the same direction and with the same speed.

REASON : The acceleration of an object produced by a net applied force is directly related to the magnitude of the force, and inversely related to the mass of the object.

1

03. State law of inertia. Explain, with proper derivation that Newtons first law of motion is a special case of Newtons second law.

3

04. Draw graph for the following condition:

3

- a) Velocity time graph for a body having uniform acceleration.
- b) Distance time graph for a body having zero velocity.
- c) Velocity time graph for a body having zero acceleration.

05. An athlete completes one round of a circular track of diameter 200m in 40s. What will be the distance travelled and displacement at the end of 2 min 20s?

3

OR

An object moves towards south by 7km and then takes a right turn and moves 5km, again takes a left turn and moves 5km. Calculate the distance travelled and displacement of the object.

06. Give reasons:

- a) It is difficult for the fireman to hold a hose, which ejects large amount of water at a high velocity.
- b) We fall in the forward direction when the driver of the moving bus applies break suddenly. $1\frac{1}{2} + 1\frac{1}{2}$

07. a) Define inertia of motion.

b) State Newtons second law of motion.

c) A car of mass 1200kg is moving along a straight line with a uniform velocity of 90 km/h. Its velocity is slowed down to 18 km/h in 4s by an unbalanced force. Calculate the acceleration and change in momentum. Also calculate the magnitude of the force required.

1+1+3

08. a) Write two points of difference between speed and velocity.

b) A train travels the first 30km on a 120km track with a uniform speed of 30km/h. What should be the speed for the remaining distance of the track so that the average speed for the entire trip is 60 km/h?(2+3)

OR

5

- i. Name the term used for Rate of change of velocity.
- ii. Describe the different types of the above quantity based upon change in velocity.
- iii. A jet plane starts from rest with an acceleration of 3m/s^2 and makes a run of 35s before taking off. What is the minimum length of runway and what is the velocity of the jet at take off? (1+2+2)

SECTION – B (CHEMISTRY) : 26 Marks

09. The boiling point of water is –
 (a) 0°C (b) 273 K (c) 100°C (d) None of these (1)
10. Density (d) of a substance is –
 (a) $d = \frac{m}{T}$ (b) $d = \frac{m}{V}$ (c) $d = \frac{V}{M}$ (d) None of these (1)
11. Diffusion of which state of matter is maximum?
 (a) Gas (b) Solid (c) Liquid (d) None of these (1)
12. The metal, Gallium (Ga) is liquid at –
 (a) 0°C (b) 20°C (c) 303 K (d) None of these (1)
13. Define the term-Evaporation. (1)
14. Write the percentage composition of the metals in alloy Brass. (1)
 OR
 What are the percentages of oxygen and nitrogen present in atmospheric air?
15. Assertion (A) : Cotton clothes are more comfortable in the summer.
 Reason (R) : Cotton is a natural fibre. (1)
16. Which of the following materials fall in the category of a 'Pure Substance'?
 (a) Ice (b) Iron (c) Air (d) Brick (e) Mercury (3)
17. Calculate the masses of solute and solvent required to make a 25% solution of 250 gm. quantity. (3)
18. Tabulate the difference in the following characteristics of solid, liquid and gas –
 (a) Shape and Volume (b) Interparticle space
 (c) Interparticle force of attraction (Must be written in tabular form) (3)
 OR
Give Reason :
 (a) A desert cooler cools better on a hot and dry day.
 (b) The water kept in an earthen pot (matka) becomes cool during summer.
19. (a) Convert the following temperature to Kelvin Scale – (i) 25°C (ii) 373°C (iii) -20°C
 (b) Give any two reasons to justify that water is a liquid at room temperature. (5)
20. (a) How are true solution, suspension and colloidal solution different from each other? (Write any three points in tabular form)
 (b) Classify the following as Physical or Chemical changes –
 (i) Burning of wood (ii) Cutting of vegetables
 (iii) Digestion of food (iv) Melting of ice (5)
 OR
 (a) Classify the following into elements, compounds and mixtures –
 (i) Sodium (ii) Soil (iii) Calcium Carbonate
 (iv) Carbon di oxide (v) blood (vi) Tin
 (b) Tabulate any two points of differences between homogeneous and heterogeneous mixtures.
 (Write in column)

SECTION – C (BIOLOGY) : 27 Marks

21. Nirmita collected onion peel from onion and her friend Payel collected membranous structure of an egg after deshelling through diluted hydrochloric acid. Payel placed the membranous body into pure water while Nirmita put the onion peel into the sugar solution.

Now answer the following questions : (any four) (1x4=4)

- (a) Is the outermost layer of experimental material Nirmita and Payel collected are living or non-living?
 Name the parts in biological term.
 (b) What is the chemical composition of outermost layer in both the above cases?
 (c) What happened when the onion peel was placed in the sugar solution & why?
 (d) What happened, when the membranous deshelled egg was placed in pure water?
 (e) How can the above experiment be also useful in human life?

22. What do you mean by 'Green Chromoplasts'? Where do you find 'Leucoplasts' in a plant body? (1)

OR

Name the process by which meristematic tissue changes into permanent tissue. What is the other criteria for such a change?

23. Assertion (A) : In both plant and animal cells, the main area of cellular activities in cytoplasm.
Reason (R) : Various chemical Reactions occur in Cytoplasm to keep the cell in living state. (1)

24. The Plant tissue which provides mechanical strength and consists of living cell is –
(a) Sclerenchyma (b) Xylem (c) Collenchyma (d) Aerenchyma (1)

25. The cell organelle involved in forming complex sugars from simple sugars are –
(a) Endoplasmic Reticulum (b) Golgi Apparatus
(c) Ribosomes (d) Plastids (1)

26. Differentiate between the cell-division process of Mitosis and Meiosis (Minimum three points and in a tabular form). (3)

27. Name the cell organelle which show the analogy as written under : (3)

- (a) Transporting Channels of the cell –
- (b) Power house of the cell –
- (c) Packaging & despatching unit of the cell –
- (d) Digestive bag of the cell –
- (e) Storage sacs of the cell –
- (f) Kitchen of the cell –

28. (a) Which structure protects the plant body against the invasion of parasites?
(b) Write two more importance (other than the above mentioned) of such a structure.
(c) Why cork cells are impermeable to gases and chemicals? (3)

OR

- (a) You can very easily bend the stem of a plant without breaking it. Name the tissue in the plant which makes it possible.
- (b) Where is such a tissue located?
- (c) Draw a labelled diagram of the transverse sections of the tissue.

29. Give reason for :- (5)

- (a) Meristematic cells have a prominent nucleus and dense cytoplasm, but they lack vacuole.
- (b) Intercellular spaces are absent in sclerenchymatous tissue.
- (c) It is difficult to pull out the husk of coconut.
- (d) We get a crunchy and granular feeling when we chew pear fruit.
- (e) Aquatic plants float in water.

30. (a) Which plant tissue will you associate with conduction of food in plants?
(b) Name the constituents of such plant tissue.
(c) Draw neat and labelled diagram of the section of such tissue showing all the constituents. (5)

OR

- (a) Draw the diagram of a plant cell and label any three parts which makes it different from an animal cell.
- (b) Why is endocytosis found in animals only?
- (c) Name the two organelles in a plant cell that contain their own genetic materials & ribosomes.



General Instructions :

- Question paper comprises 3 sections – A, B, and C. There are 33 questions in the question paper. All questions are compulsory.
 - Section A is History and Civics of 40 marks.
 - Section B is Geography of 20 marks.
 - Section C is Economics of 20 marks.
- Objective type questions should be answered as directed.
- Answer to 3-mark questions should not exceed 80 words each.
- Answer to 5-mark questions should not exceed 120 words each.
- Source based questions should be answered as directed.
- Map work should be done as directed in question.

SECTION – A (HISTORY & CIVICS) : 40 MARKS

01. Which Estate did the businessmen in France belong to? (1)
(a) 1st Estate (b) 2nd Estate (c) 3rd Estate (d) None of these
02. Who from among the following advocated women's suffragette movement? (1)
(a) Radicals (b) Conservatives (c) Liberals (d) All of these
03. Identify the book written by Montesquieu. (1)
(a) The Spirit of the govt. (b) The Spirit of the Laws
(c) The Spirit of the State (d) None of these
04. In the year 2015, who in Saudi Arabia got the right to vote? (1)
05. In which words did Abraham Lincoln define democracy? (1)
OR
From which country did the Indian Constitution borrow the idea of Fundamental Rights?
06. What do you mean by the term Sovereign? (1)
OR
What do you mean by the term Secular?
07. State any three features of the French Constitution of 1791. (3)
08. Why did the Tsarist autocracy collapse in 1917? (3)
OR
Write a note on the Duma in Russia.
09. Zimbabwe under Robert Mugabe was not a true democracy. Justify. (3)
OR
Democracy is a more accountable form of govt. than any other. Justify.
10. The representatives of the third estate viewed themselves as spokesmen for the whole French nation. On 20 June they assembled in the hall of an indoor tennis court in the grounds of Versailles. They declared themselves a National Assembly and swore not to disperse till they had drafted a constitution for France that would limit the powers of the monarch. They were led by Mirabeau and Abbé Sieyès. Mirabeau was born in a noble family but was convinced of the need to do away with a society of feudal privilege. He brought out a journal and delivered powerful speeches to the crowds assembled at Versailles. Abbé Sieyès, originally a priest, wrote an influential pamphlet called 'What is the Third Estate'?

Answer the following MCQs by choosing the most appropriate option.

(1x4=4)

- 10.1 What did the 3rd Estate declare themselves on 20th June 1789?
(a) Estates General (b) National Assembly (c) Convention (d) None of these
- 10.2 In the tennis court ground of which city did the 3rd Estate representatives assemble on 20th June 1789?
(a) Paris (b) Versailles (c) Berlin (d) None of these
- 10.3 The representatives of which estate viewed themselves as spokesmen for the whole French nation?
(a) First Estate (b) Second Estate (c) Third Estate (d) None of these
- 10.4 Who, originally a priest, wrote an influential pamphlet called 'What is the Third Estate'?
(a) Rousseau (b) Mirabeau (c) Abbe Sieyes (d) None of these

11. In Pakistan, General Pervez Musharraf led a military coup in October 1999. He overthrew a democratically elected government and declared himself the 'Chief Executive' of the country. Later he changed his designation to President and in 2002 held a referendum in the country that granted him a five year extension. Pakistani media, human rights organisations and democracy activists said that the referendum was based on malpractices and fraud. In August 2002 he issued a 'Legal Framework Order' that amended the Constitution of Pakistan. According to this Order, the President can dismiss the national and provincial assemblies. The work of the civilian cabinet is supervised by a National Security Council which is dominated by military officers. After passing this law, elections were held to the national and provincial assemblies. So Pakistan has had elections, elected representatives have some powers. But the final power rested with military officers and General Musharraf himself.

Answer the following MCQs by choosing the most appropriate option. (1x4=4)

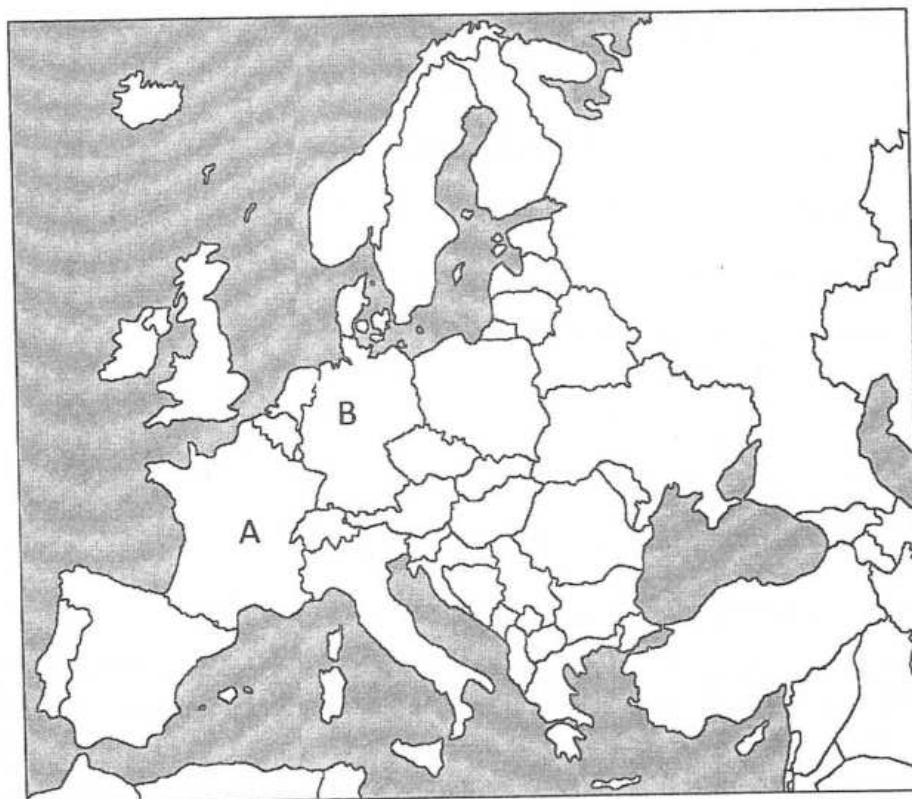
- 11.1 Who led a military coup in Pakistan in October 1999?
 (a) Nawaz Sharif (b) Gen. Parvez Musharraf (c) Gen. Zia (d) None of these
- 11.2 Which of the following was dominated by the military officers in Pakistan?
 (a) National Security Council (b) Supreme Court (c) Parliament (d) None of these
- 11.3 For the extension of which post did Gen. Musharraf hold a referendum in Pakistan?
 (a) Prime Minister (b) President (c) Chief Minister (d) None of these
- 11.4 In which year was a 'Legal Framework Order' issued??
 (a) 2000 (b) 2001 (c) 2002 (d) None of these

12. Describe the rise of Napoleon Bonaparte. (5)

OR

Describe changes that occurred in Russia immediately after the October revolution.

13. What is Constitution? Why should we accept the Indian Constitution made more than 70 years ago? (1+4=5)
14. Explain any five demerits of democracy. (5)
15. Two places A and B have been marked on the given outline map of Europe. Identify them and write their correct names on the answer sheet. (1x2=2)



SECTION – B (GEOGRAPHY : 20 MARKS)

16. Which latitude divides India into almost two equal parts? (1)
 (a) The Tropic of Capricorn (b) The Tropic of Cancer
 (c) Prime Meridian (d) Standard Meridian
17. Which is the northern most range of the Himalayas? (1)
 (a) Himadri (b) Himachal (c) Purvanchal (d) Shivalik
18. Which group of islands' administrative headquarters are at Kavaratti? (1)
 (a) Andaman and Nicobar (b) Puducherry (c) Diu (d) Lakshadweep
19. Which one of the following rivers is known as the "Dakshin Ganga"? (1)
 (a) Narmada (b) Tapi (c) Kaveri (d) Godawari
20. India has a land boundary of about km. (1)
 (a) 15,200 (b) 16,800 (c) 13,500 (d) 14,300

OR

- Which is the southernmost point of the Indian Union? (1)

21. Which longitude has been taken as the Standard Meridian of India and why has it been so selected?(1+2=3)

22. Read the text given below and answer the following question:

A lake is an area filled with water, surrounded by land. Lakes are typically larger and deeper than the ponds. Lakes in the region of inland drainage are sometimes seasonal; for example, the Sambhar Lake in Rajasthan, which is a salt water lake. Its water is used for producing salt. Most of the fresh water lakes are in the Himalayan region. They are of glacial origin. In other words, they formed when glaciers dug out a basin, which was later filled with snowmelt. The Wular lake in Jammu and Kashmir, in contrast, is the result of tectonic activity. It is the largest fresh water lake. Apart from natural lakes, the damming of the rivers for the generation of hydel power had also led to the formation of lakes, such as Guru Gobind Sagar.

22.1 Most of the fresh water lakes of the Himalayan region are of _____ origin. (1)
 (a) Volcanic (b) Landslide (c) Weathered (d) Glacial

22.2 Which is the largest fresh water lake in India? (1)
 (a) Dal (b) Kolleru (c) Wular (d) Hirakud

22.3 In which state is the Sambhar lake located ? (1)
 (a) Haryana (b) Rajasthan (c) Madhya Pradesh (d) Gujarat

22.4 Which of the following is a man made lake ? (1)
 (a) Lake Naini (b) Chilika (c) Bhimtal (d) Guru Gobind Sagar

23. Write in brief about the Indian Desert under the following heads ? (1+1+1+1+1=5)
 (a) Location (b) Climate (c) Vegetation
 (d) Drainage (v) Land features/any other feature

OR

Name any four physiographic divisions of India. Contrast the relief of the Himalayan region that with the Peninsular Plateau.

24. On the given outline map of India, mark the following. (Any three) (2+3=5)
 (a) Goa (b) Kanchan Junga (c) Malwa Plateau
 (d) The Narmada (e) Pulicat

SECTION – B (ECONOMICS : 20 MARKS)

25. Which one of the following inputs is not a working capital? (1)
 (a) Machine (b) Raw material (c) Money (d) None of the above

26. Name any four factors of production. (1)

27. Infant mortality rate refers to the death of a child under the age of (1)

OR

Which of the following is not a market activity?

(a) Banking (b) Teaching (c) Dairy farming (d) Raising child

28. Economic activities add value to the (1)

OR

Wheat is a _____ crop.

29. Educated are found to invest heavily on the education of their child. (1)

30. What do you mean by: (3)

(a) Multiple cropping (b) Green revolution

31. Write any three characteristics of capital as a factor of production. (3)

OR

What are modern farming methods? Explain their drawbacks.

32. During interaction between a teacher and the students, one student raised some questions. You are requested to frame the response for the teacher. (4)

(a) Meaning of economic activities with example. (b) Unemployment and its types

33. Meera is afraid that in her workspace men colleagues of lesser experience and educational qualification are getting good salary and hike. State the reason behind her worry. (5)

OR

Write a short note on: (any five)

(a) Vicious cycle with example. (b) Life expectancy rate (c) Distance education
 (d) Disguised unemployment (e) Sarva Siksha Abhiyan (f) Bridge course



General Instructions :

- Attempt all questions.
- Tick the right option.
- Each correct answer carries 1 mark.

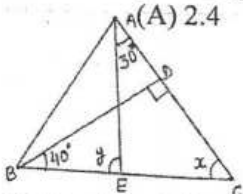
Name of the student: _____




Class/Sec. _____

Roll No. _____

Invigilator's Signature _____

Marks obtained : ____/50

- If 'r' is a rational number and 's' is an irrational number, then (r + s) and (r - s) are
(A) Rational Number (B) Irrational Number (C) Polynomial (D) Prime Number
- A polynomial is called a quadratic polynomial if it has
(A) two terms (B) degree two (C) degree three (D) three terms
- Rise in Green Net National Income implies higher sustainable development in an economy. Green Net National Income is the difference between
(A) Difference between Net National Income and gross savings.
(B) Difference between Net National Income and depreciation of natural capital
(C) Difference between Net National Income and depreciation of man-made capital
(D) Both (B) and (C)
- Match List-I with List-II and select answer using the appropriate code from among the following alternatives. List-I List - II
(A) Disparities in income in a developing economy (I) Trickle Down theory
(B) Economic development benefits the poor (II) Change in occupational structure
(C) Shifting of labour from agricultural to non agricultural sector (III) Less redistribution of income in favour of poor
(D) Increase in the capabilities of people (IV) Human development
(A) A - II, B - III, C - I, D - IV (B) A - I, B - II, C - III, D - IV
(C) A - III, B - I, C - II, D - IV (D) A - IV, B - II, C - I, D - III
- If Life Expectancy Index for a country is 0.53, Educational Attainment Index is 0.67 and Per Capita Real GDP Index is 0.42, then HDI for the country will be
(A) 0.93 (B) 0.70 (C) 0.54 (D) 0.68
- If cash reserve ratio of banks is 20% and currency reserves in the banking system amount to 50 million rupees, the maximum amount of demand deposits which can be created by the banks is
(A) 200 million rupees (B) 250 million rupees (C) 500 million rupees (D) 1000 million rupees
- The Government of India supplies food grains and other essential commodities to BPL households through fair price shops. Name of the programme is
(A) ICDS (B) MDM (C) PDS (D) Antodaya
- The distance of a point 'A' from x-axis, on a Cartesian or coordinate plane is called
(A) X-coordinate (B) Absciss (C) Ordinate (D) Origin
- Free trade in goods among nations is called
(A) Privatisation (B) Liberalisation (C) Globalisation (D) Exclusion
- NITI Ayog prepares
(A) Five year plans for the country (B) Five year plans for the states
(C) Annual plans for the country as well as states (D) None of the above
- A linear equation in two variables has
(A) Infinitely many solutions (B) Unique solution (C) Only two solutions (D) No solution
- Indira Awas Yojana houses are given to the
(A) STs only (B) SCs only (C) BPL households (D) Both (A) and (B)
- In which of the following countries the Baluchistan Plateau is located?
(A) Afghanistan (B) Pakistan (C) China (D) India
- Which of the following is not a criteria for congruency of two triangles?
(A) SAS (B) ASA (C) ASS (D) AAS
- What is the percentage of surface covered by India?
(A) 2.4 (B) 3.4 (C) 4.4 (D) 5.4
-  In the given figure, what is the measure of angle x and y respectively?
(A) 50° & 60° (B) 30° & 80° (C) 50° & 75° (D) 50° & 80°
- Which of the following places is known as the "Island of Pearls"?
(A) Australia (B) Madagascar (C) Baharin (D) Srilanka
- Durand Line is the boundary between:
(A) India and Pakistan (B) India and China (C) Pakistan and Afghanistan (D) India and Afghanistan
- In which of the following countries world's largest reserves of uranium is located?
(A) Australia (B) Canada (C) China (D) Brazil
- Select the odd one from the following:
(A) Chilika (B) Pulicat (C) Vembanad (D) Kolleru
- What is Karewa?
(A) A type of soil (B) A type of plant (C) A type of animal (D) A type of tribe

22. Which of the following pairs is not correct?
(A) Berlin – Rhine (B) London – Thames (C) New York – Hudson (D) Viena – Danube
23. Which of the following groups accounts for over 90% of India's annual coal production?
(A) Bihar, Odisha, Madhya Pradesh (B) Bihar, Madhya Pradesh, Tamil Nadu
(C) West Bengal, Odisha, Madhya Pradesh (D) Bihar, Odisha, West Bengal
24. Which National Highway connects Amritsar with Kolkata via Delhi?
(A) N.H. 1 (B) N.H. 2 (C) N.H. 4 (D) N.H. 8
25. The line segment joining the mid points of any two sides of a triangle is parallel to third side and equals to of it.
(A) 2 times (B) 1/3 times (C) 1/2 times (D) 1/4 times.
26. In which state is the Guru Sikhar Peak Located?
(A) Gujarat (B) Rajasthan (C) Maharashtra (D) Madhya Pradesh
27. Tehri Hydropower Project is located on:
(A) Alakananda River (B) Bhagirathi River (C) Mandakini River (D) Dhauliganga River
28. In the context of which event we read about the activities of Mensheviks and Bolshevicks?
(A) French Revolution (B) World war I (C) Russian Revolution (D) Indian Nationalist movement
29. Who was the Czar of Russia in 1917?
(A) Alexander I (B) Alexander II (C) Nicholas I (D) Nicholas II
30. In which country was the Weimar Republic formed after the World War I?
(A) Germany (B) Italy (C) France (D) England
31. Find out which statement mentioned below is true
(A) Hitler came to power in Italy (B) Hitler deliberately violated the terms of the Treaty of Versailles
(C) Hitler was a poor orator (D) Hitler encouraged the Jews
32. Who has written the Odia novel Chhamana Athaguntha?
(A) Rama Shankar Ray (B) Nandakishore Bal (C) Fakir Mohan Senapati (D) Surendra Mohanty
33. Where did Mahatma Gandhi start his first Satyagraha movement?
(A) South Africa (B) Kheda (C) Champaran (D) Nagpur
34. Whose cause did Mahatma Gandhi champion in organizing a satyagraha movement in Ahemedabad in 1918?
(A) Peasants (B) Agricultural Labours (C) Zamindars (D) Cotton mill workers
35. What was the date fixed for observing a countrywide hartalin protest against the Rowlatt Act?
(A) 18 March 1919 (B) 19 March 1919 (C) 6 April 1919 (D) 9 April 1919
36. Who presided over the Lahore session of the Indian National Congress in December 1929?
(A) Motilal Nehru (B) Jawaharlal Nehru (C) Subhas Chandra Bose (D) Mahatma Gandhi
37. Who was the Viceroy of India when the Salt Satyagraha began in 1930?
(A) Lord Irwin (B) Lord Willingdon (C) Lord Linlithgow (D) Lord Wavell
38. How was response of the Indian women towards the Salt Satyagraha?
(A) They were against the movement (B) They remained indifferent
(C) They participated in large number (D) They were not allowed to participate
39. Which one of the following is written in correct chronological order of the given events?
(A) Chaurichaura Incident, Gandhi – Irwin Pact, Second Round Table conference, Dandi March
(B) Dandi March, Chaurichaura incident, Second Round Table Conference, Gandhi – Irwin Pact
(C) Second Round Table Conference, Dandi March, Gandhi – Irwin Pact, Chaurichaura Incident
(D) Chaurichaura Incident, Dandi March, Gandhi – Irwin Pact, Second Round Table Conference
40. Which part of the Indian Constitution mentions that the State shall endeavour to promote international peace and security?
(A) Part I (B) Part II (C) Part III (D) Part IV
41. How many members from the Anglo-Indian Community be nominated to the State Legislative Assembly by the Governor?
(A) 1 (B) 2 (C) 3 (D) 4
42. What happens if there is a disagreement between the two Houses of the Parliament regarding a Constitution Amendment Bill?
(A) Joint sitting of both the House is convened. (B) The bill is sent to the State Legislative
(C) There is an end to the Bill (D) Advice of the Supreme Court is solicited
43. What can be the maximum number of elected members of a State Legislative Assembly?
(A) 500 (B) 507 (C) 509 (D) 510
44. Which of the following Amendments Converted Right to Property into a Legal Right?
(A) 44th Amendment (B) 42nd Amendment (C) 73rd Amendment (D) 86th Amendment
45. How long a Chief Minister of a State holds office?
(A) For full 5 years (B) So long as he remains the leader of the majority party in the State Legislative
(C) So long as the Governor desires (D) None of the above
46. Who can create or abolish an All-India Service?
(A) Lok Sabha (B) Rajya Sabha (C) President (D) The Parliament
47. Which of the Articles says that a Money Bill shall not be introduced in the Council of States?
(A) Article 107 (B) Article 108 (C) Article 109 (D) Article 110
48. The shaded region in the given circle is known as,
(A) Major Segment (B) Minor Sector (C) Major Sector (D) Minor Segment 
49. In the given figure what is the measure of x if y = 30°. 
(A) 60° (B) 30° (C) 90° (D) 45°
50. In the given figure, what is the total surface area,
(A) $2\pi r(r + h)$ (B) $2\pi rh$ (C) $2\pi(rh + h)$ (D) $2\pi h(r + h)$ 



General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 21 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
5. All questions of a particular section must be attempted in the correct order.
6. SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):
 - (i) This section has 05 questions.
 - (ii) Marks allotted are mentioned against each question/part.
 - (iii) Do as per the instructions given.
7. SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):
 - (i) This section has 16 questions.
 - (ii) A candidate has to do 10 questions.
 - (iii) Do as per the instructions given.
 - (iv) Marks allotted are mentioned against each question/part

SECTION A: OBJECTIVE TYPE QUESTIONS

- Q1. Answer any 4 out of the given 6 questions on **Employability Skills** (1x4=4 marks) 4
- i. A group of words that makes complete sense is called a _____
 - a. Phrase
 - b. Sentence
 - c. Subject
 - d. Predicate
 - ii. The 'S' SMART strategy stands for _____
 - a. Short
 - b. Schedule
 - c. Specific
 - d. Systematic
 - iii. People with self-confidence have a _____ outlook.
 - a. Negative
 - b. Arrogant
 - c. Outward
 - d. Positive
 - iv. A CPU does not consists of _____
 - a. ALU
 - b. HDD
 - c. CU
 - d. MU
 - v. In an E-mail message, Cc stands for _____
 - a. Carbon copy
 - b. Cannot copy
 - c. Can copy
 - d. Contains copy
 - vi. A web page is written using _____ language.
 - a. C++
 - b. Python
 - c. HTML
 - d. Java
- Q2. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks) 5
- i. Who among the following is the pioneer of the AI research?
 - a. Google
 - b. Facebook
 - c. US Department of Defence
 - d. None
 - ii. Which of the following is/are domains of artificial intelligence?
 - a. Data
 - b. Neural network
 - c. Computer vision
 - d. All of these
 - iii. Which of the following is NOT one of the Vs of Big Data?
 - a. Volume
 - b. Verifiability
 - c. Velocity
 - d. Variety
 - iv. Which is used to define a block of code (body of loop, function, etc) in Python?
 - a. Curly braces
 - b. Quotation
 - c. indentation
 - d. parenthesis
 - v. Which of the following is a keyword in Python?
 - a. else
 - b. return
 - c. import
 - d. all of the above
 - vi. Which of the following companies have developed Hangout?
 - a. Microsoft
 - b. Google
 - c. IBM
 - d. Apple
- Q3. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks) 5
1. The AI systems in existence today cannot _____.
 - a. Help in decision-making
 - b. Interpret visual scenes
 - c. Recognise objects in videos
 - d. Cannot categories images,
 2. _____ contains both location and time information.
 - a. Machine data
 - b. Time stamped data
 - c. Spatiotemporal data
 - d. Spatial data
 3. During which period did big data sets start emerging?
 - a. 1960s and 70s
 - b. 1980s and 90s
 - c. 2000s and 2010s
 - d. 2010 onwards
 4. An AI project cycle ends with _____.
 - a. Project Deployment
 - b. Project Review
 - c. Project Tuning
 - d. None of these
 5. What is the answer to this expression 20%3?
 - a. 6
 - b. 2
 - c. 1
 - d. 5
 6. Which of the following sources contain labelled images of human faces?
 - a. Labelled Faces in the wild.
 - b. Labelled database of faces
 - c. Google images
 - d. IMDB image datasets

- Q4.** Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
- Which of the following statements is NOT true for Python?
 - It was released in 1991.
 - Python 4 is the latest version of Python.
 - Python supports multiple platforms.
 - It can handle big data.
 - Sustainable Development Goal 13 deals with _____
 - Climate Change
 - Communities
 - Water
 - Energy
 - All keywords in Python are in _____
 - UPPER CASE
 - lower case
 - Capitalized
 - None of the above
 - Brainstorm is best suited for _____
 - Identifying existing measures
 - Identifying stakeholders
 - Identifying goals
 - None of these
 - Weak AI systems _____
 - Mimic intelligence behavior
 - Fail at reasoning-based tasks
 - Cannot handle Big Data
 - Can understand emotions
 - _____ must have knowledge about platforms like Hive, Hadoop etc.?
 - Data Scientists
 - Data Interpreters
 - Machine Learning Engineers
 - Machine Learning Scientists

- Q5.** Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
- In which of the following areas has the artificial intelligence defeated the best brains on the earth?
 - Decision making
 - Strategy games
 - Natural Language learning
 - Intelligent social behavior
 - What is the debate in the definition of Artificial Intelligence related to?
 - Meaning of humans
 - Problem of Values
 - Understanding of Intelligence
 - The complexity of human brain
 - The identification of stakeholders helps in _____
 - Identifying actions that are ineffective.
 - Identifying troublemakers
 - Identifying ethical implications
 - Identifying cost overruns
 - Which of the following is NOT a challenge related to Big Data?
 - Problem of storage
 - Problem of preparing data
 - Problem of everchanging data
 - Problem of structured data.
 - Which statement is true?
 - Python is a high level programming language.
 - Python is an object-oriented language
 - Python is an interpreted language
 - All of the above.
 - Which of the following input() function will give syntax error?
 - Input(num)
 - Input(number)
 - Input("integer number")
 - Input(integer number)

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

- Q6. What is Communication?
Q7. What is social media?
Q8. What is internet?
Q9. What are the components of a CPU?
Q10. What kind of a sentence asks a question?

Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)

- Q11. Why is Big Data normally unstructured in nature?
Q12. List few smart devices that can make your house smarter. Give reason for selecting each smart devices?
Q13. How is an AI Project different from a regular IT Project?
Q14. Explain Integer and Float data types in python.
Q15. Why does AI project cycle often become cyclic in nature?
Q16. Big Data is normally defined on the basis of three parameters. Which are these three parameters?

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

- Q17. Define Artificial Intelligence.
Q18. Differentiate between Statement and expression in python?
Q19. We must not use smartphone as the various apps can collect and misuse data. Do you agree? Why?
Q20. How are data requirements connected to data curation?
Q21. What are the components of a good AI policy?