

2023
ENGLISH

Full marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 15 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

SECTION-A (Literature)

1. Answer the following questions: **5x2=10**
 - (a) Why was the boy not successful in his attempt to steal from the large woman?
 - (b) What does the 'Article 1081 of the code' say in the story 'The Malefactor'?
 - (c) What is the greatest irony of the diamond maker's life?
 - (d) Why was the Verger asked to step down?
 - (e) What kind of books the people in Zimbabwe wanted to read?

2. Answer **any one** of the following questions in about 150 words:
 - (a) In the story 'The Diamond Maker' by H.G Wells, the diamond maker faces a lot of hardships trying to make the diamonds. Write a note on the difficulties faced by him.

Or **5**

 - (b) Albert Foreman became rich and successful despite not knowing how to read and write. Does this disprove the importance of reading and writing? Explain with reasons.

3. Read the lines from the poem and answer **any two** questions that follow:
 - I. *Remember, we who take arms against each other
It is the human earth that we defile.
Our hells of fire and dust outrage the innocence
Of air that is everywhere our own.*
 - (a) What does the poet mean by the phrase 'take arms'? **1**
 - (b) How do we defile the earth? **1**
 - (c) What are the hells of fire and dust? **1**

 - II. *If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run,*

- (a) Why should 'all men' count, but 'none' too much? 1
- (b) Why has the minute been called 'unforgiving'? 1
- (c) What does the poet mean by saying 'sixty seconds' worth of distance run? 1

III. *Why is thinking something women never do?
And why is logic never ever tried?
Straightening up their hair is all they ever do.
Why don't they straighten up the mess that's inside?*

- (a) From which lesson is the above extract taken from? 1
 - (b) What kind of character does the speaker reveal about himself through these lines? 1
 - (c) Give the difference in the meaning between 'straighten up' in lines 3 and 4. 1
4. What is the theme of the poem *Kelhoukevira*? How does the poet use words and phrases to convey the theme? 4
5. *Jack: Well my name is Ernest in town and Jack in the country and the cigarette case was given to me in the country.*
- (a) Who is Jack speaking to? 1
 - (b) Who gifted the cigarette case to Jack? What relation Jack has with this person? 2
 - (c) Why is he called Ernest in town and Jack in the country? 2

Or

Discuss the character of Algernon and Lane and how they depict a peculiar aspect of society and the relationship between the rich and their servants. 5

6. Answer **any two** of the following questions in about 150 words: 5x2=10
- (a) Write the character sketch of Mani.
 - (b) Who was Rajam? Why was Mani angry with him?
 - (c) Discuss the irony present in the novel, *Swami and Friends*.

SECTION –B (Reading)

7. *I wandered lonely as a cloud*

*I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,*

*A host, of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.*

*Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay;
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.*

*The waves beside them danced: but they
Out did the sparkling waves in glee:
A poet could not but be gay,
In such a jocund company:
I gazed- and gazed- but little thought
What wealth the show to me had brought:*

*For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.*

- (i) Based on your reading of the poem, complete the following in the space provided **4x¹/₂=2**

The poet wandered as a _____ in the country side. Suddenly, his eyes catch the sight of a large number of _____ fluttering and dancing beneath the trees. The poet often thinks about them in vacant or in _____ mood and his heart is filled with_____.

- (ii) Find words in the poem that mean the same as: **2x1=2**
- (a) Lively
 - (b) Shining

8. Read the following passage and answer the questions that follow:

One of the greatest mysteries of bird life is travelling. Every year during autumn and early winter, birds travel from northern regions of Asia, Europe and America to the southern warmer lands. They make the return journey again during spring and early summer. They are punctual unless they are delayed by bad weather. They face many dangers and hardships while travelling long distances through the air, over hills, forest, plains and large stretches of water. Sometimes, sudden storms arise and drive them far out of course. Often they are blown right out to sea and drowned in the wild

waves. At night, bright lights attract and confuse the birds. They cannot fly at their fastest. The migration speed is usually from 48 km an hour and rarely exceeds 80.

Based on your reading of the passage answer the following questions:

- I. (a) When do the birds travel from northern regions to southern warmer lands? **1**
(b) What dangers do they face when they are flying? **2**

- II. Give words from the passage which mean the same as: **2x1=2**
(a) detain (b) riddle

9. Read the passage and answer the questions that follow:

Character is destiny. Character is that on which the destiny of a nation is built. One cannot have a great nation with man of small character. We must have young men and women who look upon others as the living images of themselves as our sacred texts have so often declared. But whether in public life or in student life, we cannot reach great heights, if we are lacking in character. We cannot climb the mountain when the ground at our feet is crumbling. When the very basis of our structure is shaky how can we reach the heights we have set before ourselves? We must all have humility. Here is a country which we are all interested in building up. For whatever service we take up, we should not care for what we receive. We should know how much we can put into that service. That should be the principle which should animate our young men and women. Ours is a great country, we have had for centuries a great history. The whole world of the East reflects our culture.

- a. What quality of a person is mentioned here? **1**
b. What kind of young men and women we must have? **1**
c. How can we reach the great heights we have set? **2**
d. Give words from the passage which means the opposite as: **2x1=2**
(i) building (ii) arrogance

SECTION-C (Writing)

10. You are the Principal of Little Angel School, Noklak. Draft a notice in not more than 50 words directing all the parents and guardians to clear all school fees/dues before the commencement of the final examination.

Or **4**

You are Jessica. Write an informal invitation to your closest friends inviting them for dinner to celebrate the silver wedding anniversary of your parents.

11. You have recently taken admission in a new school. Write a diary entry describing vividly the feelings and experiences of your first day in the new school.

OR **5**

Write an essay in about 150-200 words on the topic, 'Role of Technology and Communication in Modern Society'.

12. Write a letter to the Editor of a newspaper, drawing the attention of the concerned authorities towards the long power cuts that your colony is facing causing a lot of inconvenience to the students.

6

SECTION-D (Grammar)

13. You need a mobile phone. But your father is not willing as he thinks you might misuse it. You convince him by giving the following assurances and you narrate it to your friends. (Remember to use Indirect Speech)

- * will never take it to the school.
- * will switch it off during study hours.
- * will not use it for playing games.
- * take necessary precautions while using it.

4

14. Complete the following sentences by giving two reasons for each of them:
- a) I was washing my clothes when:
 - b) It is a good habit to wake up early as:
 - c) You love your school because:

3

15. Write three effective ways to preserve environment degradation. (Remember to use Passive Voice)

3

2023
GEOGRAPHY

Total marks: 70

Time: 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory. Marks are indicated against each question.*
- iii) *The question paper consists of 27 questions divided into Section A and Section B.*
- iv) *Internal choice has been provided in some questions.*
- v) *Alternate questions for visually impaired students are provided in question 14 and 27.*

Only the visually impaired students have to attempt the alternate question.

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

Section –A

1. Name the person who first coined the term ‘Geography’. 1
2. Which planet is also called the blue planet? 1
3. What is meant by ‘hotspots’? 1
4. Name two career options of studying geography. 2
5. What is Nebula? Who gave the theory of Nebula Hypothesis? 1+1=2
6. What is insolation? 2
7. Define genetic diversity and species diversity. 2
8. Explain Wegener’s Continental Drift Theory. 3
9. a. Distinguish between exogenic forces and endogenic forces with examples. 3

Or

b. What are the three types of moraines?
10. a. Explain in brief any three important gases of the atmosphere. 3

Or

b. Distinguish between dew and frost.

11. a. Write a note on the economic importance of continental shelf. 3
Or
b. Write any three factors affecting the salinity of water.
12. a. What is soil? Briefly explain four factors of soil formation. 1+4=5
Or
b. Write a short note on the three erosional landforms and two depositional landforms of wind. (3+2=5)
13. a. What is a front? Explain briefly the types of fronts. 1+4=5
Or
b. What is global warming? Explain briefly four concerns of global warming.
14. On the given world map, four areas are numbered. Choose any two and match with the names given below. 1+1=2
(a) Eurasian plate
(b) Ring of fire



For Visually Impaired Students in lieu of Q.no.14

- (a) Which continents does the Eurasian plate cover?
(b) Around which ocean is the ring of fire found?

Section –B

15. Mention one island country of Indian Ocean. 1
16. What is the latitudinal and longitudinal extend of India? $\frac{1}{2} + \frac{1}{2} = 1$
17. Name any two rivers of India that flows into the Arabian sea. 1+1=2
18. Define Monsoon. 2
19. What are natural hazards? 2
20. What are earthquakes? Mention one cause. 1+1=2
21. State why India is known as a sub-continent? 3
22. a. Distinguish between Western Himalayas and Eastern Himalayas. 3
Or
b. Explain briefly any three types of drainage pattern.
23. a. Mention any three examples of diversities in the monsoonal unity of Indian climate. 3
Or
b. Differentiate between social forestry and urban forestry.
24. a. Mention any three steps to reduce the adverse effects of floods. 3
Or
b. What is tropical cyclone? Mention two effects of tropical cyclone. (1+2=3)
25. a. Name any five physiographic divisions of India. 5
Or
b. Differentiate between Bhangar and Khadar.
26. a. Write any five significant role of monsoon in Indian economic life. 5
Or
b. Mention the five types of forests in India.
27. On the given map of India, five areas are numbered. Choose any three and match with the names given below. 1+1+1=3
a) The Great Indian Desert
b) Northern most river basin of India
c) Brahmaputra river



For Visually Impaired Students in lieu of Q.no.27

- (a) Where is the Great Indian desert located?
- (b) Name the Northern most river basin of India.
- (c) Name one state of India through which the Brahmaputra flows.

2023

ENTREPRENEURSHIP

Full marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 19 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

- 1. Why does entrepreneur seek an enterprise? 1
- 2. Who are drone entrepreneurs? 1
- 3. Write any two examples of sales promotion. 1
- 4. What is meant by expenses? 1
- 5. Define angel investors. 1
- 6. Define personal financing. 1
- 7. State three importance of market survey. 3
- 8. Write any three features of business model. 3
- 9. Mention three ways how indirect taxes are imposed. 3
- 10. What are the types of cost included in the startup cost? 3
- 11. Write three facts about tax which an entrepreneur must know. 3
- 12. **a.** Explain any five managerial functions of an entrepreneur. 5
Or
b. Explain five reasons why one should become an entrepreneur.
- 13. **a.** Explain the common ways of generating ideas. 5
Or
b. Explain any five elements of business plan.
- 14. **a.** Explain any five different types of entrepreneurs, according to Bill Wagner. 5
Or
b. State any five basic steps to manage execution of plan.

15. **a.** What is meant by new age economy? Explain the four tips and techniques to survive in new age economy. **1+4= 5**
Or
b. What is business incubator? Mention four types of support given by the business incubator.
16. **a.** State any two types of internal risk and any three types of external risk. **2+3=5**
Or
b. Explain any five innovations that become the base for successful venture. (5)
17. **a.** Explain any eight essential attitudes for an entrepreneur. **8**
Or
b. Explain briefly the behavioral competencies of an entrepreneur.
18. **a.** Explain five merits and three de-merits of contract manufacturing. **5+3=8**
Or
b. Explain any four importance of pricing and four ways to launch venture after pricing strategies. **(4+4=8)**
19. **a.** Explain eight factors affecting the working capital of a business. **8**
Or
b. Explain eight different methods of debt financing.

2023
MUSIC

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 34 questions.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice is given in questions carrying 4 and 6 marks.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

- | | | |
|-----|---|---|
| 1. | What is a chromatic scale? | 1 |
| 2. | Write the full form of SATB. | 1 |
| 3. | Name a form commonly used in vocal music. | 1 |
| 4. | Which harmonic rhythm changes once in a bar? | 1 |
| 5. | Name one instrument that uses the alto clef. | 1 |
| 6. | Write the main beats for $\frac{5}{4}$ time signature. | 1 |
| 7. | What are the enharmonic equivalents of C \sharp and F \flat ? | 1 |
| 8. | What is transposition ? | 1 |
| 9. | Give the meaning of : | 1 |
| | a) pesante b) subito | |
| 10. | Which two chords create a plagal cadence ? | 1 |
| 11. | How is dominant seventh chord formed ? | 1 |
| 12. | Identify the given interval. | 1 |



13. Write the correct clef before these notes. 2

(a) (b) (c) (d)

G D F B

14. Continue the rhythm to fit the following phrase : 2
'Early one morning just as the sun was rising'


15. Name the harmonic rhythm in the following music. 1+1=2


a)

b)

16. Write two more repeats of this chromatic ostinati that moves in similar motion. 2

17. Work out the keys of the following music : 1+1=2

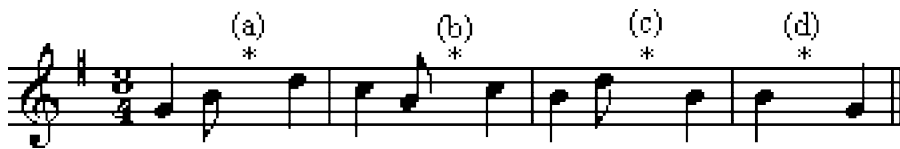
a) 

b) 

18. Write a tune for oboe using the first five degrees of the scale of E minor to the given rhythm. Use a key signature and finish on the tonic. 2



19. Add unaccented passing notes below the asterisks : 2



20. Construct the dominant 7th chord in the key of B^b major using semibreves, on the bass stave. Give key signature. 2

21. Write a one-octave arpeggio in the key of C minor (bass stave) following the rhythm given below, going down and then up. 2



22. Add bar lines to agree with the time signature. 2



Answer any **five** from questions 23-29

23. Draw the following intervals up from the given notes. 4x1=4



Diminished 5th major 3rd octave minor 7th

24. Write the following tunes using alto clef so that they sound at the same pitch. 2+2=4

a) 

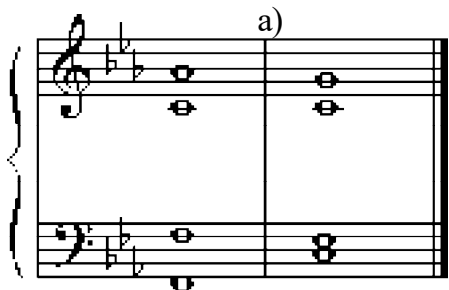
b) 

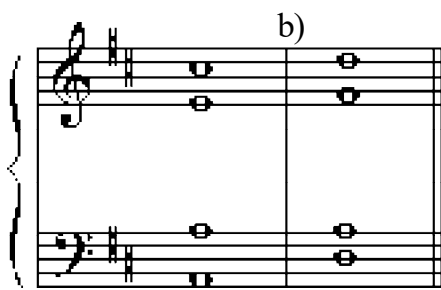
25. Draw the tonic triads in root position, first inversion and second inversion in the given keys as directed. Use semibreves. 2+2=4
- a) D major (alto clef)
- b) C minor (treble clef)

26. Label the triads with roman numerals and chord symbols to show the chord progression. 4



27. Give the key of each cadence and identify the type of cadence. Label them with roman numerals and chord symbols. 2+2=4

a) 

b) 

28. Using minims, construct the following scales with key signature. 2+2=4
- a) D major scale, going down (alto clef)
- b) C melodic minor scale, going up (treble clef)

29. Using crotchets, write out 4-part chord for SATB, using the chords shown by the roman numerals. Double the root in each case. Label with chord symbols and roman numerals. Use key signature. 2+2=4
- a) Key of A major - IV
- b) Key of E minor - V

Answer any **three** from questions 30-34.

30. Using crotchets, write broken chords in the given keys as directed. Finish no less than 2 ledger lines above/below the staff. Use patterns of three notes: 3+3=6

- a) B \flat major tonic triad, going up, treble clef, $\frac{3}{4}$ time. (start on the first B below the staff)
- b) E minor triad, going down, bass clef, $\frac{3}{4}$ time (start on the first E above the staff)

31. Draw scales in the given keys and construct triads on the tonic, sub-dominant and dominant degrees. Label them with roman numerals and chord symbols. (Use semibreves) 3+3=6

- a) F \sharp melodic minor scale, alto clef, going up.
- b) G harmonic minor scale, bass clef, going down.

32. Use notes from the chords shown by the roman numerals to create : 3+3=6
- a) A bass line for the given melody. Add repeated notes and octaves.

- b) A tune for the given bass line. Add some unaccented passing notes.

33. Transpose the following tunes :

3+3=6

a) Up a perfect fourth.

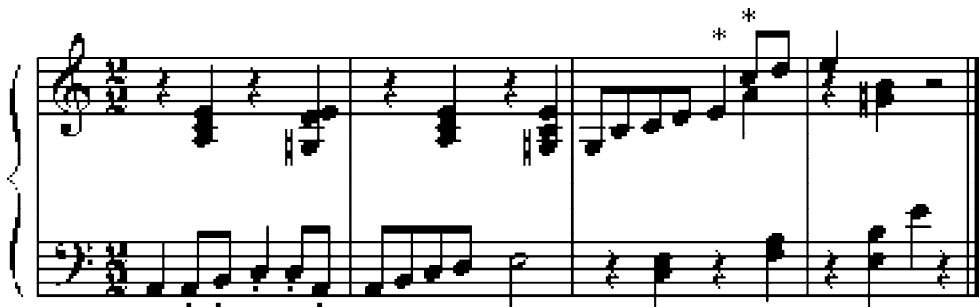



b) Down a perfect fifth.



34. Look at the music and answer the questions below.

6x1=6



- a) What key is this music in ?
- b) Name the harmonic rhythm of bass 1 and 2 .
- c) Name the interval between the two notes marked by asterisks (*).
- d) Name the cadence formed at the end of the music.
- e) What is the dot under the note () ?
- f) How much higher is the opening quaver in bar 3 compared to the opening quaver in bar 2 ?

Total number of printed pages: 3

NB/XI/HIS/1

**2023
HISTORY**

Full marks : 80

Time : 3 hours

General instructions:

- i. Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii. The question paper consists of 29 questions.*
- iii. Marks are indicated against each question.*
- iv. Alternate questions for visually impaired students is provided in question 29*

Answers to questions carrying 1 mark should not exceed one sentence.

Answers to questions carrying 2 marks should not exceed 50 words.

Answers to question carrying 4 marks should not exceed 100 words.

Answers to questions carrying 6 marks should not exceed 200 words.

Answers to questions carrying 8 marks should not exceed 300 words

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

1. When did the cities first begin to emerge? **1**
2. Name the country in which the first towns begin to emerge. **1**
3. Under which Roman Emperor, Christianity became the State religion? **1**
4. What is Yasa? **1**
5. Who introduced Feudalism in Europe? **1**
6. Who wrote the book called 'The Prince'? **1**
7. When was slavery abolished in USA? **1**
8. From which Adventurer's name is the word 'America' derived from? **1**
9. Who was the founder of Kuomintang (KMT) party in China? **1**
10. When did the Japanese surrender to the Allied powers? **1**
11. Give two reasons why the people in the villages migrated to the cities. **2**
12. Who were the Patritians? **2**
13. Which two events destroyed the socio-economic basis of Feudalism? **2**
14. What were the functions of medieval monastery? **2**
15. Mention two features of Humanism. **2**

16. Who were called 'Native Americans' and 'Red Indians'? 2
17. Briefly describe the contribution of Romans to government and politics. 4
18. How did Buddhism spread among the Mongol nomads? 4
19. Mention the four values of Feudalism. 4
20. What were the results of Japan opening up to commercial treaties? 4

Answer any two from Q.21 to Q.23 **2x6=12**

21. Describe the growth of early cities in Iraq.
22. Examine the cause of the fall of the West Roman Empire.
23. Discuss the achievements of Meiji Rule in Japan.

Answer any three from Q.24 to Q.28 **3x8=24**

24. Who founded the Mongolian Empire? Describe the distinct characteristics of the nomadic Mongolian society. (1+7=8)
25. Write the meaning of Feudalism? Describe the main features of Feudalism. (1+7=8)
26. What is meant by Renaissance and what were the causes of its movement? (2+6=8)
27. How did the Europeans exploit the natives of North America?
28. Explain the role of Zaibatsu in the economy of Japan.
29. On the map given below six (6) places have been numbered as **1, 2, 3, 4, 5 & 6**. Match the numbered places with the questions and name the places/country. **1x6=6**

- | | |
|--|-----------------------|
| (a) Early cities | (b) Holy Roman Empire |
| (c) Origin of Feudalism | (d) Mongol Empire |
| (e) Place where Captain Cook reached in 1770 | (f) Meiji rule |



For visually impaired students in lieu of Q no.29

(1x6=6)

- (a) Name a modern day country under Mesopotamia.
- (b) In which country is the Holy Roman Empire located?
- (c) Name the country where Feudalism originated.
- (d) Name the country that was under Mongol Empire.
- (e) Which place did Captain Cook reached in 1770?
- (f) Name the country that was under Meiji rule.

2023
ACCOUNTANCY

Full marks : 80

Time : 3 hours

General instructions:

i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*

ii) *The question paper consists of 17 questions. All questions are compulsory.*

iii) *Marks are indicated against each question.*

iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

1. What is meant by accounting? 1
2. Define capital. 1
3. Mention two methods of preparing trial balance. 1
4. Write two examples of capital receipts. 1
5. Write two circumstances when purchases account is credited. 1
6. State any three advantages of accounting. 3
7. Explain the three fundamental accounting assumptions. 3
8. Write any three points of difference between debit vouchers and credit vouchers. 3
9. Prepare a Trial Balance from the following information:

<u>Particulars</u>	<u>Amount (₹)</u>
Wages	26,000
Building	60,000
Commission	500
Sales	1,00,000
Capital	1,23,100
Creditors	12,500
Drawings	500
Machinery	16,000
Furniture & fixture	41,600
Debtors	33,700
Purchases	56,000

Bad debts recovered	700	
Income tax	2,000	3

10. Calculate working capital from the following information:

<u>Particulars</u>	<u>Amount(`)</u>	
Stock in hand	48,000	
Trade debtors	36,000	
Prepaid tax	400	
Trade creditors	42,000	
Bills payable	3,200	
Bank overdraft	4,800	
Interest outstanding	1,000	3

11. a. Distinguish between book keeping and accounting on any six basis.

Or

b. Explain any six activities of accounting.

6

12. Answer *any two* (2) from the following questions:

2x6=12

a. Prove that the accounting equation is satisfied in all the following transactions of John:

i) Commenced business with cash ` 60,000.

ii) Paid rent in advance ` 500.

iii) Purchased goods for cash ` 30,000 and credit ` 20,000.

iv) Sold goods for cash ` 30,000 costing ` 20,000.

v) Paid salary ` 500 and salary outstanding ` 100.

vi) Bought motorcycle for personal use ` 5,000.

b. Enter the following transactions in the purchases book and sales book.

<u>Date</u>	<u>Particulars</u>	<u>Amount (`)</u>
2021		
Jan.1	Sold goods to Ramesh	525
	Bought of Hari Ram	780
Jan.2	Sold to Dina Nath	550
	Purchased goods from Mangal	700
Jan.4	Bought of Devi Dayal	325
	Sold to Zakir Hussain	350
Jan.6	Sold to Ram Saran	500
	Sold to Ghanshyam	300
Jan.7	Bought of Devi Dayal	700

Jan.9	Purchased goods from Raghu Nath } subject to a trade discount of 10%	} 1,000
Jan.10	Sold to Raja Ram goods subject to } trade discount 5%	} 500

c. Explain any three errors with example.

13. a. Explain any six basic principles of accounting.

Or

6

b. State any six users of accounting information.

14. a. From the following information prepare a Bank Reconciliation Statement as on 31st March, 2022:

- i) Bank overdraft balance as per the cash book ` 7,640.
- ii) Cheques deposited but not credited by the bank ` 10,000.
- iii) Credit transfer not recorded in the cash book ` 200.
- iv) Cheques issued but not present for payment ` 37,400.
- v) Interest debited by the bank but not recorded in the cash book ` 1,000.
- vi) Bank charges not recorded in the cash book ` 340.

Or

6

b. Write any six causes of disagreement between the balance shown by the cash book and the balance shown in the passbook.

15. a. Journalise the following transactions in the journal of M.Chand

Date	Transactions	`
Jan. 1	M Chand started business with cash	20,000
Jan. 3	He opened a current account in the bank	5,000
Jan. 7	Purchased goods on credit from Shyam	4,000
Jan. 10	Paid to Shyam in full settlement	3,900
Jan. 13	Machinery purchased	2,000
Jan. 16	Goods sold to Mohan	3,000
Jan. 18	Amount received from Mohan	1,000
Jan. 20	Salaries outstanding	700
Jan. 23	Rent received	300
Jan. 28	Goods purchased from Sohan	4,000
Jan.31	Interest on capital @ 10% per annum for the month	
Jan.31	Depreciation on machinery	100

Or

10

- b. From the following particulars, write three column Cash Book of Anurag and Mangal.

Date	Particulars	(`)
March 1	Cash in hand	2,892
March 1	Bank balance	2,172
March 4	Paid salaries in cash	1,320
March 4	Paid Satish & Co. by Cheque in full settlement of their claim of ` 1,590	1,560
March 5	Received from Ram & Mohan on account Cheque for	2,400
March 6	Bought goods for cash	150
March 7	Cash sent to bank	600
March 8	Paid Hari Bros by Cheque (discount allowed ` 3)	384
March 9	Received from Mohan Bros in coins and notes	900
March 11	Received from Ramesh & Co. Cheque (discount allowed ` 8)	960
March 12	Drawn from Bank	1,200
March 14	Paid wages	1,620
March 14	Cheque from Ramesh & Co. returned dishonoured and Bank debits account in respect of charges	12
March 14	Interest collected by Bank	180
March 14	Cash sales	480
March 15	Bought goods from Gyan on credit	162

16. a. From the following information of Bharat Tulsian Limited prepare Machinery Account for three years ending 31st March, 2022.
Method of Depreciation: Straight Line, Rate of depreciation : 20% per annum.

Date	Transactions
1.04.2019	Purchased a second hand machinery I for ` 80,000
1.04.2019	Spent ` 20,000 on its repairs to make it serviceable
1.10.2019	Purchased a new machinery II for ` 2,00,000
1.04.2020	Spent ` 2,000 on repairs of new machinery II
30.09.2021	Sold machinery I for ` 45,000
30.09.2021	Purchased a new machinery III for ` 3,00,000

Or

10

- b. What is reserve? State any three objectives of reserve. Write any 6 points of difference between provision and reserve. (1+3+6=10)

17. a. The following is the trial balance of Mr. Amir on 31st March, 2022:

Particulars	Dr. (₹)	Cr. (₹)
Plant & machinery	55,000	-
Fixtures & fittings	1,720	-
Mr. Amir's Capital Account/Drawings	6,820	93,230
Factory fuel & power	542	-
Office salaries	3,745	-
Manufacturing expenses	2,680	-
Bills payable	-	6,422
Factory lighting	392	-
Travelling expenses	925	-
Carriage on sales	960	-
Cash at bank	2,245	-
Cash in hand	68	-
Sundry Debtors/Creditors	47,800	22,680
Purchases/Sales	83,290	1,26,177
Wages	9,915	-
Rent and taxes	1,765	-
Office expenses	2,778	-
Carriage inward	897	-
Discount	422	-
Stock on 1.4.2021	21,725	-
Returns	7,422	3,172
Insurance	570	-
Total	2,51,681	2,51,681

Adjustments:

- i) Depreciate 5% on plant and machinery and 10% on fixtures and fittings.
- ii) Provision for doubtful debts 2½% on sundry debtors.
- iii) Rent outstanding for March, 2022 ₹ 150.
- iv) Insurance unexpired on 31st March, 2022 ₹ 70.
- v) Outstanding wages and salaries ₹ 800 and ₹ 350 respectively.
- vi) Stock on 31st March, 2022, ₹ 16,580.

Prepare Trading and Profit & Loss Account for the year ended on 31st March, 2022 and a Balance Sheet as on that date.

Or

10

b. Trial Balance of Mr. Thomas as on 31st March, 2022.

Particulars	Dr. (₹)	Cr. (₹)
Capita/ Drawings	3,600	2,00,000
Building	30,000	-
Furniture & fittings	15,000	-
Computer	50,000	-
Loan from Mr. Ravi @6% per annum (taken on 1.04.2021)	-	30,000
Interest on loan	1,800	-
Loose tools	32,200	-
Purchases/Sales	1,50,000	2,00,000
Stock on 1.4.2021	50,000	-
Freight inward	4,000	-
Freight outward	2,000	-
Commission received	-	15,000
Debtors/Creditors	56,000	20,000
Bank	40,400	-
General expenses	30,000	-
Total	4,65,000	4,65,000

Adjustments:

- i) Closing stock ₹ 64,000.
- ii) Depreciation: computer at 10% per annum, building at 5% per annum, furniture & fittings at 10% per annum.
- iii) Provide for doubtful debts at 5% and for discount on debtors at 2%.
- iv) Provide interest on drawings at 6% and on capital at 8%.

Prepare Trading Account, Profit & Loss Account and Balance Sheet as on 31st March, 2022.

**2023
PHYSICS**

Total marks : 70

Time : 3 hours

General instructions:

i) Approximately 15 minutes is allotted to read the question paper and revise the answers.

ii) The question paper consists of 30 questions. All questions are compulsory.

iii) Marks are indicated against each question.

iv) Internal choice has been provided in some questions.

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

1. What determines the nature of the path followed by a moving particle? **1**
(a) Speed (b) Velocity
(c) Acceleration (d) Both (b) and (c).

2. If force and displacement of particle in the direction of force are doubled, then work done would be **1**
(a) double (b) 4 times
(c) half (d) $\frac{1}{4}$ times.

3. The motion of planets in the solar system is an example of the conservation of **1**
(a) mass (b) linear momentum
(c) angular momentum (d) energy.

4. At 0K temperature, which of the following properties of an ideal gas will be zero? **1**
(a) Kinetic energy (b) Potential energy
(c) Vibrational energy (d) Density.

5. A simple harmonic motion is represented by $F(t) = 10 \sin (20t + 0.5)$. The amplitude of the simple harmonic motion is **1**
(a) 30 (b) 20 (c) 10 (d) 5.

6. Mention two physical quantities which have same dimensions as that of work. **1**

7. Prove that $|\vec{a} \times \vec{b}|^2 + (\vec{a} \cdot \vec{b})^2 = a^2 b^2$. **1**

8. State Newton's law of gravitation. 1
9. What is meant by degrees of freedom of gas molecules? 1
10. What is the net displacement of a particle executing SHM in one complete cycle? 1
11. Name the physical quantity whose SI unit is Newton second. A cricket player lowers his hand while catching a ball. Why ? 2
12. **a.** A light and a heavy body have same kinetic energy. Which one will have more momentum and why? 2
- Or**
- b.** Two balls each of mass M moving in opposite direction with equal speed undergo a head on collision. Calculate the velocity of the two balls after collision.
13. Show that the velocity of centre of mass of a system of particles remain constant when no external force act on it. 2
14. **a.** An object weights 90 kg on the surface of the earth. How much will it weigh on the surface of the planet Mars, whose mass is $1/9^{\text{th}}$ and radius $1/2^{\text{th}}$ of that of the earth? 2
- Or**
- b.** An artificial satellite is revolving around the earth near its surface. By how much its speed be increased so that it may escape from the gravitational pull of the earth and become free?
15. **a.** Two wires of the same materials have lengths in the ratio $1:2$ and their radii are in the ratio $1:\sqrt{2}$. If they are stretch by applying equal forces, then find the ratio of elongations of the two wires. 2
- Or**
- b.** A spherical ball contracts in volume by 0.084% when subjected to hydraulic pressure of 50 atmosphere. Calculate the bulk modulus of the material of the ball. Given 1 atmosphere = 1.01×10^5 Pa.
16. Name a thermodynamic process in which- 2
- a) internal energy remains constant.
- b) no work is being done by the gas.

17. a. The time period of oscillation of a simple pendulum is given by

$$T = 2\pi\sqrt{\frac{l}{g}}$$

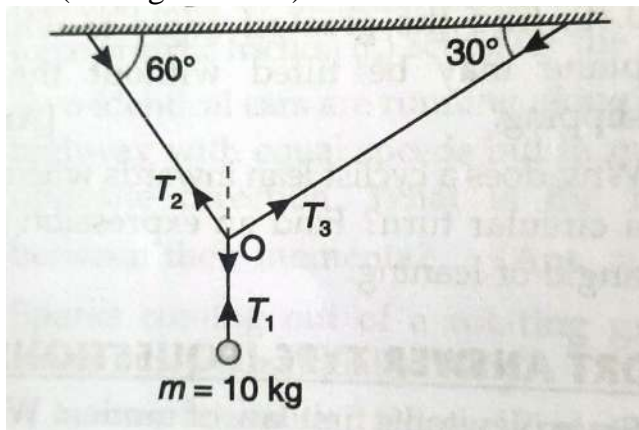
In a particular experiment, length of pendulum is measured as $83.2 \pm 0.1 \text{ cm}$ and time of 20 oscillations is measured as $36.2 \pm 0.1 \text{ s}$. Determine the relative error in the value of g in percentage terms.

Or

- b. An object is having a uniform acceleration of 6.5 m^{-2} . Find the value of acceleration in Kmh^{-2} by the use of dimensions.

18. Derive the expression for the displacement covered in n th second for a uniformly accelerated motion.

19. a. A metal sphere of mass $m=10\text{kg}$ is suspended with the help of three light strings as shown in the figure. Find the tensions T_1, T_2 and T_3 . (Take $g = 10 \text{ ms}^{-1}$).



Or

- b. A body of mass 0.25 kg moving with a velocity 12 ms^{-1} is stopped by applying a force of 0.6 N . Calculate the time taken to bring the body to rest. Also, calculate the impulse of this force.

20. Obtain the expression for maximum speed which a vehicle can safely negotiate a curved road banked at an angle θ with horizontal.

21. Show that the total mechanical energy of an object falling freely under gravity is conserved.

22. a. Establish the relation between angular momentum and torque.

Or

- b. State the principle of conservation of angular momentum. Apply this principle to explain the following observations:
- An ice-skater can increase her angular velocity by folding her arms and bringing the stretched legs closer to the other leg.
 - The angular speed of planets increases, when it comes closer to the sun.

23. Show that acceleration due to gravity decreases with depth. Find the weight of an object at the centre of earth. 3
24. For a wire of length L and cross-section area A subjected to a deforming force F , show that $U = \frac{1}{2} \times stress \times strain$. 3
25. a. Derive Mayer's relation for one mole of an ideal gas. 3
Or
b. What is an indicator diagram? Show that the area under P-V diagram for a thermodynamic process gives the value of work done during that process.
26. Find an expression for the pressure exerted by an ideal gas on the basis of kinetic theory. 3
27. What is a spring pendulum? Prove that time period of a spring pendulum does not depend on acceleration due to gravity of the place. 3
28. a. Define centripetal acceleration. Derive expression for the centripetal acceleration of a particle for a uniform circular motion. What will be the direction of the velocity acceleration at any instant? 5
Or
b. What is a projectile? Find mathematically the nature of the path of projectile when projected at an angle θ with the horizontal. Under what condition is the horizontal range maximum?
29. a. State Bernoulli's principle. Prove that the total energy possessed by a flowing ideal liquid is conserved. 5
Or
b. What is conduction? Obtain an expression for rate of heat flow through a metallic bar in its steady state. Hence, define thermal conductivity of the material.
30. a. Show that total mechanical energy of a particle executing simple harmonic motion is constant. Also, draw the graph of potential energy, kinetic energy and total energy of the particle. 5
Or
b. Explain the formation of standing waves in a string fixed at both ends and also, find the different modes of vibration.

2023

ALTERNATIVE ENGLISH

Full marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 23 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal & general choice have been provided in some questions.*

N.B: *Check to ensure that all pages of the question paper is complete as indicated on the top left side.*

SECTION -A (Prose)

1. Name the factory from where the Bhopal gas tragedy took place. **1**
2. What did the narrator finally decide to do if the bill turned out to be more than the amount he was carrying? **2**
3. Why does Mr. Woodfield visit the boss only on Tuesday? **2**
4. Describe the woman in the story 'The Luncheon'. **3**
5. Discuss the relationship between Christy and his mother. **3**
6. Why is 'Dream Children' sub-titled 'A Reverie'? **4**
7. **a.** Why was Sunil depressed and what do you think would have helped Sunil overcome his loneliness? **5**
Or
b. Write a note on the memories of the Boss about his dead son.

SECTION- B (Poetry)

8. Why is money referred to as our collective madness? **2**
9. Critically analyse the lines given below: **4**
*She walks in beauty, like the night
Of cloudless climes and starry skies;
And all that's best of dark and bright
Meet in her aspect and her eyes;*

10. In the poem 'Money Madness', what is the poet afraid of and why? **4**
11. **a.** Describe the slave's past life based on his dream. **5**
- Or**
- b.** *He moves in darkness as it seems to me,
Not of woods only and the shade of trees.
He will not go behind his father's saying.*
- (i) Why does the neighbour appear to be moving in darkness? (1)
- (ii) From where is the darkness emanating? (2)
- (iii) Is the poet alluding the neighbour's adherence to his father's advice as the darkness? (2)

SECTION- C (Drama)

12. Why don't the other women around Mrs. Payne-Dexter get the same deferential treatment from the debutantes? **2**
13. Explain the last meeting of Mrs. Blanchard and Oliver Trent. **3**
14. **a.** "*Be shocked if you want to – I am free now and can speak of it.*"
What can Mrs. Blanchard speak of now? Over what did she grieve for forty years? **2+3=5**
- Or**
- b.** Do you agree that being in love helps a person to stay young? Explain in the light of your understanding of the play 'Ever Young'. (1+4=5)

SECTION -D (Fiction)

15. What does the severed sow's head represent in the novel? **1**
16. How did the boys come to the jungle island? **2**
17. Why is Ralph considered as primary representative of order and civilization? **3**
18. **a.** Sketch the character of Simon. **4**
- Or**
- b.** How were Ralph's priorities different from Jack?
19. **a.** Civilization versus savagery is one of the major themes of the novel 'Lord of the Flies'. Do you agree? **5**
- Or**
- b.** "*There isn't a tribe for you anymore! The conch is gone-*"

- (i) Who said this? (1)
- (ii) What does the destruction of the conch symbolize? (4)

SECTION -E (Grammar)

20. **Answer the following as directed in the brackets:** **4x1=4**

- (a) My parents love to read my poems and stories. (State whether the underlined verb is feeling or state-of-being verb)
- (b) I _____ (set/sit/sat) boxes one on top of the other. (Choose the correct verb to fill in the blank)
- (c) Mother bought me a bicycle. (State whether the underlined verb is transitive or ditransitive)
- (d) I _____ (throw) all the waste material in the trash can. (Fill in the blank with the correct form of the verb in the bracket)

21. **Underline the adverb and state its kind:** **3x1=3**

- (a) I always do my work carefully.
- (b) The book will completely change the way you think about rural life.
- (c) We often come to this lake in the evenings.

22. **Answer the following as directed in the brackets:** **3x1=3**

- (a) They are always running around with their pets. (State the tense)
- (b) He _____ (write) the letter before I could talk to her. (Rewrite the sentence in Past Perfect Tense)
- (c) She came home late. (Rewrite the sentence in Simple Future Tense)

SECTION-F (Reading)

23. **Read the passage carefully and answer the questions that follow:**

This rule of always trying to do things as well as one can do them has an important bearing upon the problem of ambition. No man or woman should be without ambition, which is the inspiration of activity.

But if one allows ambition to drive one to attempt things which are beyond one's own personal capacity, then unhappiness will result. If one imagines that one can do everything better than other people, then envy and jealousy, those twin monsters, will come to sadden one's days. But if one concentrates one's attention upon developing one's own special capacities, the things one is best at, then one does not worry over much if other people are more successful.

There are those again who are discontented with their own job and complain drudgery. But there is no job in the world which does not contain a large element of drudgery. Do you imagine that a Prime Minister has a

drudgery to do, or an artist, or an author? I loathe drudgery as much as any man; but I have learnt that the only way to conquer drudgery is to get through it as though it as neatly, as efficiently as one can. You know I am right when I say that adult job slackly done becomes twice as dull; adult job which you try to do just as well as you can become half as dull. Here again effort appears to me the main part of the art of living. Have I any other, and less disagreeable, hints to suggest? I believe that every man and woman has somewhere tucked away inside them a sense of beauty. Without this sense, life on this earth is veiled in dim grey clouds. It may be that you do not care, for poetry or art or music. If you make the least effort, you may find that some or all of these things will cause you sudden delight; and once you catch that delight it will never leave you. But in life, as I believe, is a constantly renewed effort, then the human frame and nerves require some relaxation.

- a. **Based on your understanding, answer the following question:**
- (i) How can a person avoid envy and jealousy? 2
 - (ii) How can we avoid the feeling of drudgery? 2
 - (iii) Should we avoid ambition? Why? 1+1= 2
- b. **Fill in the blanks:**
- (i) _____ and _____ are the twin monsters that disheartens a man. 1
 - (ii) The main part of the art of living is _____ . 1
- c. **Give the synonyms of the following words from the passage:**
- (i) Renovated 1
 - (ii) Dissatisfied 1

2023
HINDI

Total marks : 80

Time : 3 hours

General Instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii) The question paper consists of 25 questions. All questions are compulsory
- iii) Marks are indicated against each question.
- iv) Internal & general choice have been provided in some questions.

N.B: Check to ensure that all pages of the question paper is complete as indicated on the top left side.

SECTION - A (पठन परीक्षण)

1. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए:

मनुष्य अपने भविष्य के बारे में चिंतित है। सभ्यता के अग्रगति के साथ ही चिंताजनक अवस्था उत्पन्न होती जा रही है। इस व्यावसायिक युग में उत्पादन की होड़ लगी हुई है। कुछ देश विकसित कहे जाते हैं, कुछ विकासोन्मुखी। विकसित देश वे हैं जहाँ आधुनिक तकनीक का पूर्ण उपयोग हो रहा है। ऐसे देश नाना प्रकार की सामग्री का उत्पादन करते हैं और उस सामग्री की खपत के लिए बाजार ढूँढते रहते हैं। अत्यधिक उत्पादन क्षमता के कारण ही ये देश विकसित और अमीर हैं। विकासोन्मुख या गरीब देश उनके समान ही उत्पादन करने की आकांक्षा रखते हैं, और इसलिए उन सभी आधुनिक तरीकों की जानकारी प्राप्त करते हैं। उत्पादन क्षमता बढ़ाने का स्वप्न देखते हैं। इसका परिणाम यह हुआ है कि सारे संसार में उन वायु-मंडल प्रदूषण यंत्रों की भीड़ बढ़ने लगी है जो विकास के लिए परम आवश्यक माने जाते हैं। इन विकास-वाहक उपकरणों ने अनेक प्रकार की समस्याएँ उत्पन्न कर दी हैं। वायुमंडल विषाक्त गैसों से ऐसा भरता जा रहा है कि संसार का सारा पर्यावरण दूषित हो उठा है, जिससे वनस्पतियों तक के अस्तित्व संकटपन्न हो गए हैं।

- | | |
|---|---|
| (क) अपने भविष्य के बारे में कौन चिंतित हैं ? | 1 |
| (ख) किसकी अवस्था चिंताजनक होती जा रही है ? | 1 |
| (ग) व्यावसायिक संस्कृति में किसकी होड़ लगी हुई है ? | 1 |
| (घ) विकसित देश किसका पूर्ण रूप से उपयोग कर रहे हैं ? | 1 |
| (ङ) विकसित देश किस लिए अमीर होते जा रहे हैं ? | 1 |
| (च) विकासोन्मुख या गरीब देश क्या आकांक्षा रखते हैं ? | 1 |
| (छ) कौन उत्पादन क्षमता को बढ़ाने का स्वप्न देखता है ? | 1 |
| (ज) विकास - वाहक उपकरणों के उपयोग से प्रकृति में क्या हो रहा है ? | 1 |
| (झ) 'देश' शब्द के पर्यायवाची शब्द लिखिए ? | 1 |
| (ञ): 'विकास के लिए परम आवश्यक हैं।' में कौन सा काल है। | 1 |

SECTION - B (संरचना)

2. किसी एक प्रश्न का उत्तर लगभग 100 से 150 शब्दों में लिखिए -

6

- (क) अपने क्षेत्र में पेड़-पौधों के अनियंत्रित कटाव को रोकने के लिए अपने क्षेत्र के जिलाधिकारी को एक आवेदन पत्र लिखिए।
- (ख) 'समाचार पत्र से लाभ' विषय पर अपने विद्यालय की प्रातःकालीन सभा में बोलने के लिए एक भाषण तैयार कीजिए

3. किसी एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखिए: 4
- (क) आप अपना दो कमरों वाला घर भाड़े पर देना चाहते हैं। इस संबंध में विस्तृत जानकारी देते हुए एक सुंदर विज्ञापन लिखिए।
- (ख) विद्यार्थियों के लिए आदर्श जीवन शैली विषय पर एक कार्यशाला का आयोजन किया जा रहा है। छात्र छात्राओं को इसकी जानकारी देते हुए एक सूचना लिखिए।

SECTION - C

खण्ड - ग (व्याकरण एवं अनुवाद)

4. दिए गए शब्दों के दो-दो पर्यायवाची शब्द लिखिए: 2X1=2
पृथ्वी, पानी
5. दिए गए शब्दों का संधि-विच्छेद कीजिए:- 2X1=2
भाग्योदय, पुस्तकालय
6. दिए गए सामासिक पदों का विग्रह कीजिए:- 2X1=2
नीलकमल, सत्याग्रह
7. दिए गए मुहावरों का अर्थ वाक्य प्रयोग द्वारा स्पष्ट कीजिए:- 2X1=2
राग छेड़ना, इन्द्रजाल हो जाना
8. काव्य के अनुसार रस किसे कहते हैं? रस के कितने अंग होते हैं? नाम लिखिए। 1+1=2
9. अलंकार किसे कहते हैं? इसके कितने भेद होते हैं? नाम लिखिए 1+1=2
10. हिन्दी में अनुवाद कीजिए:- 3

A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

SECTION - D

खण्ड - घ (साहित्य)

गद्य भाग

11. दोपहर को भीड़ कहाँ जमा हो गई? 1
12. सर्जन ने क्या रिपोर्ट भेजी? 2
13. शामनाथ क्यों नहीं चाहते थे कि माँ चीफ के समाने आए? 2
14. लेखक ने मंदिर तथा दफ्तर की तुलना किस प्रकार की है? 3
15. पत्नी की मृत्यु के एक वर्ष बाद जब चेंतिवा अपने कुत्ते को लेकर शिकार पर गया तो वहाँ क्या घटना घटी? 3
16. निम्न कथन किसने, किससे तथा क्यों कहे हैं: 1+1+2=4
'कुछ नहीं कर सकते तो आप मेहरवानी करके कुर्सी छोड़ दीजिए।'
17. निम्न गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए:-
- (क) बिरादरी के एक संपन्न परिवार का युवक रमेश उन दिनों लखनऊ से छुट्टियों में गाँव आया हुआ था। बातों-बातों में वंशीधर ने मोहन की पढ़ाई के संबंध में उससे अपनी चिन्ता प्रकट की तो उसने न केवल अपनी

सहानुभूति जतलाई बल्कि उन्हें सुझाव दिया कि वे मोहन को उनके साथ लखनऊ भेज दें। घर में जहाँ चार प्राणी है एक और बढ़ जाने से कोई अन्तर नहीं पड़ता, बल्कि बड़े शहर में रहकर वह अच्छी तरह से पढ़-लिख सकेगा।

- | | |
|---|---|
| (i) मोहन की पढ़ाई के संबंध में वंशीधर ने अपनी चिन्ता किससे प्रकट की ? | 1 |
| (ii) रमेश ने क्या सुझाव दिया ? | 1 |
| (iii) रमेश के परिवार में कितने लोग थे ? | 1 |
| (iv) रमेश कहाँ रहता था ? | 1 |
| (v) सम्पन्न का विलोम शब्द लिखिए। | 1 |

अथवा

- ख. 'चीफ की दावत' कहानी के माध्यम से लेखक क्या कहना चाहता है, कहानी के आधार पर कहानी का उद्देश्य स्पष्ट कीजिए।
- 5

पद्य भाग

- | | |
|---|-------|
| 18. कवि ने आदमी के श्वप्न को किस चीज की संज्ञा दी है? | 1 |
| 19. कविता के अनुसार बच्चों की प्रत्याशा क्या है ? इसके लिए वे क्या करते हैं ? | 2 |
| 20. किसान की आर्थिक स्थिति क्यों दयनीय है ? इसके लिए कवि ने किसे जिम्मेदार बताया है ? | 3 |
| 21. दीपक दीया तेल भरी, बाती दई आघट्ट।
पूरा किया विसाहुणाँ, बहुरी न आवै हट्ट ॥ | |
| (क) यह पंक्ति किस कविता से ली गई है ? | 1 |
| (ख) इस कविता के रचनाकार कौन हैं ? | 1 |
| (ग) दिए गए खण्ड का आशय स्पष्ट कीजिए। | 2 |
| 22. किसी एक पद्यांश की संदर्भ एवं प्रसंग सहित व्याख्या कीजिए: | 1x5=5 |
| (क) स्वर्ग की सम्राट को जाकर खबर कर दे,
रोज ही आकाश चढते जा रहे हैं ये,
रोकिये जैसे बने, इन स्वप्नवालों को
स्वर्ग की ही ओर बढ़ते आ रहे हैं ये। | |
| (ख) बच्चे प्रत्याशा में होंगे
नीड़ों से झाँक रहे होंगे
यह ध्यान परो में, चिड़ियों के भरता चंचलता है। | |

कथा साहित्य

- | | |
|--|---|
| 23. रमानाथ सरकारी पैसे का गबन क्यों करता है ? | 2 |
| 24. देवीदीन किस प्रकार रमानाथ की सहायता करता है ? | 3 |
| 25. क) "गरीब अपनी ही लगाई आग में जल जाता है।" गबन के आधार पर कथन की समीक्षा कीजिए। | 5 |

अथवा

ख) निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए:

आधी रात बीत चुकी थी। रमानाथ आनंद की नींद सो रहा था। जालपा ने छत पर जाकर एक बार आकाश की ओर देखा। निर्मल चाँदनी छिटकी हुई थी। वह कार्तिक की चाँदनी जिसमें संगीत की शांति है, शांति का माधुर्य और माधुर्य का उत्साह। जालपा ने अपने कमरे में आकर अपनी संदुकची खोली और उसमें से वह काँच का चंद्रहार निकाला जिसे एक दिन पहनकर उसने अपने आपको धन्य माना था। पर अब इस नए चंद्रहार के सामने उसकी चमक उसी भाँति मंद पड़ गई थी, जैसे इस निर्लज्ज ज्योति के सामने तारोंका।

- (i) कौन गहरी नींद में सो रहा था? (1)
- (ii) जालपा उठ कर कहाँ गई? (1)
- (iii) आकाश में किसकी चाँदनी बिखरी हुई थी? (1)
- (iv) जालपा ने संदुक से क्या निकाला? (1)
- (v) किसकी चमक कम हो गई थी? (1)

2023
BENGALI

Total marks : 80

Time : 3 hours

General Instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii) The question paper consists of 24 questions. All questions are compulsory
- iii) Marks are indicated against each question.
- iv) Internal & general choice have been provided in some questions.

N.B: Check to ensure that all pages of the question paper is complete as indicated on the top left side.

বিভাগ - ক (পাঠ)

1. নিম্নলিখিত অংশটুকু ভালো করে পড়ে প্রশ্নগুলোর উত্তর লিখঃ-

এশিয়ান গেমস্ ফেডারেশনের জন্ম ১৯৪৯ খ্রীষ্টাব্দের ১০ই ফেব্রুয়ারি দিল্লীর পাতিয়ালা হাউসে। ১৯৫০ খ্রীষ্টাব্দেরই এশিয়ান গেমস্ এর সিদ্ধান্ত গৃহীত হয়, কিন্তু 1950 খ্রীষ্টাব্দের বদলে 1951 খ্রীষ্টাব্দের মার্চ মাসেই দিল্লীর ন্যাশনাল স্টেডিয়ামে প্রথম এশিয়ান গেমস, এর শুভ সূচনা হয়, প্রথম এশিয়ান গেমস্ এর মশাল জ্বালানো হয়েছিলো লাল কেপ্পায়, সূর্যরশ্মি থেকে। লালকেপ্পা থেকে ন্যাশনাল স্টেডিয়াম পযন্ত 21 মাইল পথ ৪৪ জন ‘রানার’ এটি হবন করে এনেছিলেন। নেতৃত্ব দিয়েছিলেন 1936 খ্রীষ্টাব্দের ভারতীয় অলিম্পিক প্রতিনিধি ব্রিগেডিয়ার দলীপ সিং।

প্রথম এশিয়ান গেমস অনুষ্ঠিত হয় দিল্লীর ন্যাশনাল স্টেডিয়ামে 4টা মার্চ থেকে 11ই মার্চ পর্যন্ত। আট দিনের এই আসরে প্রতিযোগিতা মোট 6 টি বিষয় অংশগ্রহণ করেছিলো 21 টি দেশের মোট 489 জন প্রতিযোগি।

এটা ভারতের গর্ব যে, প্রথম এশিয়াত অনুষ্ঠিত হয় দিল্লীতে। তার পর কেটে গেছে অনেক বছর-আর এরই মধ্যে এশিয়ার বিভিন্ন দেশে অনুষ্ঠিত হয়েছে 24’টি এশিয়াত যার েকটি অনুষ্ঠানের সঙ্গে পরবর্তী অনুষ্ঠানের সময়ের পার্থক্য থাকে চার বছর।

নীচের প্রশ্নগুলির উত্তর প্রায় ‘5’ থেকে ‘10’ টি শব্দের মধ্যে লিখঃ-

- | | | |
|--------|--|---|
| (i) | এশিয়ান গেমস্ ফেডারেশনের জন্ম কবে, কোথায় হয়েছিল ? | 1 |
| (ii) | প্রথম এশিয়ান গেমসের সূচনা কবে, কোথায় হয়েছিল? | 1 |
| (iii) | প্রথম এশিয়ান গেমসের মশাল কোথায় জ্বালানো হয়? | 1 |
| (iv) | ভারতীয় অলিম্পিক প্রতিনিধির নাম কী ? | 1 |
| (v) | এশিয়ান গেমসের আসর কত বছর অন্তর বসে? | 1 |
| (vi) | প্রথম এশিয়ান গেমস্ কত দিন অনুষ্ঠিত হয়েছিলো | 1 |
| (vii) | প্রথম এশিয়ান গেমস্-এ কতিট দেশ অংশগ্রহণ করেছিল ? | 1 |
| (viii) | প্রথম এশিয়ান গেমস্-এ কতজন প্রতিযোগী অংশ গ্রহণ করেছিল ? | 1 |
| (ix) | নীচে দাগ দেওয়া পদটির কারক নির্ণয় কর - “মশাল জ্বালানো হয়েছিলো সূর্যরশ্মি থেকে” | 1 |
| (x) | বিপরীত শব্দ লিখ - “শুভ” | 1 |

বিভাগ - 'খ' (রচনা ও নির্মিতি)

2. নিম্নলিখিত প্রশ্নগুলির উত্তর 100 থেকে 150 টি শব্দের মধ্যে লিখঃ-

- (a) মনে কর তুমি জয় / রীতা, তোমার স্থানীয় “আর্যবিদ্যাপীঠ” কলেজে একজন বাংলার অধ্যাপক / অধ্যাপিকার দরকার। তুমি তোমার সমস্ত শিক্ষাগত যোগ্যতার প্রমান পত্র দিয়ে কলেজের অধ্যক্ষের কাছে একটি আবেদন পত্র লিখ।

অথবা

6

- (b) মনে কর তুমি তোমার বিদ্যালয়ের ছাত্র / ছাত্রী প্রধান তুমি তোমার বিদ্যালয়ের প্রাতঃকালীন সভার জন্য “ব্যায়ামে” (Yoga) সম্বন্ধে বলার জন্য একটি ভাষণ প্রস্তুত কর।

3. নিম্নলিখিত প্রশ্নগুলির উত্তর ‘50’ টি শব্দের মধ্যে লিখঃ

- (a) কলেজ থেকে বাড়ি ফেরার সময় তুমি তোমার একাদশ শ্রেণীর (Class11) বাংলা বইটি হাড়িয়ে ফেলেছো। বইটির সম্পূর্ণ বিবরণ দিয়ে তোমার স্থানীয় সংবাদপত্রে একটি বিজ্ঞাপন দাও।

অথবা

4

- (b) মনে কর তুমি কোহিমা সেন্ট মাউন্ট স্কুলের ছাত্র / ছাত্রী সুবল / সুবলা সরকার। তোমাদের স্কুলে আগামি 25’ মে নভেম্বর একটি স্বেচ্ছায় রক্তদান শিবিরের আয়োজন করতে চলেছো। তুমি তোমার বিদ্যালয়ের সমস্ত ছাত্র-ছাত্রীদের এই বিষয়ে অবগত করে, এই মহান কাজে যোগদান করার আহ্বান জানিয়ে বিদ্যালয়ের বিজ্ঞাপ্তি ফলকে একটি বিজ্ঞাপ্তি দাও।

বিভাগ - 'গ' (ব্যাকরণ ও অনুবাদ)

4. সম্প্রদান কারক কাকে বলে ? উদাহরণ দাও।

2

5. নীচে দাগ দেওয়া পদগুলির কারক নির্ণয় কর।

3x1=3

(i) মাটিতে মূর্তি গড়ে।

(ii) তাকে ভুতে পেয়েছে।

(iii) “আমি কী ডরাই সখি ভিখারী রাঘবে ?

6. স্বরসন্ধি কাকে বলে ? উদাহরণ দাও।

2

7. সন্ধি বিচ্ছেদ করঃ-

3x1=3

(i) শশাঙ্ক, (ii) নবান্ন, (iii) প্রত্যেক

8. নিম্নলিখিত বিশিষ্টার্থক পদগুলির দ্বারা বাক্য রচনা করঃ

2x1=2

(i) টনক নড়া (ii) মাটির মানুষ

9. বাংলায় অনুবাদ কর

3

A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

বিভাগ 'ঘ' (সাহিত্য)

গদ্যাংশ

10. জয়কালী দেবীর সর্বাপেক্ষা যত্নের ধন কী ছিল ? 1
11. শঙ্কর কোথায় কাঠের পিপে দেখেছিল ? পিপেটার পাশে কী ছিলো ? 1+1=2
12. সিবেলিউস কে ? তিনি কার লেখা পড়ে গভীর আনন্দ পান । 1+1=2
13. দুর্যোগের তিনটি বৈশিষ্ট্য লিখ ? যে কোনো তিনটি জলবায়ু সংক্রান্ত দুর্যোগের নাম লিখ? 2 +1=3
14. “আমরা সাতজন অতিকষ্টে ভাঙা পেলাম” - কার উক্তি ? তারা কোথায় আশ্রয় নিয়েছিল। সেখানে তারা কিসের গল্প শুনেছিল? 1+1+1=3
15. ভূমিকম্প কী ধরনের দুর্যোগ ? ভূমিকম্পের আগে কী কী ধরনের সাবধানতা অবলম্বন করা উচিত ? 1+3=4
16. (a) “বিধবার সেই প্রানাধিক যত্নের সুপবিত্র নন্দন ভূমিতে আকস্মাৎ এই বীভৎস ব্যাপার ঘটিল”
- (i) কোন গল্পের অংশ ? 1
- (ii) লেখক কে ? 1
- (iii) বিধবাটি কে ? 1
- (iv) বীভৎস ব্যাপার টি কী ? 2

অথবা

- (b) “ফ্লোরেন্সের গাতিবংশে আমার জন্ম”
- (i) কোন পাঠের অংশ ? (1)
- (ii) কার উক্তি ? (1)
- (iii) বক্তার শেষ ইচ্ছাটি কী ছিল ? (2)
- (iv) কতগুলি হীরা তাঁর জুতার মধ্যে লুকানো ছিল ? (1)

পদ্যাংশ

17. “বলাই ধাইবে আগে” - বলাই কে ? 1
18. ‘ধরায় দেবতা চাহি’ - কবিতাটি কার রচনা ? কবি পৃথিবীতে কার আবির্ভাব চেয়েছেন ? 1+1=2
19. “এ তিনের ছল সম” - এই তিন কী কী ? এই তিন কবিকে কিভাবে ছলনা করেছে ? 1+2=3

20. “এ বয়স জানে রক্তদানের পুণ্য”
- (i) কোন কবিতার অংশ ? 1
- (ii) কবিতাটির কবি কে ? 1
- (iii) কবিতাটি কোন কাব্যগ্রন্থের অন্তর্গত ? 1
- (iv) ‘এ বয়স’ বলতে কোন বয়সের কথা বলা হয়েছে ? 1

21.(a) “থাকিহ তরুর ছায়” - মিনতি করিছে মান রবি যেন না লাগয়ে গায়ে”

- (i) কোন কবিতার অংশ ? 1
- (ii) এখানে ‘মা’ বলতে কাকে বোঝানো হয়েছে ? 1
- (iii) ‘রবি’ বলতে কী বোঝানো হয়েছে ? 1
- (iv) এখানে কে, কাকে মিনতি করছেন ? 2

অথবা

- (b) ‘ধরায় দেবতা চাহি’ কবিতাটির সারমর্ম নিজের ভাষায় লিখ ? (5)

কথাসাহিত্য

22. “সভয়ে প্রশ্ন করিলাম চুরট খাওয়া কেউ যদি দেখে ফ্যালে” ? - কে, কাকে প্রশ্নটি করেছিল ? চুরট কী ? 1+1=2

23. ইন্দ্রনাথের ছাত্রীজীবনের পরিসমাপ্তি কিভাবে ঘটেছিলো ? 3

24.(a) “বাঘে নিলে না ত রে !”

- (i) কার উক্তি ? 1
- (ii) কাকে করা হয়েছে ? 1
- (iii) কাকে বাঘে নেওয়ার কথা বলা হয়েছে ? 1
- (iv) কোন প্রসঙ্গে উক্তিটি করা হয়েছে। 2

অথবা

- (b) শাহজীর চরিত্র আলোচনা কর। (5)

2023
TENYIDIE

Total marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 20 main questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal & general choice have been provided in some questions.*

N.B: *Check to ensure that all pages of the question paper is complete as indicated on the top left side.*

SECTION – A (Kesi Mhaphrü)

1. Thedze hau phrülie di ketso kebako kelashülie:

Tenyimia ha puo kelhou zho rükrie phikecü seyie puo. Kelhouzho huo liro we si vo tsolie kelho nnhienhie nunu u krü u tsiepfumia medzi kevor zho mu huo liro rüdirüli kezhü teiu nunu chüpie ba salielie ivorkecü ngulie. Kelhouzho kesa sedekelie hakoha puotei kekreikecü nu niakiluomia huo lhou kesier tei ze chükellie pekraya. Nanyüu geinu mehoshü zorei nanyüu krei, u kelhouzho se nanyü khekecüko krei iba. U nia u meimia pese kenyüthor ikecü die hauha geinu nhicumia pete rei u nia u meimia rhu mu khrie morokesuou hai zo di puo nou letaya mu sidi u nia u meimia neikemo chü ro terhuomia u siezha pie u tsüketuo keprei kele puo puo nou leta di süu se kelhouzho puo chülietaya. Kelhouzho pete nu rei u krukecü puo mu u kepele puo sa kepero phre baya. U tsiepfumia kelhouzho puo liro ukoe terhuomia prei se di lhou. Süla ‘kenyü’ ikecü die hauha se pezha se, mu die hauha phichüu rei nhicuu shierei le kemesi se di lhoukecü die puo. Ukoie sikemo rhuo rüsuo derei themia bu prei di lhou morokesuo la ‘kenyü’ hauha nanyü geinu se sedellie di se rüna kelhou zhoko nu rei themia kekhalieya.

U tsiepfumia kelhouzho kevi puo liro kediethe. Mu süla u ro u üya mo ro mo üya. Puo diepu puo mhatho medzi di pu mu chüya ro sümia üse dietho üya. Derei puoe puo thuo puo miatho-u rhu kemosie tijütaya. U kelhouzho kevi kekrei puo liro phichümia rhukecü. ‘Niaki kele tieki rei phichümia pfhe rünyü morosuo iya. Phichümia puo kelhou geinu themia dze phrü di sikellieko se nhicumia pethaya mu nhicumia süu rünyülie ro puo la kemevi ngulieya. Mechü kelhouzho nu morei mia puopuo kelhou nu shierei ‘phichümia pushülie’ ikecü hauha die kezha puo. Mhahuo si tso mota shierei ‘phichümia ketsollie’ iya. Mha hako mehoshü tse u kelhouzho mia ki vi rükrükecü kropuo tuo ketho mu hakoha puoma re se ketho we.

Ketsokeshü:

- (a) Thedze cayie puokru tou-u thushülie. 1
- (b) Kedipuo la u nia u meimia pese kenyüya ga? 1

- (c) Kelhouzho puorhi kimhiecü kropuo baya ga? 2
(d) Kedipuo la u tsiepfumia kelhouzho nu 'kenyü' ikecü die hau se pezha seya ga? 2
(e) Kedipuo la phichümia rhu morosuoya ga? 2
(f) **Dieca hanie puoca thushülie:** 1+1=2
(i) Kelhouzho (ii) Kedietho

SECTION – B (Thedze kezo)

2. **Hanie puo (1) kedapie dieca 100-150 mese nunu thushülie:**
a. Noe Votuo/Vonuo. N leshüki nu theba, mizhü tsa di kephrünuoko bu kemezhie baketa la kerükri nu keseshü morokesuo kecha dzeyieleshü puo thupie leshüki mhokezhau tsüshülie.
Moro 6
b. Tenyidie kemevi (Advantages of Tenyidie) dieu pemvü di khise kehou nu die putuoü keba n diepuko le menuo di thushülie.
3. **Hanie puo (1) kedapie dieca 50 mese nunu thushülie:**
a. N rünae 'Shühuo' (Orange) lei puo se baya mu süu pemvü di teisozha puo nhie pie 'Shühuo nyi' (Orange festival) pebaketuo la themiako bu vorlienukecü pie kelieshie (Advertisement) puo thushülie.
Moro 4
b. Noe Neituo/Neinuo, Alka Public School, Dzükou Sports Club nu kethuu (Secretary) chü ba. N leshüki nu rüzhünya keweko teisozha puo nhie kephrünuoko ki zeshüketuo la kepesikeshü (Notice) puo thupie leshüki notice board nu khashülie.

SECTION – C (Diezho)

4. **Hako chatha khakeshü medzi di kelashülie:** 12x1=12
(a) Dzüleke thechü kezivi puo. (*Zaliu rhieshülie*)
(b) Diekhe puo se diecha chüshülie.
(c) _____! Uko sü chüwate ho. (*Ungo pfhephra puo kruu pie ksheshülie*)
(d) Tseilie leshüdanie khashü. (*'Leshüdanie' hau pie miakra dieza nu chüshülie*)
(e) Sei se mizhü chüya. (*Rhiepie kebau dieza zatse kiu nu ba ga?*)
(f) Puo teisonhie a kinu vorya. (*Puotei dieba rhieshülie*)
(g) Thepfuyo ze ba. (*Rüdikemo dietho-u rhieshülie*)
(h) Setuo themia kedietho puo. (*Zamho-u rhieshülie*)
(i) Puo kerü nunu khuo te se vor. (*Diepeu rhieshülie*)
(j) Kenei die pu pevi seshü. (*Diebau kiu ga?*)
(k) Supuo die pu ba ga? (*Ketsokecü zasou-u rhieshülie*)
(l) Akhrienuo zivi secüpfü puo. (*Rhiepie kebau diezho kikru kiu nu ba ga?*)

5. **Hakhro kebau Tenyidie nu thuyie chüshülie:** **3**
 A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

SECTION – D (Diemvü)
Thedze

6. Dr. Faustus chalieu za supuo ga? **1**
7. Kediu Laius kedipuo la rüse krapie puo kikru nu shüwata ga? **2**
8. Kiüdi Jacques üse Melancholy Jacques idi kieya ga? **2**
9. Kedipuo la Dr. Faustus Mephistophilis bu puo kimia pfhü ze vornuta ga? Mephistophilis kedipuo pupie Faustus die kelashü ga? **1+2=3**
10. Yash Pal nuo zuo kiükishü dze kimhie di se puo ki pushü mu Yash Pal puo zuo puo ki kepuu medzi di kedipuo chü baya üsi ga? **2+1=3**
11. *“Kediü, n kedi sekelie-ue n kedi kekuo se n tsü lashüwate we.”*
- (i) Supuo die hau pu ga? **1**
- (ii) Supuo Kediü Frederick dosuoko mu puo nou kesuoko chü kedi lotso wata ga? **1**
- (iii) Kediü Frederick puo nou kedikelie sie kedipuo chüta ga? **2**
12. **a.** Kediü Creon kesiamoko la ahza kimhieci puo khashü ga? Antigone kediü Creon neimo chükewa la puo gei kedipuo vorta ga? **1+4=5**
- Moro**
- b.** *“Nko haki ba salie kenjüte, kekhuohi ki pfhüta morosuote.”*
- (i) ‘Nko’ hau suomia pu ba ga? **(1)**
- (ii) Supuo die hau pu mu suomia ki pu ga? **(1+1=2)**
- (iii) Kedipuo la ukoe ta se kekhuohi pfhütatuo üzhie ga? **(2)**

Geizo

13. ‘Themia Kelhou’ geizo nu themia ha kijü nu kelhou khunuo pete donu kimhie üsi ga? **1**
14. ‘N Ba Nunu N Nei Kedalie’ geizo nu ükezo-ue kimhie di cienyhü kezathoko rüli pie thie leshü phrü pedze kebako chieshü ga? **2**
15. Geizo diecha hau puoca vatshashülie: **3**
Perie ketsü mechü dzevi le,
Tie nhie idi medo tha weru,
Ta pa ta le noutshünounyü chü.

*Kezha kesu u ya kevi le,
Zotha dinu jü kethoyatuo.*

16. *Kemichie ze keduo keba ki,
Kepenuopfü u nou bataya;
U neimia ze keduo bata ro,
Kepenuopfü u khie bataya.*
- (i) ‘Rheichie Khrüprei’ geizo-u Ketholeshü kiu pemvü di zo se par ga? 1
 - (ii) Themia kelhou ha Kepenuopfü ze kepero pevilieketuoe kedipuo
gei ba ga? 1
 - (iii) We puotei kimhiecü kropuo nu Kepenuopfü rükra mu puo
rükra mo bataya ga? 2

- 17.a. *Khrüthemvü teigei rütso chü,
Kezhako ha kevimia za chie,
Kijü nu lhou zharülie dinu,
Ba tso moü khrüthemvü mevi,
Teigei nei chü themianuo pesi
Kechachie rei zie tuoyaluo die.*
- (i) Supuo geizo hau zoshü ga? 1
 - (ii) ‘Zharülie’ puoca thushülie. 1
 - (iii) Themia kikemhiemia khrüthemvü meviya üdi geizo nu ngulie ga? 1
 - (iv) U zhorüli kimhiekecümia teigei kechachie zayie chü zhaya üsi ga? 2

Moro

- b. *A kelhou nu leshükephrü ha
Phrü zo sie di kezhamia puo chü
Zolieketuo medo tuo mu ru.*
- (i) Supuoe geizo hau zoshü ga? (1)
 - (ii) Puoe kedipuo kemengu geinu leshü phrü sedelie ga? (2)
 - (iii) Puo puo kelhou nu kedipuo silie ga? (2)

Noudo Dze

18. Atseinuo zepfü za supuo ga? Akhrie kedipuo la süpfü lieketuo puo medo
mota ga? 1+1=2
19. Akhrie-nuo puo kikemhie di vor seluoba nu lhouta ga? 3
- 20.a. “Anuou, no mhasilieketa ki ze n pfhe n die rei vi se zo...hieko sü thiedzü rei n
mho dukhriwate derei no thie ketso hie pele keba hie n dzümengathor.”
- (i) Supuo die hako pu ga? 1
 - (ii) Kedipuo la puo mho dukhriwata ücü puta ga? 2

- (iii) Kikemhie di puoe uko pele keba thashü ga? 2

Moro

b. “*Hienie kiya chülie mu themiako hienie kiya dze pu kekre la tuota.*”

- (i) Suomia kiya pu ba ga? (1)
(ii) Unie kiya puo rhi kimhiecü puo nu chü ga? (2)
(iii) Themiake unie kiya dze kicüpuo pu kekre tuota ga? (2)

2023
SÜMI (SÜTSAH)

Total marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
 - ii) *The question paper consists of 22 main questions. All questions are compulsory.*
 - iii) *Marks are indicated against each question.*
 - iv) *Internal & general choice have been provided in some questions.*
- N.B:** *Check to ensure that all pages of the question paper is complete as indicated on the top left side.*

KOKÜPPHA– A (Akipphi)

1. Hi aqhou yehpüakeu akivishi phino inju akeu khochile lo:

Aküpu kighe ye alu lo apiti qü khavepu iphi moza hunike zulono pinni chaghi. Ike akupukighe, ashi kuchu chine ye aphuh lo alagha aloji ampe kütäu kishi pinni cheni keno titoi tipa mpe loghi kuto kulumi ghakütsü pu amqo aqoshi aluh huläh khiküdaü asüh yehu anike no tiküdaü aphuh kubala lo apushoh shipeqhi no kipitimi assatheve kemi ye akupu gheni.

Ike tilehi ghulo kini küthü totimi sasü azübo, alakhü lakhi shimo eno kitiqe mo no apushoh ghasü lo zuni, ike alhe ye kutokulul kiqu lono shinani. Timi kiqu lono awo, atsü, awudu, awuquh ishi tile heqhipe apushoh lo ilo nani. Shilu aye alih, alih no ashi ghekije nani, tishipu tipau apushoh ghazü lono lhochu khave no aphuh lo ipe nani. Tsütsala akütsüh, ashibo, anheghu chukha mokeu aghi aye lakhosa ngo achineh mi qono lhochu khave no aphuh lo ipe nani.

Hipau chineh lo kumthu kümna yezu chemo hipaqo ghenguno aghiboh, asüboh nake ghenguno.

Akupu kigha ashi kuchu hipau ye tukuu swüu qo pütüta chineh yeh kiqu lono kumo no alih-alih ala kiqu lono shi nani. Tsütsala alagha dolo amllo kümtha kile no aghi aye achineh hipau lono külashive cheghi kiu ghengu achineh hipau ye alah kishi aküpu ghekeu ke.

- | | | |
|------|---|--------------|
| (a) | Kiu ghuloki lono akupu kighe chineh shi che kea? | 1 |
| (b) | Akupu ye khiküdaü ghehu che kea? | 1 |
| (c) | Kiu shipe qhino akupu gheche kea? | 1 |
| (d) | Lhoxü kiu toi keqo heqhino akupu kighe chineh shi che kea? | 1 |
| (e) | Achineh hipau shi akelo kipitimi qo ye kiu shi masa kea? | 2 |
| (f) | Tukuu swüu qo kiu ghola lona akupu kighe ashi kuchu chineh hipau shi che kea? | 2 |
| (g) | Hipaqo kiqu pilo: | 1+1=2 |
| (i) | Akupu | |
| (ii) | Külashi | |

KOKÜPHA – B (Akiyye)

2. **Hiküma dolo lakhi yelo atsathi 100-150 lono:**
- a. Lau yeh (application) lono nono akiphi kilo ghulo küthü wumove keu ghenguno yeh lo. Noye Iloni/Iloto je lono yeh lo.
Momu **6**
- b. Atsapi kiiyye (speech writing) ‘ashi ajeh kivi ye akinni’ nowu kiphiki inaqhe boho lo phisüni keu yeh lo.
3. **Lakhi likhi yelo atsathi 50 dolono:**
- a. Yekhülha (advertisement) nono yeghi kilu lono izüche ke lono owu ghüka bo (wallet) pühave. Hile ghüka khije ani eno kütäu nhemgha kiu akeno kishekulu yeh pe yekülha lo sülo.
Momu **4**
- b. Pithitsa (notice) No ye Vito/Vivi yekala XI lo pi ani. Amikucho kikishe phukutho shiniye akeu lo kiphimi kümtsü ighino süpeni ke pithitsa lono yeh lo.

KOKÜPHA – C (Tsayeh eno Pekibide)

4. **Atsajoh kümsa lo thizungo achipiu pe shipichi tsülo:**
- (a) Paye ishi küsülo thiveni _____ xülu vea. **1**
- (b) Anga no aza _____ iqave. **1**
- (c) Sümi ye cholimi eno Sangtam _____ xüküami. **1**
- (d) Pa kulu ye aghoki _____ ani. **1**
5. **Hipaqo ye kiu tsahjoh kikije keno alaxa tsülo:**
- (a) Kumlhomi ye kimiyekepu **1**
- (b) Akükütsü tsa inilo **1**
- (c) Oh! Li ye kiu toi juvi kela **1**
- (d) Opelo axushu peni! **1**
6. **Sülekutho hipaqo kiqu yehlo:**
- (a) Awu kimiye toi **1**
- (b) Ane no sho **1**
- (c) Achequti azapolo la kithi **1**
- (d) Achuwo nhethi **1**
7. **Sümi tsahlo pebide süvelo:** **3**
- A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

KOKÜPHA – D
Tsaiko Küghakiche

8. Sümi chineh akhoto khijehi ache keu? **1**
9. Amüghüsü ye anupau vilo kiu toi kemi totimi lu lo pi kea? **2**
10. Sheyili ye kiu michipu shipe li pelimi qo tsüpuwu kea? Tipau kiqu ye kiu kea? **1+1=2**
11. Nagami achekeu kiu ghuloki eno khuu vechewo ithi kea? **3**
12. Akibo shiluve kethiu pama akimi anipu ye kiu kükü lo xü niye pükapütsa che kea? Kiu kishino latsugho ki shilu che kea? **1+2=3**
13. Pinyeh mishi heqhi keu momu pinyeh chineh ghili yeh lo. **4**
- 14.a. Amüghüsü ye khipaqo vehupulo ‘Shilo’ momu ‘Shikevelo’ pi Anupau niyetsü che kea? **5**

Momu

b. *Nongu phuthekuwa lah lo che kelo khipa a lono atu hipau no ita iqighi eno awudu hipau no igha ithughini keno tipa a lo paghi aphu shilo.*

- (i) Atsah hiye khuno pi ani kea? (1)
- (ii) Khunoqo vilo pi ani kea? (1)
- (iii) Kiu shiwunike lono pi ani kea? (1)
- (iv) Khuno kughakiche lono inju ani kea? (2)

Leshe

15. Kiu shive ke lono ‘Kunolike’ leh shi kea? **1**
16. Kiu shive kelono atsü puhave kea? Khuu pama kuu shiwu ache kea? **1+1=2**
17. Visheli no kiu pime eno Hokhuli no kiu pime kea? Pama khiu pavi puna kea? **2+1=3**
18. Khuno leshe lono inju ani eno kiu pi ani keno mutsü mishei hepho tsü lo. **1+3=4**
Alhokuthu tukah lono lhoeye,
Alhokuthu tukah thowo kighini,
Nikujo ye anhezu qi mullo cheni,
Pinaimu niqo akilo wuye küha ni wono.

19. **Khuu no leshe lono piani, khuu no kiu. Shive kelono pi ani kelo lakhi yeh lo:**

- a. *Oh! Inolino vemu yeno,
Ghulo kiithü kiphi qholo züye,
Oh! Hoishe thoghi tsah kitheu ye,
Anhewuno ghü ishe wo,
Pekishe wu ala!*

Momu

1+4=5

- b. *...Ala chighi pesüno xaluna ighi,
Tughamino kipishi ye shimla ni wono.*

Lotsüh Kiye

20. Aghüzümi thukuwu ghili ye khuu no yeh kea? Paye kuu xapu chekea? **1+1=2**

21. Timi lakhi akho kimishi puchekeu ithulu pa je ye khuu kea? Pa ye pa u lo kiu pe che kea? **1+2=3**

22.a. *Hikithipu mllo ghime xapüsü kiu shi ache kea? Timino khochile “Niye khilau wukepu keno mthake ghengunoke”. Tileno pa no ashiyiko no shikeu Liküzüpa pa tsü eno tile atsa hitoi yeh pua. “Amllo kighide ighini – küau lono pokalulo.
Atsah yeh püa keu phiheno pano tsavipeu vilo inju, niye khikudau powu kepu kea?*

- (i) “Hikithipu mllo ghime xapüsü kiu shi ache kea?” Khuu no khuu vilo pi kea? **1**
- (ii) Niye khilau wukepukeno mthake ghengunoke khuu no pi ani kea? **1**
- (iii) Pano ashiyikono shikeu liküzü pa tsü khuu no khuu tsü kea? **1**
- (iv) ‘Amllo kighide ighimi küau lono pokalulo’ kiu lo yeh puaghi keu khu no ithulu kea? **1**
- (v) Niye khikudau powu kepu kea? Khuu no inju ani kea? **1**

Momu

b. *Alokughuno pelono osasü cheche peni, akiviu, Khristou qeti nono aphughi lo ilonike kuto lo okheu shitsü peni.*

- (i) Hiye khuu no pi ani kea? **(1)**
- (ii) Khristou no kiu shiwu che kelono pi kea? **(2)**
- (iii) Atsah hipau chilu kelo timi huye kishive kea? **(2)**

2023

AO

Total marks : 80

Time : 3 hours

General instructions:

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iii) *Marks are indicated against each question.*

iv) *Internal choice has been provided in some questions.*

N.B: *Check to ensure that all pages of the question paper is complete as indicated on the top left side.*

SECTION – A (Zügang aser langzüang)

1. Agüja aliba olenji junga zügang aser tasüngdangbatemji langzüang:

Kibong ka nung tetsü talangka shiranga lir, jabaso o tebu doktsür asü. Kidang kinungtsü shiranga alidang alu nung aroba tsük ajak chiyungmadok. Küm ka alui tao majung, kinungtsü shirangba agi alu doktsütsüsa aküm. Tangar dang tetemlok agia apudena akaba tsük ajak la lepkhung mung tashi Chiyunger külen, tsükji molok ka Sünga dang anüng.

Kinungtsü sür külen akhi ama jabaso dena yimertem den lumang ka nung, tsüngküm mapang alu achitsü tenzük. Jabaso tena atema joko tsük tapulen maka ta meteta, anogo shia jang tekapu ka sünga bener alui oa chi chiyungtsü melena soztü aria ajem. Anogo shia pai soztü aria atadang, jabasoji chirong nung aliba alu tzübu yoka tzü tar adokli soztüji külemi anisüngzüka jemli ta amalitepa alu tendakji inyaktep.

Jabasoji soztü jagi lakteter kenübo tebu dang yamai ashi, “Oba soztü ya joko mejemnür” ta nemnema ashi. Jabaso nemnema oji pa mulungi kanga runga ait. Saka pa atema jabaso ashibaji inyaksüdi ta bilemyonga tanga lenmang mali nung temulung arungba dak alaka temelen kecha magutsütet. Pai jabasoji kanga meimyonga, azümesena chiyungtsü tajung mebushii mapang meranga inyaksüla ta ajungshisem. Alu nungji metsü proker, temenungratsü ka motemji moko meitsü tenzük.

Kasa alu mapalem süa inyakba mapang, kenübo pa jendang soztü aria yutsür, tzütalen nungi jabasoji madok. Jabasoji adoktsü atajen atar madokshiba agi chirongleni bushia lenchi ai. Pai tzübu tashi lua repranger jabasoji mangu nung tzübu anasa noktaker ajatsü tenzük.

Iba mapang ozü ka arua süngsem rongnung temer, tutzü terishi ni, totzü terishini ta asaloktsü.

Tetezü:

Sotzü teyanglushi ni,

Sotzü teyanglushi ni.

Ozü ka pa anasa asaba dak alaka tanga kecha mangu, idakji pa kisüng azüng azünga aküm. Joko jabasoji mangu, jeba kidangi meyipa adok. Tasüngnüjia alui oa, alu meküta anüdoklen, anü olen, anüdohtip aser anülutip tesem ajaklen jabasoji bushia senzü. Saka anasa ozü ka temer, “Tutzü terishi ni, tutzü terishi ni”, ta asaloktsüba dak alaka jabasojibo mangu. Iba küm nungi tenzüka ozü jagi asükwä tatemlen aser meiwa tetenzüklen küm shia “tutzü terishi ni, tutzü terishi ni”, ta asaa senzür.

Tasüngbatem:

- (a) Tebui jabaso kong aser koma bushi? 1
- (b) Koba tsüngküm nung ozü jagi asar? 1
- (c) “Tutzü terishi ni, tutzü terishi ni”, tetezü rateta züluang? 1
- (d) Khen mapang ka nung kibong ka nung kechi atalok? 1
- (e) Kechiba tebu o techir na sotzü dang ajem? 1
- (f) Tebu o jabaso na tsüngküm mapang kechi inyak? 1
- (g) Tebui jabaso nem kechi sayubentsü o ashi? 1
- (h) Chirong nungi shiba madok aser kechiba? 1
- (i) **Agüja aliba ojang ya tetezü agüjang:** 1+1=2
 - (i) Nemnema (ii) Amalitepa

SHILEM- B (Olem)

- 2. **Ana rongnung ka shimteta ojang 100-150 tashi nung langzüang:**
 - a. Na Lirusen/Liruba, The Woods Higher Secondary School, Dimapur Principal dangi na tesayur inyaktsü temsüa lir ta metetdakja mapa meshia bangdak shiti ka züluang. **Mesüra 6**
 - b. Ner School tekülem nung jembitsü onük agüja aliba nung ajemdaker züluang. **Mesüra 4**

“Merükmejua alitsü koda tongtibang”
- 3. **Ana rongnung ka shimteta ojang 50 shi nung langzüang:**
 - a. Nai ner jila nung dokan tajung ka lapok saka koda masüba tia ka ajanga nai ibaji yokdoknür. Iba indang ne terajem shisatsü amshia SANGDONG ka züluang. **Mesüra 4**
 - b. Ner school kima anütetsü (watch) ka shia arua ne nem agütsü. Na school captain ka ama ibaji metetdaksü ka züluang.

SECTION - C (Orrlem)

- 4. **Itemi langzüang:**
 - (a) Rarem leplashi ratetjang. 1
 - (b) Ramok leplashi Kechi dang ajar? 1
 - (c) Tarutsü tensa nisungi meteta mali. (*Ramok leni meyipang*) 1
 - (d) Yange balala pezü sayuang. 1

- (e) Yange teratet shiang. 1
- (f) Yange ana amshia oren yangluang. 1
- (g) Jilajitep teratet shiang. 1
- (h) ‘Ü’ agi tenzükba ojang ana agi oren yanglua sayuang. 1
- (i) ‘E’ olasü adokba ojang ana shiang. 1

Itemi Apakijem tetezü agüjang:

- (j) Küpra asü songang maru. 1
- (k) Tzüma zükshir. 1
- (l) Ojilak kolepa alur. 1

5. Itemi Ao oshi nung meyipang: 3

A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

**SECTION – D (Kaketkeno Zülu)
Otsü**

- 6. Tenem ozüji kudasür teben anaben temdanger liasü? 1
 - 7. Mera taket nisungji komala dang ajar? 2
 - 8. Nokrang tongtibai anisen rongsen shiba dang kechi meshi? 2
 - 9. Masüngteti aliba taküm ka dak kechi komala jaklaliro keta alitsüla? 3
 - 10. Aiürla ana tepsetba tatsü agi shiang. 3
 - 11. “Tashi angabaji tenlaba dang nungi taoba” iba shin o ya rasaa züluang. 4
 - 12. **a.** HIV aser AIDS kechi dang ajar aser item nungi koda kümzüka litettsü? **5**
- Mesüra**
- b.** “*Lanurtem, nenoki akok tashi bushibayong nenok dang kanga pelar.*”
 - (i) Ya shibai jembü? (1)
 - (ii) Kechi bushiba ashir? (1)
 - (iii) Kechi indang jembir orenji rasaa shiang. (2)

Sangro

- 13. Kechi atema tasütaitertem rarai ao? 1
- 14. Teyangluri meimchir nem shisadangtsü doktsüba anaji kechisa? 2
- 15. ‘Kü Lima Nungtem’sangro shibai mejem, aser sangro nung ‘Shilanger O jetzükerji’ ta ashiba orenji ratetjang. 3
- 16. Naga nungeri Naga nunger indang jembitsü temedenji rateta shiang. 4
- 17. **a.** “*Anü Tongnüsen agi mekütbanger adok,*

An tepongi kongpet, nashi pongchi hokmang asapet.”

- (i) Koba sangro nungi orenji agitet? **1**
- (ii) Shibai zülu? **1**
- (iii) Kechiba ya atalok rasaa shiang. **3**

Mesüra

- b.** “*Anüngtsüing külen nungi külen tashi enzüidangang, Saka ne temetetba kechi aser kodaka lir, Shisatsübo kodanga tatem maka.*”
Item oren ratetjang. **(5)**

Yimjangjem

- 18. Lensengubai Prangpong koma sempa? **2**
- 19. Kechi tebilemba nung Rachel O lenba na Phek town nung oset yoka senzü? **3**
- 20. **a.** “*Temba ni na ajurnüa liasü.*”
 - (i) Iba oren shibai jembü? **1**
 - (ii) Shibai shiba ajurunüba indang ashir? **1**
 - (iii) Kechi tensa ka nung iba oren ya jembitsüsa aküm tatungi ratetjang. **3**

Mesüra

- b.** “*Gari workshop nung inyaktsüji mapa tasak lir. Nai aremtsü südi.*”
 - (i) Item oren ya shibai shiba den jembiba. **(2)**
 - (ii) Komala tia aser tensa ka nung jembü, rasaa shiang. **(3)**

2023
LOTHA

Total marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
 - ii) *The question paper consists of 21 main questions. All questions are compulsory.*
 - iii) *Marks are indicated against each question.*
 - iv) *Internal & general choice have been provided in some questions.*
- N.B:** *Check to ensure that all pages of the question paper is complete as indicated on the top left side.*

SECTION – A (Ekhaio)

1. Motsü shi khae zesi oküpoe engao jiang janlana:

Nkolo orae ekümrum tona kyon to npyontathüng kyon nchyua na eloe nchyua soa vancho. Osi onpoe na otsoe eloe nchyua, eboe nchyua to vancho. Hoji süi jo eloe ji chücho, tole enhünga ha eboe ji na eloe ethan echü echong soa vanlancho. Tole eloe ethanvü ji na eloe ehenvü ji tose oni ji elümoto khangshia ntsongshia ekümcho. Nchoka tsüngon no jo ngaro oni thüngi heto ezochö, “Nchüngo oli nhyako wotakhe; ana engakvü etsoyu nini hantokvü ka oki tiyitakhe”, to ezoa wotokcho.

Tole eloe ethanvü ji na ngaro oni thüngi engakvü otsi kilato honochü, wokochü, zhürochü, makvüeran to tae nkhüpi hantoka mongcho. Hoji tsükona ngaro ji onina engakvü oyo ethanvü na etsoyu hantoko jiang otsi kilato nchümta lanphe zetasi lia si, si to tsüngon songa hojito tsocho. Hoji sülo jo ngaro ji oni na echümchüm na jo kyon etsoyu lan jiang nchümchev orae evamo ekümrum etsoyu, tssüngthilonben, ponghantzü osi etsoyu thanpo to jiang tsota vancho. Tole nchoka tsüngon no jo opo na otsi nkhüpi hansi owo ngaro jiang pilo wocho, “Ana otsi nini hanichoka oyi tsota” to nzana tsale ngaro oni na opo thüngi ezochö: “O...Apo eyio enhüngo kyon etsoyulan nchümchev yakso küma yia ka”, to ezoa yakso ekhü, khüa yakso kümkhana yiracho. Hoji süi jo opona elümoto nungra, oni thüngi heto ezochö; toka nini na yakso küma yina oyam na müngthan- müngri, emong chephia oyam hümoli, tenjü-mojü roe tsota yitakhe to ezokata yitokcho. Hoji tsükona enhünga ejan yakso na müngthan-müngri, emongo jo kyon li chiro tenjü-mojü jiang roe tsoa woala to motsü rüta la.

Engao shiang janlana:

- | | |
|--|----------|
| (a) Eloe ehemo jijo otsoe nchyu kvüta vancho la? | 1 |
| (b) Otsoe jiang jo eloe alo eboe vancho la? | 1 |
| (c) Eloe ethanvü ji na ngaro jiang kvüto zeyata vancho sana erana. | 1 |
| (d) Eloe ethanvü ji na etsoyu hantoko jiang mmhona erana. | 1 |
| (e) Ngaro eni ji na ntio etsoyu tsota vancho la? | 1 |

- (f) Opo na ntio etsoyu hansu owo picho la? 1
- (g) Ngaro jiang na ntio kvüto opo ezotachola? 1
- (h) Opo na ngaro jiang kvüto ezokacho sana erana. 1
- (i) **Motsü shi lona yitsüing esütao tvü yani erana:** 1+1=2
 - (i) Tsüka (ii) Tssoria

SECTION – B (Eramo)

2. Oküpoe eni eramo pi elio jiang lo na ni lümcho motsünga yitsüing 100-150 na epemo erana:

a. Nino Libemo/Libeni, yithen kako yakchia okying Kohima lona ete Lotha yithen yivonkok (radio) lo nsanthechiv tsükona lhidong motsünga ejüngi lia. Lhidong ji tsükona jonji yilan erantsüing ethelan eli jiang theta kvüto eram sana erana.

Mekana 6

b. ‘Ntsa jina e-ntsachev’ (The truth shall set us free) to yidong ji khapheni enyathüing sanrhyu jilo nsam tsükona erana.

3. Oküpoe eramo eni pi elio shi lo na motsünga yitsüing 50 na epemo erana:

a. Nina Dimapur yantsü longi shishophen jiang lo shishoa vanathüing ni rang sükvüro ji moni sicho. Ocho na sana khyoe lia tssona yivon nipi-le to thüingoe na yithen kako lo moncho ntsijanta kvüto erani thev sana erana.

Mekana 4

b. Nio khaphen jilo Esopvüi (captain) ji. Nchüküm nzyu shilo jo ‘Pyimtsümotsüi Jülü Tsüingon’ (Cultural Day) ji khitav tsükona ekhae topvü thüingoe ntsijantoka erana.

SECTION – C (Lothayi Nsanlan)

4. Shiang janlana:

(a) **Echak yi shiang yichak pia:**

(i) Yukhyu shüp 1

(ii) Efüi menkirang tsüpho 1

(b) **Engao yiren kümtoka:**

(i) Onte na oso epicho 1

(ii) Ombo kvüri na noala 1

(c) ‘Elani’ yitsüing shi yichak eni pia yiren nsüingrüa. 2

5. Etssyuchi epio ji ephan janlana:

(a) _____ nlan pita la. (*Reciprocal pronoun theta*) 1

(b) Ombo yikvüo ji _____ ombo na nungracho. (*Yishen khi pyingtoka*) 1

(c) Apo na zotoro ji emongala. (*Tssoyio yi ji sekata*) 1

(d) Püingnoe jina nonghori jiang engacho, “Nteno kvüwoe wohungala”. (*Yiren shi erhüyi kümtoka*) 1

- (e) Mangsü _____ Barhi chungji rhowo vana. (*Etsyukayi khi pyingtoka*) 1
- (f) Mmhorü _____ ora _____ vanala. (*Zonkayi khi pyingtoka*) 1

6. **Yiren shiang Lothayi na khophia:** 3
 A person with good manners is always loved and appreciated. Education makes a person an educated one but good manners and behavior make him a gentleman. The quality of having good manners is the ladder to achieve success.

SECTION – D (Motsüran Ekhaos)

- 7. Samson thojü etho ji jo ntio lo jücho la? 1
- 8. Nri ji omotsü na Potsow loroe ji thüngi hantoko jiang jo ntio la? 2
- 9. Mali loroe motsü ji ephani na jo nkolo eranreni jo kvüto shishokhophita rocho la? 2
- 10. Samson na ombo ri jiang nllan sa thüng ombo potsow ji thüngi kvüto randancho la? 3
- 11. Newton na nchüng etena tsütsata evamo konchonphen ji kvütolyui yanchecho la? 3
- 12. Yansalümo tona ombo eüng Mmhaseni to onpoe yuta lo nmyantav tara arakari ji jo kvütolyui chiyicho la? 4
- 13.a. Ete Lotha na kikyonykyo olan olan tsütsata erowo jiang lona Tsipfü hanpfü tona ophük olok to eni shiang ereroa erana. 5

Mekana

- b. *Eloe ji na otsoe okharo vani züa vanathüing, ompvü na opoang oyoang nchümchei nungra nchümcho. Ompvü na ngaro okharo ji pvükachi si orapvü mphoa oki na khochuki wocho.*
- (i) Eboe jiang yani na owo phonglan ji ejamü ji nchuk kvüta lantsa la? (1)
- (ii) Nchuk kvüta etsoyu hüngi nntsocho la? (1)
- (iii) Olong tsüphov jilo na esana yipa thüng ntio tsocho la? (1)
- (iv) Ngaro ji pono ntio tsocho sana erana. (2)

Chungiyi

- 14. Shantiwoe na omi phonga na ntio tsovo to longtsütacho la? 1
- 15. ‘Ete woden na ha woro tsoa liosangsü nli ehamo njücho alo? Shi yichak ji ereroa. 2
- 16. *Shomo sana opo eli na otsen tsoa kha,*

*Shomo sana opvü eli na otssen tssoa kha,
 Kio opo eli lo tsankav la nnli,
 Kio opvü ejüeli lo tsankav la nnli.*

- (i) Khenzhü shi jo ntio chungiyi lona khichecho la? 1
- (ii) Khenzhü shi yichak jiang hungri na eroroa erana. 2

17. *Yanjoe na mankachi khi, nonghoriten,
 Yonton ni tae zekachia tssona,
 Nte na nryupaka tssona nonghoriten,
 Nte na kvütolyu tssochev la?*
 Eroroa erena. 4

- 18.a. Chungiyi ‘Mmhorü’ ji jo ocho na erancho la? Chungiyi eranpvüi ji na mmhorü mhyik jiang jo kvülo na hansi oyi theyicho to nchümcho la? Osi mmhorü kichok ji jo kvütolyui nsüngrücho to chungiyi eranpvüi ji na nchümcho sana erana. 1+2+2=5

Mekana

- b. *E shantiwoe na omi phonga jo ntio etsso mphong küma, enungi ventyu vo eshunga to yantaro kyon chüia tsae la, jeni, yeni, poni lo ti khondale.*
- (i) ‘Enungi ventyu vo eshunga to’ to ephyo yiren shi eroroa. (2)
 - (ii) Ochoang thüngi ntio tssotale to ntssongcho la? (3)

Nchümntan motsü

19. Arilao tsükona tara erana. 2
20. Arilao yingaden jiang na Arilao ji ntio lyuyiv tsükona methaktacho la osi echa jo ntio khiyitav to methaktacho la? 3

- 21.a. Oyamo kyon jiang na Arilao ji kvütolyui chütokcho sana mmhona erana. 5

Mekana

- b. *“Ojyua jo oyamo nonghori topvü na a ki oro mongtoktale a na woko vüktsü ji noni tsota mongtav ka.”*
 Lankonrhoni na oyamo nonghori jiang ntio lanka lona osi kvütolyui omi na rongtsüngi siratokcho sana erana.

2023
SOCIOLOGY

Full marks : 80

Time : 3 hours

General instructions:

- i. Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii. The question paper consists of 30 questions.
- iii. Marks are indicated against each question.
- iv. Answers to questions carrying 1 mark should not exceed one sentence.
- v. Answers to questions carrying 2 marks should not exceed 50 words.
- vi. Answers to question carrying 4 marks should not exceed 100 words.
- vii. Answers to questions carrying 6 marks should not exceed 200 words.
- viii. Answers to questions carrying 8 marks should not exceed 300 words

***N.B: Check that all pages of the question paper are complete as indicated on the top left side.
Choose the correct answer from the given alternatives in questions 1 to 5.***

1. The word 'Sociology' was coined in the year: 1
(a) 1839 (b) 1849 (c) 1939 (d) 1949
2. A collection of people on the basis of common characteristic is known as: 1
(a) Category (b) Aggregate (c) Social group (d) In-group
3. The term 'monarchy' denotes rule of: 1
(a) The people (b) The representatives (c) Head of the Clan (d) Single person
4. The word 'accommodation' literally means: 1
(a) Becoming similar (b) Adjustment (c) Co-operation (d) Assimilation
5. In the Varna system, how many varnas is the society divided into? 1
(a) Three (b) Four (c) Five (d) Six
6. Who divided sociology into social statics and social dynamics? 1
7. What is a social group? 1
8. What is monotheism? 1
9. What is direct co-operation? 1
10. What is spatial mobility? 1
11. Point out two differences between in-group and out group. 2
12. State two basic aims of education. 2
13. Differentiate between primary kin and secondary kin. 2

- 14. What is cultural lag? 2
- 15. List out two aims of social research. 2
- 16. Mention two attributes of social stratification. 2
- 17. Explain the four means of social control as listed by Crosbie. 4
- 18. What are cultural trades and cultural complex? 4
- 19. Write about the different types of competition. 4
- 20. Mention the four attributes of social stratification. 4

Answer any three (3) from Q.21 to Q.25

3x6=18

- 21. Why is sociology considered a science?
- 22. Explain formal and informal groups.
- 23. Highlight six characteristics of culture.
- 24. Discuss personal interview as a technique of data collection.
- 25. Discuss briefly the origin of environmental crisis.

Answer any three (3) from Q.26 to Q.30

3x8=24

- 26. What are the various basis of classification of kinship terms? Discuss in detail.
- 27. Write an essay on primitive economy.
- 28. Elaborate observation as a method of data collection.
- 29. Write short notes on: (2x4=8)
a) Ascribed status b) Achieved status c) Status set d) Master status
- 30. Discuss the four stages of development of human society according to Karl Marx.

Total number of printed pages: 2

NB/XI/BS/1

2023
BUSINESS STUDIES

Full marks : 80

Time : 3 hours

General instructions:

i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*

ii) *The question paper consists of 26 questions. All questions are compulsory.*

iii) *Marks are indicated against each question.*

iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

- | | |
|---|---|
| 1. What is meant by public company? | 1 |
| 2. Write the meaning of co-operative society. | 1 |
| 3. What is meant by public- private-partnership? | 1 |
| 4. What is meant by departmental undertaking? | 1 |
| 5. Define insurance. | 1 |
| 6. What is meant by digital payments? | 1 |
| 7. What is copy right? | 1 |
| 8. What is a trademark? | 1 |
| 9. State any two types of home trade. | 2 |
| 10. Mention two objectives of prospectus. | 2 |
| 11. State any two features of private sector. | 2 |
| 12. Write any two types of business pollution. | 2 |
| 13. Write any two financial requirements of business finance. | 2 |
| 14. a. Discuss any four characteristics of business. | 4 |
| Or | |
| b. Discuss any four nature of business risk. | |

15. Distinguish between business and employment. **4**
16. **a.** Explain any four features of public enterprise. **4**
Or
b. Explain any four features of government companies.
17. Discuss any four major benefits of e-commerce/e-business. **4**
18. **a.** Explain any four social responsibilities of business towards owners/ investors. **4**
Or
b. Explain any four social responsibilities of business towards community.
19. Distinguish between retailer and wholesaler. **4**
20. **a.** Explain any four nature of international business. **4**
Or
b. Explain any four scope of international business.
21. State any four features of World Trade Organization. **4**
22. **a.** Distinguish between company and partnership. **6**
Or
b. Distinguish between the Memorandum of Association and the Articles of Association.
23. **a.** Explain any six major postal services. **6**
Or
b. Explain six nature of business services.
24. **a.** Distinguish between debenture and share. **6**
Or
b. Explain six significance of business finance.
25. **a.** Explain any six roles of small business in rural India. **6**
Or
b. Explain the main steps of registration process under Geographical Indications (GI).
26. **a.** Explain any six features of mail order business **6**
Or
b. Explain any six advantages of chain store.

2023
POLITICAL SCIENCE

Full marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 30 questions.*
- iii) *Marks are indicated against each question.*
- iv) *Answers to questions carrying 1 mark should not exceed one sentence.*
- v) *Answers to questions carrying 2 marks should not exceed 50 words.*
- vi) *Answers to questions carrying 4 marks should not exceed 100 words.*
- vii) *Answers to questions carrying 6 marks should not exceed 200 words.*
- viii) *Answers to questions carrying 8 marks should not exceed 300 words.*

N.B: *Check to ensure that all pages of the question paper are complete as indicated on the top left side.*

Choose the correct answer from the given alternatives in questions 1 – 5

1. The right to conserve the language, script and culture falls under the category of 1
(a) Right to Work (b) Right to Personal Liberty
(c) Cultural and Educational Rights (d) Political Rights
2. Which of the following is not a correct statement about the salient feature of the Constitution of India? 1
(a) Constitution aims to establish a secular state
(b) Constitution cannot be amended by the Parliament of India
(c) Ours is a written Constitution
(d) Seats are reserved for the STs and SCs in the Lok Sabha
3. Who presides over the joint sitting of both the Houses of Parliament? 1
(a) Prime Minister of India (b) Chairman of the Rajya Sabha
(c) Union Minister of Law and Justice (d) Speaker of the Lok Sabha
4. In which year was the Kalyan Singh Government in Uttar Pradesh dismissed by the Governor? 1
(a) 1997 (b) 1998
(c) 1999 (d) 2000
5. GST Act came into existence with the 1
(a) 101st Constitutional Amendment Act, 2016
(b) 100th Constitutional Amendment Act, 2015
(c) 99th Constitutional Amendment Act, 2014
(d) 98th Constitutional Amendment Act, 2012
6. Which Act contains the detailed provisions with regard to the acquisition and termination of citizenship in India? 1
7. Mention any one right included in the Universal Declaration of Human Rights. 1
8. Who coined the word 'secularism'? 1
9. Write the expanded form of NJAC. 1
10. What is Nyaya Panchayat? 1
11. Define political theory. 2

12. Mention any two problems faced by refugees. 2
13. Write any two features of political Justice. 2
14. What did Mahatma Gandhi said about religious tolerance ? 2
15. What is no confidence motion? 2
16. Mention any two provisions of India's Constitution which can be amended by simple majority. 2
17. Explain the scope of Political Science with reference to: 2+2=4
 - i) The study of representation, election and voting behaviour
 - ii) A study of political parties and pressure groups
18. Mention any two ways each in which equality can be promoted from the following: 2+2=4
 - i) Absence of privilege
 - ii) Adequate opportunities for all
19. Write two Directives Principles which proclaim that India is a welfare state. 4
20. Discuss in brief any four significance of the Local Government. 4

Answer **any three** from questions 21 - 25 **3x6=18**

21. Examine the three safeguards for liberty. (6)
22. 'Rights and responsibilities are correlative'. Examine any three principal duties of citizens of a country. (6)
23. Discuss the powers and functions of the Election Commission. (6)
24. Explain the different stages through which an ordinary bill passes before it becomes an Act of Parliament. (6)
25. Discuss any three federal features of the Constitution of India. (6)

Answer **any three** from questions 26 – 30 **3x8=24**

26. What is a nation? Examine any three factors that constitute a nation. (2+6=8)
27. Define secularism. Discuss three important features of a secular state. (2+6=8)
28. Explain eight salient features of the Constitution of India. (8)
29. Examine any four powers of the President of India. (8)
30. Discuss briefly the Original and Appellate Jurisdiction of the Supreme Court of India. (8)

2023
CHEMISTRY

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 30 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

1. Predict the block, period and group of the element having atomic number ($Z=9$). **1**
 - (a) p-block, 2-period and 17-group
 - (b) p-block, 2-period and 15-group
 - (c) s-block, 2-period and 16-group
 - (d) p-block, 3-period and 17-group.

2. In an endothermic reaction, the value of ΔH is always **1**
 - (a) equal to zero
 - (b) greater than zero
 - (c) less than zero
 - (d) constant.

3. Which of the following is not a Lewis acid? **1**
 - (a) $AlCl_3 \cdot 6H_2O$
 - (b) $AlCl_3$
 - (c) $SnCl_4$
 - (d) $FeCl_3$.

4. The number of bond in benzene is **1**
 - (a) 6σ and 3π
 - (b) 12σ and 3π
 - (c) 3σ and 12π
 - (d) 6σ and 6π .

5. Which of the following is an electrophile? **1**
 - (a) BCl_3
 - (b) CH_3OH
 - (c) NH_3
 - (d) $AlCl_4$.

6. State law of multiple proportion. **1**

7. State Hund's rule of maximum multiplicity. **1**

8. Draw the Lewis structure of CO_3^{2-} ion. **1**

9. What is buffer solution? 1
10. Write the IUPAC name of $\text{CH}_3\text{-CH-CH-COOH}$. 1
 $\begin{array}{cc} | & | \\ \text{Br} & \text{Cl} \end{array}$
11. a. Calculate the volume occupied at STP by 16 gram of oxygen. 2
Or
 b. What is the molarity of a solution obtained by dissolving 14.6 g NaCl in enough water to give 100ml of solution?
12. Write the postulates of Dalton's atomic theory. 2
13. a. Derive de-Broglie's wave equation. 2
Or
 b. Mention two limitations of Bohr's model of atom.
14. Calculate the oxidation number of Cr in $\text{K}_2\text{Cr}_2\text{O}_7$ and S in H_2SO_5 . 2
15. What happens when ethene is oxidized in presence of cold alkaline KMnO_4 and hot alkaline KMnO_4 ? Give the chemical reaction. 2
16. a. Complete the following reaction:
 $\text{CH}_3\text{-CH=CH}_2 + \text{HBr} \longrightarrow \begin{array}{l} \boxed{} \\ \text{H}_2\text{O}_2 \end{array} \begin{array}{l} \longrightarrow ? \\ \longrightarrow ? \end{array}$
Or 2
 b. What happens when calcium carbide reacts with water? Write the reaction.
17. A golf ball has a mass of 40g and a speed of 45ms^{-1} . If the speed can be measured within accuracy of 2%, calculate the uncertainty in position. ($h=6.626 \times 10^{-34}\text{kgm}^2\text{s}^{-1}$). 3
18. Why are d-block elements called transition element? Why are Zn, Cd and Hg not considered as transition elements? 3
19. Write the electronic configuration of Cu and Fe^{3+} . What will be the sub-shell notation for $n=4, l=2$? 3

20. i) Why is the first ionization enthalpy of sodium lower than the magnesium?
 ii) Why is the electron gain enthalpy of chlorine more negative than fluorine? 3
21. a. Differentiate between σ bond and π bond. 3
Or
 b. What is formal charge? Calculate the formal charge on each oxygen atom of ozone (O_3) molecule.
22. What is enthalpy? Derive the relationship between ΔH and ΔU . 3
23. State Le-Chatelier's principle. On the basis of Le-Chatelier's principle, what will be the effect of pressure and temperature on the manufacture of NH_3 ? $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$. $\Delta H=92.4KJ$. 3
24. a. Define Arrhenius concept of acid and base. Calculate the pH of a buffer solution which is 0.1 M in acetic acid and 0.15 M in sodium acetate. (K_a for acetic acid is 1.75×10^{-5}). 3
Or
 b. What is solubility product? Lead iodide has a solubility product of 7.1×10^{-9} at 298K. Calculate its solubility at this temperature.
25. a. Write the balanced chemical equation for the reaction of $K_2Cr_2O_7$ with Na_2SO_3 in acidic medium to give chromium (III) ion and sulphate ion. 3
Or
 b. What is electrochemical series? Write the application of electrochemical series.
26. Explain geometrical isomerism and optical isomerism with example? 3
27. a. What is Inductive effect? Explain $-I$ and $+I$ effect with example. 3
Or
 b. Explain the purification of organic compound by steam distillation and thin layer chromatography.
28. a. Define hybridization. Mention two salient features of hybridization. Explain sp^3d^2 hybridization by taking the example of SF_6 . 5
Or
 b. What is bond length and bond angle? Draw the molecular orbital energy level diagram of N_2 molecule, predict its magnetic behavior.

29. a. State first law of thermodynamics and Hess's law of constant heat summation. Calculate the standard internal energy for the reaction $\text{OF}_2 + \text{H}_2\text{O} \rightarrow \text{O}_2 + 2\text{HF}$ at 298K. (Given – standard enthalpies of formation in KJmol^{-1} are $\text{OF}_2 = +20$, $\text{H}_2\text{O} = -250$ and $\text{HF} = -270$).

Or

5

- b. What is standard enthalpy of formation? Write one importance of standard enthalpy of formation. Calculate the enthalpy change on freezing of 1.0mole of water at 10°C to ice at -10°C . $\Delta_{\text{fus}}\text{H} = 6.03 \text{ KJmol}^{-1}$ at 0°C .

$$C_p [H_2O(l)] = 75.3 \text{ J mol}^{-1}\text{K}^{-1}$$

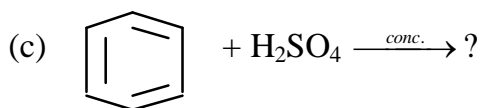
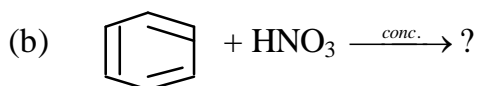
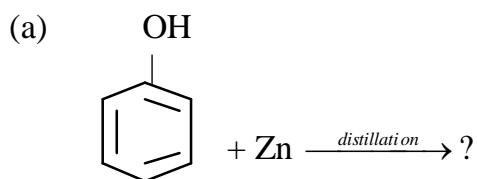
$$C_p [H_2O(s)] = 36.8 \text{ J mol}^{-1}\text{K}^{-1}$$

- 30.a. i) What are the conditions required for an organic compound to be aromatic?
ii) Explain Corey-House synthesis of alkanes.

Or

5

- b. i) What is conformation of a molecule? Write the Newman projection of ethane.
ii) Complete the following reaction:



2023

FUNDAMENTALS OF BUSINESS MATHEMATICS

Full marks : 80

Time : 3 hours

General instructions:

i) Approximately 15 minutes is allotted to read the question paper and revise the answers.

ii) The question paper consists of 21 questions. All questions are compulsory.

iii) Marks are indicated against each question.

iv) Internal choice has been provided in some questions.

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

1. Write the centre of the circle $x^2 + (y + 6)^2 = 16$ 1
2. Find the value of $\log_{10} 0.1$ 1
3. Define prime number. 1
4. Define interest period. 1
5. Write the meaning of scrap value. 1
6. If $x + y + z = 0$ show that $a^{x^2y^{-1}z^{-1}} a^{x^{-1}y^2z^{-1}} a^{x^{-1}y^{-1}z^2} = a^3$ 4
7. In how many ways can words be formed with the letters of the word 'DIMAPUR' if the vowels remain together? 4
8. How many four digit numbers can be formed with distinct digits? 4
9. How many words consisting of 2 vowels and 4 consonants out of 4 vowels and 6 consonants can be formed? 4
10. The simple interest on ₹ 6,000 for 4 years together with that on ₹ 8,000 for 6 years comes to ₹ 2,160, the rate being the same in both the cases. Find the rate of interest percent per annum. 4
11. a. The simple interest and compound interest on a certain sum of money for 2 years at the same rate are respectively ₹ 4,500 and ₹ 4,700. Find the rate of interest. 4

Or**4**

- b. A loan earns interest at a certain rate (compound) percent per annum. Four years ago, the amount was ₹ 81, now it is ₹ 144. What will the amount be two years hence?
12. a. In a certain match of cricket, the ratio of Sachin's score to that of Sourav's is 5:4 and the ratio of Sourav's score to that of Laxman's is 6:5. If Sachin scored 105 runs, what runs are scored by each of them?
(The ratio of scores given here are fictitious)

Or **4**

- b. The daily wages of Avigyan and Arnob are in the ratio of 4:5. They worked together on a piece of work for 30 days when Arnob left and Avigyan finished the work in another 8 days. They got ₹ 15,100. Find the daily wages of each.
13. a. If 20% of a number is added to 16, the result is the number itself. Find the number.
- b. An orange seller has a certain number of oranges of which 5% are bad and are discarded. He sells 90% of the remainder. If he has now 38 oranges left, how many had he originally?
14. a. A buys an article for ₹ 500, he sells it to B at a gain of 5%, B sells it to C at a gain of 10%. For how much should C sell it so as to gain 15%?

Or **4**

- b. A bookseller sells two books at the same price, gaining 10% on one and 12% on the other. If the total profit on the two is ₹ 12.20, find the cost of each book.
15. a. If $2^x = 4^y = 8^z$ and $\frac{1}{2x} + \frac{1}{4y} + \frac{1}{8z} = \frac{22}{7}$

$$\text{show that } x = \frac{7}{16}, y = \frac{7}{32} \text{ and } z = \frac{7}{48}$$

Or **5**

- b. Simplify $\frac{2 + \sqrt{5}}{2 - \sqrt{5}} + \frac{2 - \sqrt{5}}{2 + \sqrt{5}} + \frac{3 - \sqrt{8}}{3 + \sqrt{8}}$
16. a. Show that $\log 2 + 16 \log \frac{16}{15} + 12 \log \frac{25}{24} + 7 \log \frac{81}{80} = 1$
- Or** **5**
- b. Prove that $(yz)^{\log y - \log z} \times (zx)^{\log z - \log x} \times (xy)^{\log x - \log y} = 1$

17. a. A, B and C took a loan of ₹ 4,700 at 3%, 4% and 5% and paid equal amount of interest at the end of 2 years. How much loan did each of them took?

Or **5**

- b. A father leaves a sum of ₹ 80,000 for his two sons aged 5 years and 7 years so that each son at attaining the age of 30 years may get equal amount at 3% per annum simple interest. Find the amount that each son gets when he is 30 years.

18. a. Solve for x and y , $2^x + 3^y = 5, 4^x - 9^y = -5$

Or **6**

- b. If $2x = \sqrt{3} + \frac{1}{\sqrt{3}}$, show that $\frac{\sqrt{x^2 - 1}}{x - \sqrt{x^2 - 1}} = 1$

19. a. Find the equation of the straight line which passes through (3, 4) and the sum of whose intercepts on the coordinate axes is 14.

Or **6**

- b. Find the equation of the circle passing through (2, 3) and (4, 5) and having its centre on the line $y - 4x + 3 = 0$

20. a. Calculate the number, which when multiplied by

$$1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{3}}} + \frac{3\frac{1}{2} \div 2\frac{1}{2} \times 1\frac{1}{2}}{3\frac{1}{2} \div 2\frac{1}{2} \text{ of } 1\frac{1}{2}} \div 5.25 \text{ gives } 20$$

Or **6**

- b. What number multiplied itself gives $\frac{14 \text{ of } 2.\dot{2}\dot{7}}{5 \times 1.13\dot{6}} + \frac{4.\dot{4} - 2.8\dot{3}}{1.6 + 2.62\dot{9}}$ of $\frac{68}{7.5}$

21. a. A milk vendor sells two grades of milk at ₹ 22 and ₹ 18 per litre gaining 10% and 20% respectively. If he mixes the two in the ratio of 2:3 and sells the mixture at ₹ 22 per litre, what percentage gain does he earn?

Or **6**

- b. A person purchased a cow and an ox for ₹ 3,000. He sold the cow at 5% profit and an ox at 20% profit thereby making a profit of 10% on the whole. Find the cost price of the cow and an ox.

2023
EDUCATION

Full marks : 80

Time : 3 hours

General instructions:

- i. Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii. The question paper consists of 30 questions.
- iii. Marks are indicated against each question.
- iv. Answers to questions carrying 1 mark should not exceed one sentence.
- v. Answers to questions carrying 2 marks should not exceed 50 words.
- vi. Answers to questions carrying 4 marks should not exceed 100 words.
- vii. Answers to questions carrying 6 marks should not exceed 200 words.
- viii. Answers to questions carrying 8 marks should not exceed 300 words.

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

Choose the correct answer from the given alternatives in questions 1 to 5.

1. Distance Education is also known as: 1
(a) Formal education (b) Correspondence education.
(c) Informal Education (d) Guidance agencies of Education.
2. Which article has clearly stated that it shall be the endeavour of the union government to promote Hindi language? 1
(a) Article 350 (b) Article 351 (c) Article 30 (d) Article 45
3. There were three institutes of learning during the vedic period: 1
(a) School, morung, gurukula (b) gurukula, pathsala, parishads.
(c) Morung, family, parishads (d) parishads, internet, morung.
4. Who is known as the father of modern education in India? 1
(a) Charles Wood (b) W.W. Hunter
(c) William Wilberforce (d) Charles Grant.
5. The simplest definition of discipline is: 1
(a) Learning obedience (b) Learning Discipline
(c) Learning Behaviour (d) Learning order
6. Define Education according to Swami Vivekananda. 1
7. Who coined the term Kindergarten? 1
8. Where is mountain Saramati situated? 1
9. What is Socialisation? 1

10. What is written examination ? 1
11. Mention any two limitations of individual aim of education. 2
12. State any two objectives of Sarva Shiksha Abhiyan(SSA). 2
13. What is meant by the term 'Reward'? 2
14. Write any two functions of culture. 2
15. What is the process of cultural transmission? 2
16. Write any two functions of statistics. 2
17. Suggest any four methods to achieve National Integration. 4
18. Explain in brief any four hindrances which stand in the way of Universalisation of primary education. 4
19. Briefly explain the general community services performed by the members of the morung. 4
20. The marks obtained by 15 students in education of Class XI (out of 100 marks)are:- 4
74 71 75 77 16
79 35 37 90 56
55 58 58 30 15
Prepare a frequency distribution table

Answer any **three (3)** from Q.21 to Q.25.

3x6=18

21. Explain any six natures of education. 6
22. What are the powers and functions of UGC? 6
23. Discuss the educational philosophy of Maria Montessori. 6
24. What are the canons of punishment laid down by Bentham? 6
25. Differentiate between formative approach and Summative approach of evaluation. 6

Answer any **three (3)** from Q.26 to Q.30.

3x8=24

- | | |
|---|---------------|
| 26. What does scope mean? Discuss in brief the scope of education. | 1+7= 8 |
| 27. What is the role of UNESCO in unifying people from different part of the world? | 8 |
| 28. What is Rabindranath Tagore's educational philosophy? | 8 |
| 29. Explain the contribution of Christian missionaries in India. | 8 |
| 30. Discuss the ways and means suggested for the participation of village community in educational process. | 8 |

Total number of printed pages: 2

NB/XI/PSY/1

2023
PSYCHOLOGY

Full marks: 80

Time: 3 hours

General instructions:

- i. Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii. The question paper consists of 30 questions.
- iii. Marks are indicated against each question.
- iv. Answers to questions carrying 1 mark should not exceed one sentence.
- v. Answers to questions carrying 2 marks should not exceed 50 words.
- vi. Answers to question carrying 4 marks should not exceed 100 words.
- vii. Answers to questions carrying 6 marks should not exceed 200 words.
- viii. Answers to questions carrying 8 marks should not exceed 300 words

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

1. Who established the Indian Analytical Association? 1
2. What are mental processes? 1
3. What is a variable? 1
4. What is the purpose of correlational research? 1
5. Define reinforcers. 1
6. What are the two types of conditioning? 1
7. What is thinking? 1
8. What is problem solving? 1
9. What is anxiety? 1
10. Give the derivative meaning of the term motivation. 1
11. What are behaviours? Give an example each of overt and covert behaviour. 1+1=2
12. When and where was the first psychology laboratory established in India? 1+1=2
13. Write two features of learning. 1+1=2
14. Briefly explain two obstacles in solving a problem. 2
15. Elaborate any two abilities of divergent thinking. 2

- 16. Suggest any four ways to enhance positive emotions. 2
- 17. Explain any two major disciplines linked to the field of psychology. 4
- 18. Mention any four features of life-span perspective of development. 4
- 19. Explain any two causes of forgetting. 4
- 20. Briefly explain the process of creative thinking. 4

Answer any **three (3)** from questions 21-25. **3×6=18**

- 21. Explain any three ethical guidelines to be followed by a psychologist while conducting a psychological enquiry. **3×2=6**
- 22. What are the challenges faced by individuals on entry to adulthood? 6
- 23. What are the factors facilitating learning? 6
- 24. Explain the stage model memory system. 6
- 25. Explain three psychosocial motives. 6

Answer any **three (3)** from Questions 26-30 **3×8=24**

- 26. Explain psychology as a discipline. 8
- 27. What is survey research? Explain any two techniques of survey research. **2+6=8**
- 28. Discuss the main aspects of growth and development during infancy. 8
- 29. What are monocular cues? Explain any six monocular cues. **2+6=8**
- 30. What is learning disability? Explain any six symptoms of learning disability. **2+6=8**

2023
ECONOMICS

Total marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 28 questions.*
- iii) *Marks are indicated against each question.*
- iv) *Answers to questions carrying 1 mark should not exceed one sentence.*
- v) *Answers to questions carrying 2 marks should not exceed 50 words.*
- vi) *Answers to questions carrying 4 marks should not exceed 80 words.*
- vii) *Answers to questions carrying 6 marks should not exceed 120 words.*
- viii) *Answers to questions carrying 8 marks should not exceed 200 words.*
- ix) *Alternate questions for visually impaired students are provided in question 18,23,25 and 27.*

Only the visually impaired students have to attempt the alternate question

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

1. What is meant by economizing of resources? 1
2. Define production possibility curve. 1
3. What is the relationship between demand for a good and income of the consumer? 1
4. Define market equilibrium 1
5. Draw demand curve with $e_d = 1$. 1
6. Define real cost. 1
7. Who conducts census of India after every ten years? 1
8. What is frequency curve? 1
9. Give the full form of WPI. 1
10. Define seasonal variation. 1
11. What is percentage method of price elasticity of supply? Give its formula. 2
12. State the two condition of consumer's equilibrium in case of a single good. 2

- 13. Mention the four essential ingredients of a market. 2
- 14. Distinguish between continuous variable and discrete variable. 2
- 15. State any two limitations of index numbers. 2
- 16. Explain any two causes of an economic problem. 4
- 17. Mention the points of difference between price ceiling and price floor. 4
- 18. State any three relationship between ATC, AVC and MC with the help of a diagram. 4

Alternate question for the visually impaired students:

Define AFC and ATC. Write its formula. 2+2=4

- 19. Explain in brief the four functions of statistics. 4
- 20. From the following data, calculate median: 4

Class - Interval	Frequency
100 – 110	4
110 – 120	6
120 – 130	20
130 – 140	32
140 – 150	33
150 – 160	17
160 – 170	8
170 – 180	2

Answer any **two** from questions 21 – 23. 2x6=12

- 21. Explain any three factors determining price elasticity of demand.
- 22. Explain any three features of monopolistic competition.
- 23. Explain how equilibrium price is determined when there is excess demand in the market with the help of a diagram.

Alternate question for the visually impaired students:

Explain any two features of perfect competition.

Answer any **two** from questions 24 – 26. 2x6=12

- 24. State any six objectives of tabulation.
- 25. Construct sub-divided bar diagram for representing the following information.

No. of Admissions	Commerce	Science	Humanities	Total
2016	440	200	360	1000
2017	500	150	250	900

Alternate question for the visually impaired students:

Explain any two methods of collecting primary data.

- 26. From the following data, calculate Karl Pearson’s coefficient of correlation between experience of employees and their performance:

Experience	16	12	18	4	3	10	5	12
Performance	23	22	24	17	19	20	18	21

- 27. a. Explain the exceptions to the law of demand.

Or

8

- b. Explain change in quantity supplied and change in supply with the help of a diagram.

Alternate question for the visually impaired students:

Explain any two sources of shifts in demand curves.

- 28. a. From the following data of the height of 100 persons in a competition, determine the modal height by grouping method: **5 + 2 + 1 = 8**

Height (in inches)	58	60	61	62	63	64	65	66	68	70	71
No. of persons	3	8	10	20	29	25	11	5	4	2	1

Or

- b. From the following frequency distribution, calculate first quartile and third quartile. (4+4=8)

Class intervals	Frequency
100 – 110	4
110 – 120	0
120 – 130	3
130 – 140	7
140 – 150	11
150 – 160	8
160 – 170	5
170 – 180	0
180 – 190	2

2023
BIOLOGY

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory. Marks are indicated against each question.*
- iii) *The question paper consists of two parts – Part A and Part B. Each part contains 14 questions.*
- iv) *Internal choice has been provided in some questions.*
- v) *Write the answers of Part A and Part B in separate answer books. Marks shall not be awarded if the answers of both the Parts are written in one book nor marks awarded if answers of Part A are written in the answer book of Part B and vice-versa.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

PART - A

1. The concept of three domains of life was proposed by 1
(a) Carl Woese (b) Carolus Linnaeus
(c) Hutchinson (d) Robert H Whittaker

2. Mycorrhizal roots are found in 1
(a) Nostoc (b) Cycas
(c) Pinus (d) Sequoia

3. Which one of the following pteridophytes show several adaptations to produce seeds? 1
(a) Equisetum (b) Psilotum
(c) Selaginella (d) Dryopteris

4. In compound leaves, when one single leaflet is joined on the tip of the petiole, it is said to be _____ 1
(a) unifoliate (b) bifoliate
(c) quadrifoliate (d) multifoliate

5. The bicollateral vascular bundle is characteristic of members of _____ family. 1
(a) Solanaceae (b) Cucurbitaceae
(c) Poaceae (d) Leguminosae

6. **a.** Distinguish between actinomorphic and zygomorphic flowers. 2
Or
b. Define a seed. Mention the two parts of a seed.

7. **a.** Write two functions of the endoplasmic reticulum. 2
Or
b. Name the chemical substance which make up the cell wall of a bacterial cell. Give its function.

8. a. What is an auxanometer? Name the two types of auxanometer. 2
Or
b. Give two functions of gibberellins.
9. a. Discuss briefly the three economic importance of bryophytes. 3
Or
b. Write three general characters of Chlorophyceae.
10. a. Describe in brief the different types of vascular bundles. 3
Or
b. Differentiate between dicot and monocot root.
11. a. What are ribosomes? Distinguish between prokaryotic and eukaryotic ribosomes. 3
Or
b. Give one function each on golgi complex, vacuoles and cytoskeleton.
12. a. Describe the ultrastructure of mitochondria with the help of a diagram. 5
Or
b. Explain the Fluid Mosaic Model with the help of a diagram.
13. a. Explain Calvin cycle (C₃ pathway) with the help of diagrammatic representation. 5
Or
b. Give the schematic representation of photorespiration. Mention its significance.
14. a. Give a detailed account of glycolysis (EMP pathway). 5
Or
b. Explain the mechanism of fermentation.

PART - B

1. R.H. Whittaker divided the living world into five kingdom in the year 1
(a) 1959 (b) 1969
(c) 1758 (d) 1768
2. A lichen is an association of 1
(a) virus and algae (b) fungus and algae
(c) fungus and protozoa (d) bacteria and algae
3. To which phylum and class does Periplaneta belong? 1
(a) Phylum-Annelida, Class-Reptilia
(b) Phylum-Arthropoda, Class-Insecta
(c) Phylum-Annelida, Class-Insecta
(d) Phylum-Arthropoda, Class-Amphibia
4. The role of pacemaker in heart is to 1
(a) accelerate blood circulation (b) inhibit backflow of blood
(c) initiate heart beat (d) stimulate blood pressure

5. Corpus luteum secretes a hormone called 1
(a) prolactin (b) progesterone
(c) aldosterone (d) testosterone
6. a. Write two general characters of phylum platyhelminthes. 2
Or
b. List two points of differences between man and ape.
7. a. Which type of vision is present in cockroach? What enables the insect to have such vision? 2
Or
b. 'Cockroach shows sexual dimorphism'. List two features in support of the statement.
8. a. Explain in brief the excretory system of cockroach. 2
Or
b. What enables cockroach to walk on vertical surface?
9. a. What are enzymes? Explain two factors that affect the enzyme activity. 3
Or
b. Explain three significance of meiosis in the life cycle of organisms.
10. a. Explain three respiratory disorders in man. 3
Or
b. Name the two heart sounds. How are they produced?
11. a. Draw a neat labelled diagram of the following: 3
(i) Ball and socket joint in the hip
(ii) Hinge joint in the knee
Or
b. Draw a neat labelled diagram of a neuron.
12. a. List five functions of proteins. 5
Or
b. Describe the various phases of interphase of cell cycle.
13. a. Explain briefly the events that occur during a cardiac cycle. 5
Or
b. Describe the structure of a nephron with a labelled diagram.
14. a. Explain the mechanism of muscle contraction with proper diagram. 5
Or
b. Why is pancreas called a heterocrine gland? Insulin and glucagon hormones are antagonistic. How?

Total number of printed pages : 3

NB/XI/CSC/1

2023

COMPUTER SCIENCE

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 32 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice is given in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

- | | | |
|-----|--|---|
| 1. | What is a Code Unit? | 1 |
| 2. | Convert Vivaan to ASCII. | 1 |
| 3. | What is portability? | 1 |
| 4. | Define character set. | 1 |
| 5. | What are statements? | 1 |
| 6. | What are Escape Sequences? | 1 |
| 7. | If $L = [2, 4, 8, 16, 32, 64]$, what is $L[4]$? | 1 |
| 8. | If $T1 = [2, 4, 8, 16]$ and $T2 = [32, 64]$, then what is $T1 + T2$? | 1 |
| 9. | What is an associative array? | 1 |
| 10. | What is the purpose of Index? | 1 |
| 11. | What does a cookie contain? | 1 |
| 12. | What is Cyber Safety? | 1 |
| 13. | Differentiate between translator and compiler. | 2 |
| 14. | Convert the decimal number 4827 to hexadecimal. | 2 |
| 15. | Write any four uses of Python. | 2 |
| 16. | Differentiate between input function and print function. Give an example for both functions. | 2 |

17. How many times the following loop executes? 2
n = 10
i = n
while (i>0) :
 print (n)
 i = i + 1
 n = int (n / 2)
print (i)
18. What is a tuple? Explain slicing in tuple. 2
19. What is a dictionary? What is the purpose of keys() function in a dictionary? 2
20. Explain the purpose of the following string functions. 2
(i) Isalnum() (ii) Isalpha()
21. What is the difference between MOD() and TRUNCATE() functions in MySQL? 2
22. Give two points noteworthy vis-à-vis the graph databases. 2
23. Write any two features of MongoDB. 2
24. State and prove De Morgan's laws. 4
25. a. What are Identifiers? Mention the rules for naming Identifiers. 4
Or
b. Explain the following statements:
(i) Expression statement (ii) Assignment statement
(iii) Assert statement (iv) Pass statement
26. What is an algorithm? Describe the features of a good algorithm. 4
27. a. Write a Python program to find minimum number from a given list. 4
Or
b. Write a Python program to find maximum number and its position in a given list.
28. a. Write an algorithm for Selection sort. 4
Or
b. Sort the arrays 4, 7, 9, 8, 3, 11, 2, 18 using Bubble sort method.

29. **a.** Write four advantages of DBMS vis-à-vis a file system. **4**
- Or**
- b.** Define the following keys:
(i) Primary key (ii) Super key (iii) Composite key (iv) Foreign key
30. Explain the purpose of the following string functions: **4**
(i) Char() (ii) Ltrim() (iii) Instr() (iv) Left()
31. **a.** Describe four problems caused by a spyware installed in the system. **4**
- Or**
- b.** Write short notes on the following:
(i) Adware (ii) Cookies (iii) Trojans (iv) Spamming
32. Describe four types of Cyber Bullying. **4**

Total number of printed pages : 3

NB/XI/IP/1

2023

INFORMATICS PRACTICES

Total marks : 70

Time : 3 hours

General instructions:

i) Approximately 15 minutes is allotted to read the question paper and revise the answers.

ii) The question paper consists of 28 questions. All questions are compulsory.

iii) Marks are indicated against each question.

iv) Internal choice has been provided in some questions.

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

1. Choose the correct answer from the given alternatives: 5x1 = 5

(a) The inbuilt instructions on ROM is referred as

- | | |
|-----------|--------------|
| i) Bios | ii) Software |
| iii) CMOS | iv) Hardware |

(b) Which of the following is not a swing class?

- | | |
|--------------|-------------|
| i) JFrame | ii) JLabel |
| iii) JButton | iv) ListBox |

(c) Which of the following statement is used to terminate a loop?

- | | |
|-----------|-------------------|
| i) Break | ii) Continue |
| iii) Goto | iv) None of these |

(d) Which of the following is a valid table name?

- | | |
|---------------|----------------|
| i) My table | ii) 6Student |
| iii) My_Table | iv) 123Student |

(e) Which clause is used to filter data in a query?

- | | |
|------------|--------------|
| i) FILTER | ii) ORDER BY |
| iii) WHERE | iv) SEARCH |

2. What are the different types of software? 1
3. What is Java byte code? 1
4. Which property of a ListBox control is used to enter the list of items while working on NetBeans? 1
5. What are the limitations of file based applications? 1
6. Define attribute. 1
7. Write the command to see the list of available database on your MySQL server. 1

8. Mention the name of MySQL operator used to retrieve the unique records. 1
9. Which type of testing is done by the programmer? 1
10. Differentiate between file and folder. 2
11. What is phishing and Denial of Service (DoS) attack? 2
12. Write a short notes on: 2
(i) int data type (ii) Boolean data type
13. Name the interface that defines the methods of handling mouse move and mouse dragged events. 2
14. Define the significance of the following methods of JComboBox class. 2
(i) add() (ii) setMaximumRowCount()
15. What is the use of selection statement in a program? 2
16. Write down two advantages and two disadvantages of DBMS. 2
17. What is MySQL Workbench? 2
18. Give two examples of DDL commands. 2
19. Write MySQL statements to get: 2
(i) the length of a string (ii) to convert string 'HELLO' to 'hello'.
20. Why is Sequential model also called Waterfall model? 2
21. **a.** What are the different advantages of computers? Explain any four of them. 4
Or
- b.** What are the different types of printers? Discuss in brief.
22. **a.** Write a short note on Java code compilation process. 4
Or
- b.** What is the significance of control of flow in a program? Discuss any three programming elements used to control the flow in a program.
23. **a.** What is the use of JOptionPane class? Discuss with example. 4
Or
- b.** Differentiate between a JRadio Button and a JCheckBox.

24. **a.** What are the different keys available in relational model? Explain with example.
Or **4**
b. Discuss in brief the various tools and products of MySQL.
25. **a.** Discuss in brief the various built in functions available in MySQL with example.
Or **4**
b. What is the use of GROUPBY clause? Explain with example.
26. **a.** What is an array? Discuss with example, the use of array.
Or **5**
b. What is an event? Name the interfaces available in Java to facilitate event handling.
27. **a.** What is meant by Software Development Life Cycle? Discuss in brief each phase of SDLC.
Or **5**
b. Compare and contrast between sequential and evolutionary approach to SDLC.
28. **a.** What is e-Commerce? What are the various advantages and disadvantages of online shopping?
Or **5**
b. What is e-Banking? Discuss in brief the various benefits offered by e-Banking.

2023
PHILOSOPHY

Full marks: 80

Time: 3 hours

General instructions:

i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*

ii) *The question paper consists of 30 questions.*

iii) *Marks are indicated against each question.*

Answer to questions carrying 1 mark should not exceed one sentence.

Answer to questions carrying 2 marks should not exceed 50 words.

Answer to questions carrying 4 marks should not exceed 100 words.

Answer to questions carrying 6 marks should not exceed 200 words.

Answer to questions carrying 8 marks should not exceed 300 words.

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

Choose the correct answer from the given alternative:

10x1=10

- | | | |
|----|---|----------|
| 1. | Inductive leap consists in passing from observed cases to | 1 |
| | (a) unidentified facts (b) unobserved cases | |
| | (c) experimental cases (d) experienced facts | |
| 2. | Observation and experiment are the material grounds of | 1 |
| | (a) Deduction (b) Induction | |
| | (c) Observation (d) Experiment | |
| 3. | Hypothesis assumes _____ different forms | 1 |
| | (a) two (b) three | |
| | (c) four (d) five | |
| 4. | Hypothesis-non-firgo means | 1 |
| | (a) I imagine hypothesis (b) I do not imagine hypothesis | |
| | (c) I find hypothesis (d) I do not find hypothesis | |
| 5. | Passing from something known to something unknown is called | 1 |
| | (a) Reasoning (b) Knowledge | |
| | (c) Inference (d) Truth | |
| 6. | Material logic is also called | 1 |
| | (a) Applied Logic (b) Formal Logic | |
| | (c) Deductive Logic (d) Inductive Logic | |

- 7. A term is a combination of 1
(a) letters (b) words
(c) things (d) propositions

- 8. 'All S is P' are known as _____ type proposition 1
(a) 'A' (b) 'E'
(c) 'I' (d) 'O'

- 9. A syllogism consists of 1
(a) one proposition (b) two propositions
(c) three propositions (d) four propositions

- 10. The word 'Fallacy' is derived from _____ word 1
(a) Greek (b) Latin
(c) Arabic (d) Hebrew

Answer the following questions:

- 11. Name the fallacies of non-observation. 2

- 12. What is Experimental Method? 2

- 13. Name the Laws of thought. 2

- 14. Define absolute and relative terms. 2

- 15. What is Copula? 2

- 16. Symbolise the following (**Any one**) 1x2=2
(a) If there is over population, then price do not rise.
(b) Either you study hard or fail in the examination.

- 17. Give the general difference between Induction and Deduction. 4

- 18. State the uses of Logic. 4

- 19. Explain and examine the law of Identity. 4

- 20. What are categorematic words and syncategorematic words? 4

Answer **any three** from questions 21 –25

- 21. What is unscientific induction? Why is unscientific induction called induction per simple enumeration? 2+4=6

- 22. Explain the general conditions of observation. 6

23. Define proposition according to modality with examples. **6**
24. Explain the fallacy of illicit major and illicit minor with examples. **3+3=6**
25. Construct truth table of the following (any two): **2x3=6**
- a. $p \vee \sim p$
 - b. $p \supset (p \bullet q)$
 - c. $(\sim p \bullet \sim q) \equiv (p \vee q)$

Answer **any three** from questions 26 - 30

26. What is the literal meaning of observation? 'Observation and experiment do not differ in kind but only in degree' Explain. **2+6=8**
27. Are hypothesis, theory, law and fact related as concept? Explain. **8**
28. Explain the Method of Agreement with examples. **8**
29. State the general rules of categorical syllogism. **8**
30. Explain the values of symbols used in symbolization. **8**

2023
FINANCIAL MARKETS MANAGEMNET

Marks: 70

Time: 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 24 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

- | | |
|--|----------|
| 1. What is dematerialization? | 1 |
| 2. How long does it take to get the shares listed after issue? | 1 |
| 3. What is an annual report? | 1 |
| 4. Give the meaning of Net Assets of a scheme. | 1 |
| 5. What is tracking error? | 1 |
| 6. Write the full form of ELSS. | 1 |
| 7. Name any two credit rating agencies. | 1 |
| 8. Mention the rate of DDT for individual and HUF. | 1 |
| 9. What are simple interest and compound interest? | 2 |
| 10. Differentiate between secured and unsecured loans under loan funds. | 2 |
| 11. Name the two parts of mutual funds offer documents. | 2 |
| 12. What is portfolio churning in liquid funds? | 2 |
| 13. Mention any four disadvantages of holding physical gold. | 2 |
| 14. Explain any four long term financial options available for investment. | 4 |
| 15. State any four advantages of book building through the NSE system. | 4 |

16. Write the comparisons between a depository and a bank. 4
17. Discuss the sources of funds for a company. 4
18. State the procedures for investing in an NFO. 4
19. What are interest rate risk and credit risk? 4
20. Explain any four advantages of mutual funds. 4
21. a. Explain any six precautions one must take before investing in the stock market. 6
- Or**
- b. Discuss any three shares and the three bond products dealt in the secondary market.
22. a. Explain how a company can be systematically analyzed. 6
- Or**
- b. How is leverage or capital structure ratio used? Mention and explain the two sets of leverage ratios. (2+4=6)
23. a. Explain 3-tier structure of mutual funds in India. 6
- Or**
- b. Explain open ended and close ended funds.
24. a. Discuss any six product details of sovereign gold bonds. 6
- Or**
- b. State the process for stress testing of assets.

(h) A parabola has its vertex at the origin; its axis lies along the x -axis and it passes through the point $P(2, 3)$. The equation of the parabola is **1**

(i) $4y^2 = 9x$ (ii) $y^2 = \frac{4}{9}x$ (iii) $y^2 = \frac{9}{2}x$ (iv) $y^2 = \frac{3}{2}x$

Section – B

2. Find the value of a and b , when $(a + b, 2b - 3) = (4, -5)$. **2**

3. Let $f = \{(0, -5), (1, -2), (2, 1), (3, 4), (4, 7)\}$ be a linear function from Z to Z , write an expression for f . **2**

4. In a circle of diameter 30 cm, the length of the chord is 15 cm. Find the length of the minor arc of the chord. **2**

5. Prove that $(\sin x - \cos x)^2 = 1 - \sin 2x$. **2**

6. Prove that $\frac{\sin 7x - \sin 5x}{\cos 7x + \cos 5x} = \tan x$. **2**

7. Solve the inequalities $\frac{5x}{4} - \frac{4x-1}{3} > 1$, where $x \in \mathbb{R}$ and represent the solution set on the number line. **2**

8. Evaluate: $\lim_{x \rightarrow 1} \frac{x^3 - 1}{x - 1}$. **2**

9. Three unbiased coins are tossed once. Find the probability of getting:
(i) exactly 2 tails (ii) at most 2 tails **2**

Section – C

10. **a.** If $A + B + C = \pi$, prove that $\sin 2A + \sin 2B - \sin 2C = 4 \cos A \cos B \sin C$.

Or **4**

b. If $A + B + C = \pi$, prove that $\cos A + \cos B - \cos C = \left(4 \cos \frac{A}{2} \cos \frac{B}{2} \sin \frac{C}{2}\right) - 1$.

11. If $a = (\cos \theta + i \sin \theta)$, prove that $\frac{1+a}{1-a} = \left(\cot \frac{\theta}{2}\right)i$. **4**

12. a. How many numbers can be formed with the digits 2, 3, 4, 5, 4, 3, 2 so that the odd digits occupy the odd places?

Or

4

- b. In how many ways can a cricket team be selected from a group of 25 players containing 10 batsmen, 8 bowlers, 5 all-rounders and 2 wicket-keepers, assuming that the team of 11 players required 5 batsmen, 3 all-rounders, 2 bowlers and 1 wicket keeper?

13. Using binomial theorem, prove that $2^{3n} - 7n - 1$ is divisible by 49, where $n \in \mathbb{N}$.

4

14. a. If the 4th and 9th terms of a G.P. are 54 and 13122 respectively, find the G.P. Also, find its general term.

Or

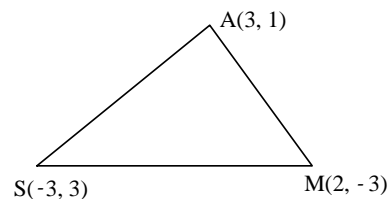
4

- b. The sum of three numbers in G.P. is $\frac{39}{10}$ and their product is 1. Find the numbers.

15. **Case Study based question:**

4

Due to Covid-19 pandemic situation, people are maintaining social distances. Three friends Along, Mharemo and Senti are sitting on the vertices of a triangle whose coordinates are A(3, 1), M(2, -3) and S(-3, 3).



Based on the above information, answer the following questions (i) to (iv).

- (i) The equation of the line AM is

- (a) $4x + y - 11 = 0$ (b) $4x - y - 11 = 0$
 (c) $4x + y + 11 = 0$ (d) $4x - y + 11 = 0$

- (ii) Slope of a line perpendicular to AS is

- (a) $\frac{1}{3}$ (b) $-\frac{1}{3}$
 (c) 3 (d) -3

- (iii) The equation of a line passing through A and parallel to SM is

- (a) $6x + 5y - 23 = 0$ (b) $6x - 5y - 23 = 0$
 (c) $6x - 5y + 23 = 0$ (d) $6x + 5y + 23 = 0$

- (iv) Equation of median through A is

- (a) $2x + 7y + 1 = 0$ (b) $2x - 7y + 1 = 0$
 (c) $2x + 7y - 1 = 0$ (d) $2x - 7y - 1 = 0$

16. a. Differentiate $\sqrt{\sin x}$ with respect to x from the first principle.

Or

4

b. Find the derivative of the following:

(i) $(2x^2 + 5x - 1)(x - 3)$ (ii) $\frac{a + b\cos x}{\sin x}$

17. **a.** Two dice are thrown together. What is the probability that the sum of the numbers on the two faces is neither divisible by 3 nor by 4.

4

Section – D

18. **a.** Let $A = \{a, b, c\}$, $B = \{b, c, d, e\}$ be subsets of $U = \{a, b, c, d, e, f\}$, then verify that (i) $(A \cup B)' = A' \cap B'$ (ii) $(A \cap B)' = A' \cup B'$

Or

6

b. In a survey of 100 students, the number of students studying the various languages is found as: English only 18; English but not Hindi 23; English and Sanskrit 8; Sanskrit and Hindi 8; English 26; Sanskrit 48 and no languages 24. Find
(i) how many students are studying Hindi.
(ii) how many students are studying English and Hindi both.

19. **a.** Find the sum of the series $0.7 + 0.77 + 0.777 + \dots$ to n terms.

Or

6

b. The sum of two numbers is 6 times their geometric mean, show that the numbers are in the ratio $(3 + 2\sqrt{2}) : (3 - 2\sqrt{2})$.

20. **a.** Find the equation of the circle passing through the point $(-1, 3)$ and having its centre at the point of intersection of the lines $x - 2y = 4$ and $2x + 5y + 1 = 0$.

Or

6

b. Find the co-ordinates of the foci, the vertices, the length of transverse axis, the conjugate axis, the eccentricity and the length of the latus rectum of the hyperbola $25x^2 - 9y^2 = 225$.

21. a. Find the mean deviation about the mean for the data

Height (in cm)	95-105	105-115	115-125	125-135	135-145	145-155
Number of boys	9	16	23	30	12	10

Or

6

b. Find the mean and variance for the following frequency distribution.

Class	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50
Frequency	5	8	15	16	6

2023
ENVIRONMENTAL EDUCATION

Total marks: 70

Time : 3 hours

General instructions:

i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*

ii) *The question paper consists of 26 questions. All questions are compulsory.*

iii) *Marks are indicated against each question.*

iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

1. Which of the following aids in fixing radiant energy of the sun? **1**
(a) Producers (b) Consumers
(c) Decomposers (d) Microconsumers

2. The traditional method of rainwater harvesting in Kerala is **1**
(a) Zing (b) Surangam
(c) Zabo (d) Kund

3. The enormous increase in the number of people is called **1**
(a) Population pressure (b) Population explosion
(c) Resource explosion (d) Human strain

4. The people in Nagaland depend on _____ for their livelihood **1**
(a) Industry (b) Technology
(c) Commerce (d) Agriculture

5. Economic growth aims to improve **1**
(a) Quality of life (b) Social needs
(c) Health and hygiene (d) Health and happiness

6. Which of the following cities has been classified as the ten most polluted cities in the world by World Health Organization? **1**
(a) Mumbai (b) Delhi
(c) Chennai (d) Kolkata

7. The four R's stands for **1**
(a) Recovery, reprocess, reuse, recycle (b) Reduce, reprocess, refuse, recovery
(c) Refuse, reuse, recycle, reduce (d) Reduce, recovery, recycle, reuse

8. The reduction in the amount of ozone in the upper atmosphere is known as **1**
(a) Ozone hole (b) Ozone reduction
(c) Ozone thinning (d) Ozone depletion
9. The major source of energy in the rural sector is **1**
(a) Firewood (b) Coal
(c) LPG (d) Kerosene
10. Amongst all the source of energy, which energy has the greatest potential? **1**
(a) Wind energy (b) Solar energy
(c) Wave energy (d) Nuclear energy
11. Differentiate between desertification and overgrazing. **2**
12. Mention any two impacts of child marriage on the development of a society. **2**
13. Write four methods through which a campaign programme can be launched. **2**
14. Differentiate between pollution and pollutant. **2**
15. Write any two ways to reduce noise pollution. **2**
16. Write any two differences of energy consumption in rural and urban regions. **2**
17. Write any two advantages of wind energy. **2**
18. Mention four effects of acid rain. **4**
19. Write any two main aims of globalisation. **4**
20. Write four effects of global warming on agriculture, plants and animals. **4**
21. Name one disease caused by water pollution. Mention three impacts of water pollution on human body. **1+3=4**
22. Write four advantages of using CNG. **4**
23. **a.** Mention any six principles of code of ecology. **6**
Or
b. What is urbanisation? How does the demand for housing cause environmental problems in urban areas? **(2+4=6)**

24. **a.** What is deforestation? Give five effects of deforestation. **1+5=6**
Or
b. Mention any six basic components of development. **6**
25. **a.** Give three energy saving tips each for (i) cooking (ii) transport. **3+3=6**
Or
b. List six ways in utilisation of energy efficiently in our daily life. **6**
26. **a.** Write four impacts of drought on the environment. Mention four preventive measures of drought. **4+4=8**
Or
b. Mention four impacts and four preventive measures of landslide. **4+4=8**

2023

Information Technology ES (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory except Q. nos.18 to 23 where general option is given.*
- iii) *The question paper consists of 23 questions.*
- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives: 10x1=10

- i. Communication which involves sending and understanding messages only through images and pictures is called
 - (a) Visual communication
 - (b) Verbal communication
 - (c) Non-verbal communication
 - (d) Actions
- ii. A regular, ordered way of doing activities at a fixed time is called
 - (a) Habit
 - (b) Routine
 - (c) Chores
 - (d) Skills
- iii. Which of the following is a feeling of certainty that something exists and is true, especially one without proof?
 - (a) Like
 - (b) Values
 - (c) Beliefs
 - (d) Opinion
- iv. Personal hygiene is the habit or practice of keeping ourselves
 - (a) Clean
 - (b) Dirty
 - (c) Shabby
 - (d) Untidy
- v. Which of the following options have the command save, print and close?
 - (a) Tools
 - (b) Format
 - (c) Insert
 - (d) File
- vi. Which short cut key is used to create new documents?
 - (a) Control+C
 - (b) Control+N
 - (c) Control+M
 - (d) Control+D
- vii. Which of the following business, converts raw materials into finished products?
 - (a) Trading business
 - (b) Service business
 - (c) Manufacturing business
 - (d) Accounting business
- viii. As an entrepreneur, to come up with new ideas that others have not thought of before is called
 - (a) Confidence
 - (b) Critical thinking
 - (c) Creativity
 - (d) Planning
- ix. Which of the following actions would not help a green agriculture sector?
 - (a) Buying organic potatoes
 - (b) Using organic manure
 - (c) Growing organic vegetables
 - (d) Using chemical fertilizers

- x. A project called 'litter of light' is bringing light to many places that need it the most by recycling.
- (a) Plastic cans
 - (b) Paper cups
 - (c) Plastic bottles
 - (d) Glass bottles

Answer the following questions in one word or one sentence:

- 2. Give the full form of LPO. 1
- 3. What is Information Technology enabled services (ITes)? 1
- 4. What is the purpose of CRM training program? 1
- 5. What is a call forcing? 1
- 6. Define audiotex. 1
- 7. What is task in CRM software? 1
- 8. Mention any two skills required for accepting orders. 1
- 9. What is 'health' according to World Health Organization (WHO)? 1

Answer the following questions in 20-50 words:

- 10. List the four kinds of jobs that can be done in voice process. 2
- 11. Differentiate between customer service and telesales. 2
- 12. List any four professional skills required for the role of CRM domestic service. 2
- 13. What is a beep tone? 2
- 14. What is call flow? 2
- 15. Define information security. 2
- 16. List any four standard organizational procedures for establishing contact with customer. 2
- 17. Define hazard. 2

Answer any four from the following questions in 60-100 words:

- 18. Explain any four top ten BPO companies in India. 4
- 19. List any four differences between domestic and international BPO. 4
- 20. List any two do's and dont's each while taking collection calls. 4
- 21. List any four characteristics of a confused customer. 4
- 22. Write any four basic steps to log in free CRM. 4
- 23. Explain any four safety rules during disaster and risk events. 4

2023

Tourism & Hospitality (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory except Q. nos.18 to 23 where general option is given.*
- iii) *The question paper consists of 23 questions.*
- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check to ensure that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives: 10x1=10

- i. One's own feelings, habits and ways of thinking such as fear and low confidence can make communication difficult. Identify the barrier of communication.
 - (a) Personal factor
 - (b) Feelings
 - (c) Environment
 - (d) Past experience
- ii. By which of the following action can a sender send a message?
 - (a) Listening
 - (b) Reading
 - (c) Speaking
 - (d) Information
- iii. 'Honesty and equality' are a set of
 - (a) Beliefs
 - (b) Values
 - (c) Opinion
 - (d) Identity
- iv. Ctrl+c is a short cut key to
 - (a) close
 - (b) cut
 - (c) copy
 - (d) clear
- v. Green economy was first coined in the year
 - (a) 1969
 - (b) 1979
 - (c) 1989
 - (d) 1999
- vi. Club and casino, spa, fun world, sports centre, etc is an activity of
 - (a) recreational tourist
 - (b) leisure tourist
 - (c) holiday tourist
 - (d) adventure tourist
- vii. An eco-tourist is interested in visiting destination where there is
 - (a) rich wildlife wealth
 - (b) dense forest
 - (c) historical monument
 - (d) relatively unspoilt natural environment
- viii. Which of the following is an agency responsible for awarding star categories to the hotels?
 - (a) WTO
 - (b) UNWTO
 - (c) HRACC
 - (d) WTTC
- ix. Who sells airlines, train cruise line and bus tickets to its clients?
 - (a) Transport agency
 - (b) Logistic department
 - (c) Travel Agent
 - (d) Sales Agent

- x. It refers to a list of person's name and their work schedule.
 - (a) Itinerary
 - (b) Roster
 - (c) Directory
 - (d) Routine

Answer the following questions in one word or one sentence:

- 2. What is ethnic tourism? 1
- 3. What is floatel? 1
- 4. Write the full form of HRACC. 1
- 5. List any two thumb rules in customer service. 1
- 6. What is VFR? 1
- 7. State one importance of personal hygiene. 1
- 8. State any two common word processing applications. 1
- 9. What is sustainable development? 1

Answer the following questions in 20-50 words:

- 10. Distinguish between entrepreneur and entrepreneurship. 2
- 11. Who is a tourist? Write any two types of tourist. 1+1=2
- 12. List the two categories of tourist attractions with examples. 1+1=2
- 13. What is meant by 'Due out' and 'Check out'? 1+1=2
- 14. What is B&B establishment? 2
- 15. Write two benefits of customer relationship management. 2
- 16. Write any two attributes or personality trait of Front Office staff. 2
- 17. What is on the spot booking? 2

Answer any four from the following questions in 60-100 words:

- 18. Briefly explain any two basic components of tourism. 4
- 19. What are Legacy Vintage Hotels? Briefly highlight the three categories of Legacy Vintage Hotels. 1+3=4
- 20. What is Indian way of greeting? Explain the GST model for greeting customers. 1+3=4
- 21. Explain the four categories of fairs and festivals in India. 4
- 22. Mention any four advantages of travel booking with travel agents. 4
- 23. What is a visa? Briefly explain any three categories of visa issued by the Government of India. 1+3=4

Total number of printed pages : 2

NB-XI/R(V)/1

2023
Retail (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

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- iii) *The question paper consists of 23 questions.*
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N.B: *Check to ensure that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives: 10x1=10

- i. It is necessary and often an overlooked virtue for retail employees.
 - a) Resilience
 - b) Attentiveness
 - c) Product knowledge
 - d) Patience
- ii. In a contract sale, the subject matter is the
 - a) price
 - b) customer
 - c) goods
 - d) services
- iii. The process of summarizing the list of benefits the customer gets is known as
 - a) final objective close
 - b) summary close
 - c) cautionary sale close
 - d) alternative close
- iv. The information about a particular product can be provided as advertisement in
 - a) newsletters
 - b) CDs
 - c) audio tapes
 - d) emails
- v. Which of the following is **not** an emergency condition in retail outlets?
 - a) Electrocution
 - b) Slip down
 - c) Training
 - d) Equipment failure
- vi. Which of the following is a way of expressing our feelings?
 - a) Posture
 - b) Facial expression
 - c) Body language
 - d) Eye contact
- vii. It means a view or judgment formed about something not necessarily based on fact.
 - a) Opinion
 - b) Beliefs
 - c) Values
 - d) Customs
- viii. Which of the following menu option has the commands like save, print and close?
 - a) Insert
 - b) File
 - c) Tools
 - d) Format
- ix. It is a software application that helps us to create documents.
 - a) Spreadsheet
 - b) Notepad
 - c) Excel sheet
 - d) Word processor

- x. Which of the following action will promote green economy?
 - a) Use of non renewable resources
 - b) Sustainable development
 - c) Social protection
 - d) Creating jobs

Answer the following questions in one word or one sentence:

- 2. Who is a customer? 1
- 3. What is retail credit facility? 1
- 4. What is trade incentive? 1
- 5. Write any two features of a product. 1
- 6. State any two factors to be kept in mind while undertaking health and safety measures at a retail store. 1
- 7. What is verbal communication? 1
- 8. What is teamwork? 1
- 9. Mention any two important steps taken by the government of India under the sustainable development or green economy policy. 1

Answer the following questions in 20-50 words:

- 10. Write any two responsibilities of sales associate. 2
- 11. Differentiate between loyal customer and impulsive customer. 2
- 12. Write any two process of credit application. 2
- 13. Write any two objectives of sales promotion. 2
- 14. What is meant by customer motivation? List any two tips to motivate the customer to buy. 1+1=2
- 15. Briefly explain any two types of post-sales service support. 2
- 16. Mention any two retailer procedures for evacuation in the case of emergency. 2
- 17. Briefly explain any two reasons to justify why a business plan is important for an entrepreneur. 2

Answer any four from the following questions in 60-100 words:

- 18. Explain any four skills required by a sales associate. 4
- 19. Explain four essential elements of contract of sale. 4
- 20. Explain four various methods of retail selling. 4
- 21. Discuss any four ways for the sales associate to handle angry customer. 4
- 22. Explain the techniques to encourage customer loyalty. 4
- 23. Explain any four types of equipment and material used in retail store to deal with risk. 4

2023

Healthcare (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory except Q. nos.18 to 23 where general option is given.*
- iii) *The question paper consists of 23 questions.*
- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives: 10x1=10

- i. Emergency service number in India is
 - (a) 100
 - (b) 101
 - (c) 108
 - (d) 911
- ii. Fever is a symptom not a
 - (a) Disease
 - (b) Sickness
 - (c) Sign
 - (d) Illness
- iii. Which one of the following is not a mission to clean up Indian cities, towns and villages?
 - (a) Swachh Bharat Mission
 - (b) Swachh Bharat Abhiyan
 - (c) Clean India Mission
 - (d) National Green Tribunal
- iv. The commonly accepted average core body temperature in °F is
 - (a) 98.6 °F
 - (b) 98.8 °F
 - (c) 101 °F
 - (d) 103 °F
- v. A practice which uses herbs as medicines is known as
 - (a) Homeopathy
 - (b) Ayurveda
 - (c) Naturopathy
 - (d) Unani
- vi. The study of the nervous system is called
 - (a) Cytology
 - (b) Osteology
 - (c) Neurology
 - (d) Myology
- vii. The short cut key to create a new document is
 - (a) Control+C
 - (b) Control+V
 - (c) Control+N
 - (d) Shift+N
- viii. Which one of the following is not a vital sign of life?
 - (a) Body temperature
 - (b) Pulse rate
 - (c) Blood pressure
 - (d) Respiratory rate
- ix. A set of practice based on the preservation of health is referred to as
 - (a) Hygiene
 - (b) Grooming
 - (c) Bathing
 - (d) Hand washing
- x. Respiration takes place in the respiratory organs called
 - (a) Heart
 - (b) Lungs
 - (c) Kidneys
 - (d) Spleen

Answer the following questions in one word or one sentence:

- 2. Define health. 1
- 3. What is visual communication? 1
- 4. What are splints? 1
- 5. Give any two signs of poor nutrition. 1
- 6. What is hospice care? 1
- 7. What are close-ended questions? 1
- 8. List any two types of stretcher. 1
- 9. What is brain? 1

Answer the following questions in 20-50 words:

- 10. Differentiate between macronutrients and micronutrients. 2
- 11. Write two features of healthcare system. 2
- 12. State any four steps involved in chain of survival. 2
- 13. List any four systems that form the human body. 2
- 14. Differentiate between entrepreneurship and entrepreneur. 2
- 15. What are the two dimensions of Emergency Response Service? 2
- 16. Mention any two purposes of traction. 2
- 17. Write any two reasons for changing of patient's position on the bed. 2

Answer any four from the following questions in 60-100 words:

- 18. What is time management? Write any three steps for effective time management. 1+3=4
- 19. Briefly explain the four principles of First Aid. 4
- 20. Write the steps to be followed while taking pulse rate. 4
- 21. Based on the objectives, briefly explain any four types of hospitals. 4
- 22. Write any four objectives of a care plan. 4
- 23. What is a clinic? Explain any three types of clinic. 1+3=4

2023

Beauty & Wellness (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory except Q. nos.18 to 23 where general option is given.*
- iii) *The question paper consists of 23 questions.*
- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check to ensure that all pages of the question paper are complete as indicated on the top left side.*

1. **Choose the correct answer from the given alternatives:** **10x1=10**
- i. The process of applying cosmetics to enhance or alter the appearance is known as
 - a) face clean up
 - b) make up
 - c) pedicure
 - d) manicure
 - ii. A chemical found in nail polish which can cause liver damage, kidney damage, birth defects etc.
 - a) Styrene
 - b) Dioxane
 - c) Methyl
 - d) Toluene
 - iii. What is the study of the function of the body parts and the body as a whole called?
 - a) Physiology
 - b) Anatomy
 - c) Dermatology
 - d) Trichology
 - iv. The treatment for improving the appearance of feet and toenails is known as
 - a) mehendi
 - b) manicure
 - c) pedicure
 - d) waxing
 - v. A single hair is referred to as
 - a) medulla
 - b) hair shaft
 - c) cortex
 - d) cuticle
 - vi. Reading and listening to someone is an example of
 - a) sending information
 - b) asking information
 - c) giving information
 - d) receiving information
 - vii. The feeling of certainty that something exist and is true, especially one without proof.
 - a) Values
 - b) Opinions
 - c) Beliefs
 - d) Religion
 - viii. Which of the following contains commands like undo, cut, copy and paste?
 - a) Edit
 - b) File
 - c) Tools
 - d) Insert
 - ix. The process of running a business using new idea or in a different way is known as
 - a) business plan
 - b) entrepreneurship
 - c) entrepreneur
 - d) manufacturing business

- x. Which of the following is **not** a mission for meeting the challenges of climatic change in India?
 - a) Green India Mission
 - b) Yellow India Mission
 - c) National Water Mission
 - d) National Solar Mission

Answer the following questions in one word or one sentence:

- 2. What is waxing? 1
- 3. Name any two types of epidermis cell. 1
- 4. What is considered as small mirror of the general health of the body? 1
- 5. Name any two parts of the nail. 1
- 6. What is electrolysis? 1
- 7. Write any two types of verbal communication. 1
- 8. What is personal hygiene? 1
- 9. What is a business plan? 1

Answer the following questions in 20-50 words:

- 10. What is manicure? Write any two benefits of manicure. 1+1=2
- 11. Name any two PPE needed in a salon and write their usefulness. 1+1=2
- 12. What is dermis? Write any two major dermis fibers. 1+1=2
- 13. Mention two disadvantages of bleaching. 2
- 14. Name any two manicure and pedicure equipments and write their uses. 1+1=2
- 15. Name any two basic face shapes and write the eyebrow shape that suits them. 1+1=2
- 16. List any four benefits of threading. 2
- 17. Mention any two advantages of using a word processor. 2

Answer any four from the following questions in 60-100 words:

- 18. Explain any four major sub-segments of beauty & wellness sector. 4
- 19. Briefly explain any four functions of skin. 4
- 20. Why is skin analysis carried out in skin care? Explain the three important techniques of skin care. 1+3=4
- 21. State any four after care advises for manicured hands. 4
- 22. Explain any four nail shapes. 4
- 23. Explain the two types of waxing. 4

2023

Electronics & Hardware (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
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- iii) *The question paper consists of 23 questions.*
- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives:

10x1=10

- i. The frequency of alternating current in India is
 - (a) 45 Hz
 - (b) 50 Hz
 - (c) 55 Hz
 - (d) 60 Hz
- ii. Electrical devices that store energy in the form of magnetic field along a coil is called
 - (a) Inductor
 - (b) Capacitor
 - (c) Resistors
 - (d) Diode
- iii. In a carbon film resistor, the code is printed in the form of
 - (a) Company
 - (b) Keyed containers
 - (c) Colour code
 - (d) Size
- iv. Which of the following is an example of oral communication?
 - (a) Reports
 - (b) Newspapers
 - (c) Face to face interaction
 - (d) E-mail
- v. Which type of earthing is also called fire earthing?
 - (a) Plate earthing
 - (b) Pipe earthing
 - (c) Strip earthing
 - (d) Rod earthing
- vi. PVC stands for
 - (a) Polyvinyl chloride
 - (b) Polyvinyl conductor
 - (c) Photoresistor chloride voltage
 - (d) Positive voltage conductor
- vii. Electromechanical assembly converts electrical signal to
 - (a) Mechanical movements
 - (b) Electrical current
 - (c) Voltage
 - (d) Magnetic force
- viii. The qualities and principles which makes a person think and act in a certain way is
 - (a) Motivation
 - (b) Self control
 - (c) Self management
 - (d) Values
- ix. Which of the following is not a part of MCB?
 - (a) Arc chute
 - (b) Fuse wire
 - (c) Bimetallic strip
 - (d) Magnetic coil
- x. Which of the following is a poor conductor of electricity?
 - (a) Aluminium
 - (b) Copper
 - (c) Glass
 - (d) Silver

Answer the following questions in one word or one sentence:

- 2. Name two types of non-linear resistors. 1
- 3. Draw the current symbol of electrical earthing. 1
- 4. What does XLPE stand for? 1
- 5. Name any two tools and equipments used to carry out electrical panel installation. 1
- 6. What is non-verbal communication? 1
- 7. What is sustainable development? 1
- 8. Give two examples of electromechanical assembly. 1
- 9. What is wire stripping? 1

Answer the following questions in 20-50 words:

- 10. What is time management? Mention one example of time management. 1+1=2
- 11. What is electric current? What is the unit of electric current? 1+1=2
- 12. Mention any two specifications of four band resistor. 2
- 13. Name two types of earthing and why is earthing required? 1+1=2
- 14. Write any two guidelines that must be followed at the workplace for electrical safety. 2
- 15. What is optic fibre cable? Which colour cable is used for earthing wire? 1+1=2
- 16. Name any two types of wire joints and write their uses. 1+1=2
- 17. What is a first aid kit? Name any two items of a first aid kit. 1+1=2

Answer any four from the following questions in 60-100 words:

- 18. Name any four sources of energy that can be converted to electrical energy. Explain any two of them. 1+3=4
- 19. What is a word processor? Mention any three advantages of using a word processor. 1+3=4
- 20. Briefly explain the following electronic components:
(i) Capacitor (ii) Resistor 2+2=4
- 21. Explain colour coded resistors (axial resistors). 4
- 22. Name any four different colours of wires and write their uses. 4
- 23. Explain the uses of megger meter. 4

2023

Agriculture (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

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- iv) *Marks allocated to every question are indicated against it.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives: 10x1=10

- i. The perception of beauty and study of its application is called
 - (a) Aesthetic value
 - (b) Cosmetics
 - (c) Beautician
 - (d) Beauty Pageant
- ii. Application of fertilizer through irrigation water is known as
 - (a) Surface irrigation
 - (b) Sub surface irrigation
 - (c) Top dressing
 - (d) Fertigation
- iii. The common growing medium in plug tray is
 - (a) Sand
 - (b) Cocopeat
 - (c) Vermiculture
 - (d) Soil
- iv. Which of the following fruit is propagated by veneer grafting?
 - (a) Pomegranate
 - (b) Lemon
 - (c) Guava
 - (d) Mango
- v. Which of the following is not a part of a seed?
 - (a) Ovule
 - (b) Shoot
 - (c) Embryo
 - (d) Seed coat
- vi. Which of the following implement is used for levelling fields?
 - (a) Harrow
 - (b) Cultivator
 - (c) Rotavator
 - (d) Plank
- vii. The ideal soil for horticulture crop production is
 - (a) Black soil
 - (b) Red soil
 - (c) Alluvial soil
 - (d) Laterite soil
- viii. Soil acidity can be corrected by adding
 - (a) Zinc
 - (b) Phosphate
 - (c) Lime
 - (d) Potash
- ix. Which short cut key is used to insert a table in a Libreoffice writer document?
 - (a) Shift+F12
 - (b) Control+F12
 - (c) F13
 - (d) F14
- x. Which of the following stakeholders makes policies for a green economy?
 - (a) Non-Government Organisations
 - (b) Scientific community
 - (c) Government
 - (d) Private sector

Answer the following questions in one word or one sentence:

- 2. What is indoor gardening? 1
- 3. What is a potting material? 1
- 4. Define layering. 1
- 5. What is plant propagation? 1
- 6. What is soil genesis? 1
- 7. Define pinching. 1
- 8. What is a business idea? 1
- 9. Who is a stakeholder? 1

Answer the following questions in 20-50 words:

- 10. Differentiate between annuals and biennials. 2
- 11. State any two functions of growing medium. 2
- 12. What is meant by potting and de-potting? 2
- 13. What is top working? Give an example of a plant grafted from this method. 2
- 14. What are specialised organs? 2
- 15. Differentiate between hand tools and power equipments. 2
- 16. What is mulching? Give any two examples. 2
- 17. What is a team work? Write one benefit of team work. 2

Answer any four from the following questions in 60-100 words:

- 18. What is a lawn? State any three importance of lawn. 1+3=4
- 19. State any four precautions that must be taken while preparing a nursery bed. 4
- 20. What is grafting? Write any three advantages of grafting. 1+3=4
- 21. Explain in brief any four types of implements used in field preparation. 4
- 22. What is pruning? Write any three objectives of pruning. 1+3=4
- 23. Briefly explain the types of verbal communication with examples. 4

2023
Automotive (Vocational)

Total marks: 50

Time: 2 hours

General instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.
- ii) All questions are compulsory except Q. nos. 18 to 23 where general option is given.
- iii) The question paper consists of 23 questions.
- iv) Marks allocated to every question are indicated against it.

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

1. Choose the correct answer from the given alternatives: 10x1=10

- i. The dimension in mm for an A4 size paper is
 - (a) 594x841
 - (b) 420x594
 - (c) 210x297
 - (d) 148x210
- ii. Which of the following is a semi permanent mechanical fastener?
 - (a) Circlips
 - (b) Rivets
 - (c) Washers
 - (d) Studs
- iii. It is a measuring instrument used for inspecting and measuring the distance between two faces.
 - (a) Micrometer
 - (b) Vernier's Caliper
 - (c) Dial Gauge
 - (d) Protractor
- iv. What is the power producing unit in an automotive system?
 - (a) Chassis
 - (b) Engine
 - (c) Piston
 - (d) Connecting Rod
- v. The clutch free play for four wheelers is generally
 - (a) 15-20 mm
 - (b) 20-25 mm
 - (c) 25-30 mm
 - (d) 30-35 mm
- vi. Which of the following is **not** a component of the gearbox?
 - (a) Gear Linkage
 - (b) Gear Lever
 - (c) Gear Shifter Fork
 - (d) Clutch
- vii. Which of the following is a method of non-verbal communication?
 - (a) Writing
 - (b) Speaking
 - (c) Gestures
 - (d) SMS
- viii. Which of the following is a step for effective time management?
 - (a) Motivation
 - (b) Communication
 - (c) Self-confidence
 - (d) Organise
- ix. Which short cut key is used to copy a file?
 - (a) Ctrl+a
 - (b) Ctrl+c
 - (c) Ctrl+v
 - (d) Ctrl+z
- x. Which of the following action will promote green economy?
 - (a) Use of non-renewable resources
 - (b) Social protection
 - (c) Sustainable development
 - (d) Creating jobs

Answer the following questions in one word or one sentence:

- 2. State any two types of non-verbal communication. **1**
- 3. What is goal setting? **1**
- 4. What is the short cut key to underline a text? **1**
- 5. GIM is one of the eight missions under India's action plan for tackling climate change. What does GIM stand for? **1**
- 6. What is line of sight in projections? **1**
- 7. What is a speedometer? **1**
- 8. Write any two materials and equipment required to clean engine. **1**
- 9. State any two components of brake. **1**

Answer the following questions in 20-50 words:

- 10. Briefly explain any two values which make an entrepreneur successful. **2**
- 11. Name any two types of bolt and write their features. **1+1=2**
- 12. Mention the four types of manufacturing processes. **2**
- 13. Differentiate between a Tachometer and an Odometer. **2**
- 14. Briefly explain any two components of a transmission system. **2**
- 15. Write any two road tests that should be done after servicing of gearbox. **2**
- 16. Mention any two reasons why a flat tyre may occur. **2**
- 17. Write any two precautions that should be taken during servicing of mechanical brakes. **2**

Answer any four from the following questions in 60-100 words:

- 18. What is projection? Explain any two types of projections. **1+3=4**
- 19. Briefly explain any four types of nuts. **4**
- 20. Briefly explain the different types of joining processes. **4**
- 21. Write any four precautions to be taken while cleaning or washing the engine. **4**
- 22. What is the transmission system of an automobile? Briefly explain any two components of the transmission system. **1+3=4**
- 23. Write any four advantages of tubeless tyre. **4**
