SAMPLE QUESTION PAPERS

for

H.S.L.C. EXAMINATION

2021

MIZORAM BOARD OF SCHOOL EDUCATION
AIZAWL : 796 012

Price – Rs. 50/-

F O R E W O R D

In view of the fact that normal classes for schools could not be conducted due to the Covid – 19 pandemic, the high level Education Committee decided that sample question papers be prepared for the upcoming Board Examinations in line with the initiative taken by the Central Board of Secondary Education (CBSE). As resolved by the Committee, the Mizoram Board of School Education (MBSE) has prepared the sample question papers for the High School Leaving Certificate (HSLC) Examination, 2021. These papers have been developed purely for the purpose of making students acquainted with the pattern and format of the HSLC Examination. Hence, students are advised not to rely solely on the Sample Question Papers for the upcoming HSLC Examination, 2021. Students may note that questions can be set from any portion of the **Reduced Syllabus for HSLC Examination, 2021** and prepare for the examination accordingly.

Secretary
Mizoram Board of School Education

T H U H M A H R U A I

Covid – 19 hripui leng avangin sikul rei tak kal theih a ni lova, chuvangin Education Committee sang chuan Central Board of Secondary Education (CBSE) kalphung angin sample question papers siam ni se a ti a. Committee thurel angin Mizoram Board of School Education (MBSE) chuan kum 2021 High School Leaving Certificate (HSLC) Examination hmachhawn turte tan Sample Question Papers a ti chhuak a. Heng sample question papers te hi zirlaiten exam kalphung leh zawhna rawn chhuah dan an lo hmelhriat theih nan tih a ni a. Amaherawhchu, he Sample Question Papers ngau ngau atang hian High School Leaving Certificate Examination, 2021 inpuahchah loh tur a ni a. **Reduced Syllabus for High School Leaving Certificate Examination, 2021** huam chhung atangin zawhna engpawh a chhuak thei tih hre chungin inbuatsaihna kalpui ni se.

Secretary
Mizoram Board of School Education

MIZORAM BOARD OF SCHOOL EDUCATION
AIZAWL – 796 012

Dated Aizawl, the 22nd December, 2020

NOTIFICATION

No. K.11013/1/2018-MBSE(Acad)/37 : It is hereby notified for the information of all High Schools that Sample Question Papers have been prepared based on the Reduced Syllabus & Scheme of Examinations for High School Leaving Certificate Examination, 2020-2021 issued by this office vide Notification No. J. 11016/1/2018-MBSE(Acad)/16 dt. 07.08.2020.

Further, the Weightage to Difficulty Level of Questions has been modified as under for the HSLC Examination 2021 only.

Level of Question	Existing Percentage	Modified Percentage	Mark	
			With practicals	Without practicals
Easy	30	40	28	32
Average	50	40	28	32
Difficult	20	20	14	16
Total	**100**	**100**	**70**	**80**

The Sample Question Papers are also accessible on the Board's official website www.mbse.edu.in

Sd/- LALTHANGBIKA
Secretary
Mizoram Board of School Education

Memo No. K.11013/1/2018-MBSE(Acad)/37 (A) :: Dated Aizawl, the 22nd Dec., 2020

Copy to : —

1. The Commissioner & Secretary to Govt. of Mizoram, School Education Department and Controlling Authority of the MBSE, Aizawl.
2. The Director, School Education Department, Govt. of Mizoram, Aizawl.
3. The Principal, Institute of Advanced Study in Education, Aizawl.
4. The Controller of Examinations, MBSE.
5. Regional Officer, MBSE Regional Office, Lunglei.
6. All District Education Officers, Govt. of Mizoram, for information, with a request to circulate to all Secondary Schools under their jurisdiction.
7. System Administrator MBSE, for uploading in the official website.
8. All others concerned.
9. Guard File I.

flpachuau 22/12/2020
(SARAH LALENGZAMI PACHUAU)
Director (Academic)
Mizoram Board of School Education

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ENGLISH
SAMPLE QUESTION PAPER
Full marks – 80
Time – 3 Hours

***General Instructions* :**

(i) This question paper is divided into four sections – A, B, C and D.
(ii) All the sections are compulsory. Answer all the questions.
(iii) Write the number of the question before attempting it.
(iv) Marks for each question are indicated against it.

SECTION - A : Reading (10 marks)

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

Why does a person become overconfident? The reason lies in over assessment of his capabilities. Sometimes people over assess their competence and jump into situations that are beyond their control.

Napoleon Bonaparte who became Emperor of France would say that the word 'impossible' was common only amongst fools. The overconfident Napoleon invaded Russia in the winter of 1812. This proved to be a big disaster.

Overconfidence generally leads people into misadventures, endangering their chances in life. It is wisely said that any achievement is a result of two factors – one's personal planning and support from the external world. People take into account only their planning, generally ignoring external factors. As a result they are unable to foresee future developments. Hence, the great risk of failure.

Then there is the question: how can one manage overconfidence? The formula is very simple. Before taking a decision, discuss the matter with other informed people with an objective mind and when it is proved that you are about to go off the path, accept reality and say without delay, "I was wrong".

Overconfidence is a flaw characterizing people who lack the virtue of modesty. Modesty makes you a realist; you become a person who is cut down to size. People of this kind become very cautious; before taking an action they assess the whole situation. They adopt a realistic approach.

Overconfident people live within their own thoughts. They know themselves but they are unaware of others. Living inside their own cell they are unable to make use of the experiences of others. This kind of habit is highly damaging to all concerned.

There is a saying that the young man sees the rule and the old man sees the exception, with a slight change, I would like to say that the overconfident person sees the rule and the confident person sees the exception. Overconfident people are always at risks. It is said that taking risk is good but it must be well calculated otherwise it becomes very dangerous.

1. 1. On the basis of your reading of the above passage, answer the following questions briefly: (3 X 2 = 6)

(a) Why does a person become overconfident?
(b) What does overconfidence generally lead people into?
(c) How can one manage overconfidence?

1. 2. Choose the most suitable antonym from the options given :

(a) capabilities 1

(i) capacity (ii) power (iii) potentialities (iv) inabilities

(b) disaster 1

(i) calorie (ii) blessing (iii) catastrophe (iv) destruction

1. 3. Find words in the passage which mean the same as : (2 X 1 = 2)
i) Threatening (para 3)
ii) Predict (para 3)

SECTION - B : WRITING (15 marks)

2. (a) With COVID-19 on the rise, universal adoption of safety measures is imperative. Design an attractive poster on COVID-19 to create awareness, highlighting the safety measures and their importance in checking the spread of the infectious disease.
(Word limit: 50) 5

OR

(b)Your father, Mr. Lalthanga, is preparing to host a grand Christmas dinner at your residence on 25th December 20xx at 5 o'clock. Draft an informal invitation on behalf of your father to invite his friend Mr. Vanmawia to join your family at the dinner.
(Word limit: 50) 5

3. As advertised in the local newspapers,one post of a high school teacher is lying vacant at Govt. Tlangmawi High School. Prepare a job application for the post with a detailed Curriculum Vitae (CV). (Word limit :150 - 200 words) 10

SECTION - C : GRAMMAR (15 marks)

4. Identify and label each sentence as *declarative, interrogative or exclamatory*: (4 X 1 = 4)
(a) How well she sings!
(b) She is a successful writer.
(c) Who told you this?
(d) They will not be joining us for dinner.

5. Fill in the blanks with the correct form of the verb from the alternatives given: (5 X 1 = 5)
(a) Puia fell ill because he_____ spicy food.
(***eat/ has ate / have eaten / had eaten)***
(b) Jane _____ her blue jeans today, but usually she wears a dress.
(wears / wearing / wear / is wearing)
(c) Lala _____ not been to Paris.
(is / has / have/ was)
(d) _____ the moon a star?
(Has / Was / Is / Were)
(e) I _____ football last Saturday.
(am playing / play / played / plays)

6. Change the statements from direct to indirect speech and vice versa by choosing the correct answer from the options given: (3 X 1 = 3)

(a) He said to Susan, "You have committed a mistake here."

(i) He told Susan that she committed a mistake here.
(ii) He told Susan that she had committed a mistake there.
(iii) He told Susan that she would commit a mistake there.
(iv) He told Susan that she has committed a mistake here.

(b) The teacher said, "Are you preparing well for the exams?"

(i) The teacher said that they are preparing well for the exams.
(ii) The teacher asked if I am preparing well for the exams.
(iii) The teacher asked whether I have been preparing well for the exams.
(iv) The teacher said that we were preparing well for the exams.

(c) The students asked whether they could use the calculator.

(i) The students said, "Can we use the calculator?"
(ii) The students said, "Can they use the calculator?"
(iii) The students said, "Could we use the calculator?"
(iv) The students said, "Could they use the calculator?"

7. Change the voice : (3 X 1 = 3)

(a) Is he doing his assignment?
(b) She will write a letter.
(c) The train has been missed by him.

SECTION - D : TEXTBOOK (40 marks)

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

I was grieving because I had lost a good friend. However, I could not dwell on my grief alone.

(a) Who is the speaker? How did the speaker lose her good friend? 2
(b) How did they become best friends? 2

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

Murray Halberg was almost killed in an accident while playing football.

(a) Who is Murray Halberg? How old was he when the accident happened? 2
(b) How bad was the accident ? 2

10. (a) Describe the situation that led the crocodile to attack Graham. (Word limit : 50-75) 4

OR

(b) Describe how Nicola and Jacopo sacrificed themselves to look after their sister. (Word limit : 50-75) 4

11. Wangari Maathai was an environmentalist who believed that it is everyone's responsibility to make our world greener. Explain how students can play major roles in promoting a 'greener world'. (Word limit : 50-75) 4

12. Read the extract and answer the questions that follow in *one* or *two* sentences only:

Till last by Philip's farm I flow
To join the brimming river,
For men may come and men may go,
But I go on forever.

(a) Who is the speaker? 1
(b) What is the refrain in the poem? 1
(c) The poet of this poem is.... 1
i) Douglas Malloch iii) John Keats
ii) Alfred Tennyson iv) William Cowper

13. Read the extract *and answer the questions that follow :*

It isn't by size that you win or you fail-
Be the best of whatever you are!

(a) How can we be the best in whatever we do? 2
(b) The speaker in the poem sounds 1
i) proud iii) angry
ii) sad iv) positive

14. (a)Write what the poet wants to show through the poem *The Poplar Field*. What lesson do you learn from the poem? (Word limit : 50-75) 4

OR

(b)The brook faced a number of ups and downs to reach its destination. Compare the journey of the brook to that of men in our journey to reach our goal. (Word limit : 50-75) 4

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

(a) ***Your visitor seems to have left traces in your bedroom as well as in your study, Mr. Soames.***

(i) Who is the speaker? What is he doing in Mr. Soames' bedroom? 2
(ii) What traces were left behind by the visitor? 2

OR

(b) ***Pray continue your very interesting statement.***

(i) Who is the speaker? To whom is he speaking? 2
(ii) What is the 'interesting statement'? 2

16. (a) Write what you understand about the character of Antonio from the story **The Merchant of Venice** in about 50- 75 words. 4

OR

(b) What was it about the old man that made the narrator of **The Corner Shop** feel so uncomfortable? Give your answer in about 50 - 75 words. 4

17. (a) In the story **The Merchant of Venice**, what was inside the silver casket? 1

(i) Portia's portrait (iii) fool's head
(ii) gold (iv) precious stone

(b) What was the most important day of Helen Keller's life? 1

(i) the day she met Anne Sullivan (iii) the day she broke her doll
(ii) the day she could walk (iv) the day she was named

18. (a) The author of the fiction **The Paper Plague** stated that *people under the threat of famine can behave like beasts.* How far is the statement true about human nature, especially in the times of pandemic or crises? (Word limit 50 - 75) 4

OR

(b) Education empowered Helen Keller who had overcome many obstacles in her life. Based on your own experiences, describe how education has helped you to become a better individual. (Word limit 50 - 75) 4

MATHEMATICS
SAMPLE QUESTION PAPER
Full Marks - 80
Time - 3 hours

General Instructions :

(i) *All questions are compulsory.*
(ii) *Figures in the margin indicate marks.*
(iii) *In question on construction, the drawing should be neat and exactly as per the given measurements.*
(iv) *Use of calculator is not allowed.*

1. Choose the correct answer : $24 \times 1 = 24$

(a) 1 km/hr is equal to -

(i) $\frac{15}{18}\ m/s$ (ii) $\frac{18}{15}\ m/s$

(iii) $\frac{5}{18}\ m/s$ (iv) $\frac{18}{5}\ m/s$

(b) The relation between time, distance and speed is -

(i) speed = distance × time (ii) speed = distance + time

(iii) distance = speed × time (iv) time = distance × speed

(c) A can do a piece of work in 10 days which B can do it in 15 days. The time taken by them, working together on it, is -

(i) 7 days (ii) 6 days

(iii) 5 days (iv) 4 days

(d) A quadratic polynomial whose zeroes are α and β is -

(i) $x^2 - (\alpha + \beta)x + \alpha\beta$ (ii) $x^2 - (\alpha + \beta)x - \alpha\beta$

(iii) $x^2 + (\alpha + \beta)x - \alpha\beta$ (iv) $x^2 + (\alpha + \beta)x + \alpha\beta$

(e) The multiplicative inverse of $\frac{x-1}{x+1}$ is -

(i) $\frac{1-x}{x+1}$ (ii) $\frac{x-1}{1-x}$

(iii) $\frac{x+1}{x-1}$ (iv) $\frac{x-1}{x+1}$

(f) In a quadratic equation, when discriminant $D < 0$, then the nature of the roots is -

(i) not real (ii) real and equal

(iii) real and unequal (iv) none of these

(g) The sum of the first 26 terms of an AP 1, 3, 5, 7, ... is -

(i) 767 (ii) 676

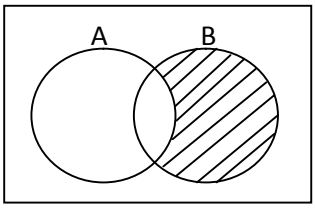
(iii) 576 (iv) 675

(h) If A = {a, b, c, d} and B = {c, d, e}, then A – B is -

(i) A (ii) B

(iii) {a, b} (iv) {e}

(i) In the given figure, A and B are two sets, then the shaded portion represents

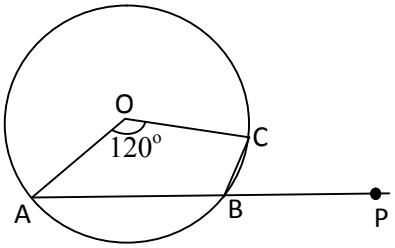


(i) $A \cap B$ (ii) $A \cup B$
(iii) A' (iv) $B - A$

(j) In a group of 70 people, 37 like coffee, 42 like tea and each person likes at least one of the two drinks. How many people like both coffee and tea ?
(i) 7 (ii) 8
(iii) 9 (iv) 10

(k) D and E are points on the sides AB and AC respectively of a ΔABC such that DE // BC. If AD = 2.5 cm, DB = 3 cm and AE = 5 cm, find EC.
(i) 1.5 cm (ii) 3 cm
(iii) 5.5 cm (iv) 6 cm

(l) In the given figure, O is the centre of a circle and $\angle AOC = 120°$, find the value of $\angle CBP$.



(i) 40° (ii) 60°
(iii) 75° (iv) 110°

(m) A ladder is placed against a wall such that it is at a distance of 3 m from the foot of the wall and its top reaches a window 4 m above the ground. Then the length of the ladder is -
(i) 5 m (ii) 6 m
(iii) 7 m (iv) 7.5 m

(n) $\square ABCD$ is a square with vertices A(1,7), B(4, 2), C(−1, −1) and D(−4, 4). Then the length of its diagonal is -
(i) $4\sqrt{17}$ *Units* (ii) $2\sqrt{17}$ *Units*
(iii) $3\sqrt{17}$ *Units* (iv) $5\sqrt{17}$ *Units*

(o) The midpoint of the line segment joining the points A(−1,7) and B(−5,−3) is -
(i) (−3, −5) (ii) (1, 5)
(iii) (−3, 2) (iv) (3, 1)

(p) The coordinates of the centroid of a triangle ABC whose vertices are A(a,b), B(c,d) and C(e,f) is -
(i) $\left(\frac{a+c+e}{3}, \frac{b+d+f}{3}\right)$ (ii) $\left(\frac{a+c+e}{2}, \frac{b+d+f}{2}\right)$
(iii) $\left(\frac{a+c}{3}, \frac{c+e}{3}\right)$ (iv) $\left(\frac{b+d}{2}, \frac{d+f}{2}\right)$

(q) The value of $\sec^2 62° - \operatorname{cosec}^2 28°$ is -
(i) 0 (ii) 1
(iii) 2 (iv) $\sqrt{3}$

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(r) If $\text{cosec}^2\theta\ (1 + \cos\theta)(1 - \cos\theta) = k$, the value of k is -

(i) -1 (ii) 0

(iii) 2 (iv) 1

(s) The radii of two circles are 15 cm and 12 cm respectively. The radius of the circle which has circumference equal to the sum of the circumference of the two circles is -

(i) 17 cm (ii) 27 cm

(iii) 37 cm (iv) 47 cm

(t) The total surface area of a cuboid is -

(i) $2(l \times b \times h)$ (ii) $2(l + b + h)$

(iii) $2(lb+bh+lh)$ (iv) $2(l^2+b^2+h^2)$

(u) If two solid hemispheres of same base radius r are joined together along their bases, then curved surface area of this new solid is -

(i) $4\pi r^2$ (ii) $3\pi r^2$

(iii) $6\pi r^2$ (iv) $8\pi r^2$

(v) The formula for finding the total surface area of a right circular cone is -

(i) $\pi l(r + h)$ (ii) $\pi h(r + l)$

(iii) $\pi r(l + h)$ (iv) $\pi r(l + r)$

(w) The area of a square inscribed in a circle of radius 5 cm is -

(i) 75 cm^2 (ii) 50 cm^2

(iii) 40 cm^2 (iv) 25 cm^2

(x) A die is tossed once. The probability of getting a prime number is -

(i) $\frac{1}{2}$ (ii) $\frac{1}{3}$

(iii) $\frac{1}{4}$ (iv) $\frac{1}{6}$

2. Answer the following: $10\times2=20$

(a) A and B together can finish a piece of work in 30 days. They worked together for 20 days and then A left. After another 20 days, B finished the remaining work. In how many days B alone can finish the piece of work ?

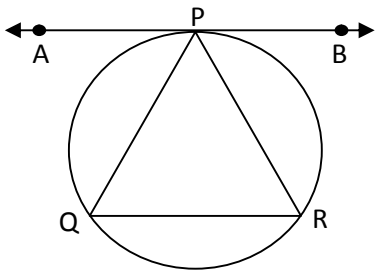
(b) Solve : $3x^2 + 10x - 8 = 0$

(c) What should be added to $\frac{6}{(x+1)\,(x+2)}$ to obtain $\frac{18}{x^2+x-2}$?

(d) The 8^{th} term of an AP is 31 and its 15^{th} term is 16 more than the 11^{th} term. Find the first term.

(e) Prove that the angles in the same segment of a circle are equal.

(f) In the given figure, APB is the tangent at P to the circumcircle of ΔPQR. If APB is parallel to QR. Prove that PQ = PR.



(g) A(x, 3) and B(4, 7) are the two end points of a diameter of a circle with centre O(3, 5). Find the value of x.

(h) Evaluate : $\left(\frac{cos7\ 4^{\circ}}{sin16^{\circ}}\right)^2 + \left(\frac{cos51^{\circ}}{sin39^{\circ}}\right)^2 - 4\sin^2 45^{\circ}$

(i) A metallic sphere of radius 4.2 cm is melted and recast into the shape of cylinder of radius 6 cm. Find the height of the cylinder.

(j) Draw a Pie-chart showing the following information. The table shows the colours preferred by a group of people.

Colours	No. of people
Blue	40
Green	30
Red	30
Yellow	20

3. Mr. Sanga borrowed Rs.1360 at 12 % per annum, compounded annually. He paid it back in 2 years in two equal annual instalments. Calculate the value of each instalment. 3

4. (a) Find the HCF and LCM of $2x^2 - 5x - 3$ and $x^4 - 27x$ 3

OR

(b) The perimeter of a rectangular field is 80 m and its area is 400 m^2. Find the length and breadth of the field. 3

5. (a) Prove that the length of tangents drawn from an external point to a circle are equal. 3

OR

(b) Prove that a cyclic parallelogram is a rectangle. 3

6. Name the type of a quadrilateral having vertices A(−1, 0), B(3, 1), C(2, 2) and D(−2, 1) 3

7. Prove that :

(a) $\frac{cos^2\theta}{(1-tan\theta)} + \frac{sin^3\theta}{(sin\theta-cos\theta)} = (1 + sin\theta.cos\theta)$ 3

8. The angles of elevation of the top of a tower from two points at distances 'a' and 'b' from its foot are complementary. Prove that the height of the tower is $\sqrt{ab}$ 3

9. A solid wooden toy is in the shape of a right circular cone mounted on a hemisphere. If the radius of the hemisphere is 7 cm and the total height of the toy is 17 cm. Find the volume of the wooden toy. 3

10. Solve the following system of equations graphically :

$2x + 3y = 8$, $x - 2y = -3$.

Shade the region bounded by these lines and the y-axis. 5

11. (a) Using ruler and compass only, construct a ΔABC in which BC = 6.5 cm, $\angle A = 60°$ and the median from A on BC is 5 cm long. Also, write the steps of construction. 5

OR

(b) Using ruler and compass only, draw a circle of radius 2.9 cm and take a point P at a distance of 5 cm from the centre of the circle. Without using the centre of the circle, draw two tangents from the point P. Also, write the steps of construction. 5

12. Find the Median of the following frequency distribution: 5

C.I.	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	6	9	14	12	19	10

Also, find the mean using empirical formula, given that the mode for the above data is 44.3

SCIENCE
(Theory)
SAMPLE QUESTION PAPER
Full Marks – 70
Time – 3 Hours

General Instructions :

(i) All questions are compulsory.
(ii) All diagrams should be drawn neatly.
(iii) Write the number and sub-number of the question before attempting it.
(iv) Figures in the margin indicate marks.

SECTION – A (PHYSICS) 24 Marks

1. Choose the correct answer: 6×1 = 6

(a) The magnification produced by a plane mirror is

(i) +10 (ii) 0 (iii) infinity (iv) +1

(b) If a ray of light passes normally at right angles from one medium to another medium, the angle of refraction is

(i) 90° (ii) 45° (iii) 0° (iv) none of these

(c) Due to the atmosphere, the sky looks

(i) black (ii) blue (iii) green (iv) yellow

(d) Power of a device can only be calculated by

(i) amount of electrical energy supplied
(ii) amount of electrical energy consumed
(iii) amount of energy consumed and time taken
(iv) amount of time taken

(e) Resistivity of a wire depends upon the

(i) length (ii) shape (iii) thickness (iv) none of these

(f) The rule used to find the direction of force on a current carrying conductor in a magnetic field is

(i) Maxwell's thumb rule (ii) Fleming's left hand rule
(iii) Fleming's right hand rule (iv) Clock rule

2. If the image formed by a mirror is always virtual, what type of mirror is it ? 1

3. What is an ammeter ? How is it connected in a circuit ? 2

4. Why does the sun appear reddish early in the morning ? 2

5. (a) Write any three uses of concave mirrors. 3

OR

(b) What is dispersion of light ? Explain with the help of a diagram. 2+1=3

6. (a) Two bulbs rated 100 w is at 220 V and 200 w at 220 V are connected in parallel to a 220 V line. What total current is drawn by them ? 3

OR

(b) Calculate the resistance of an electric bulb which uses 15 A current when connected to a 220 V source. 3

7. (a) With the help of a ray diagram, determine the nature, size and position of the image formed by a convex lens when the object is placed between f and 2f.

1½+½+½+½=3

OR

(b) With the help of a ray diagram, determine the nature, size and position of the image formed by a concave mirror when the object is placed beyond C.

1½+½+½+½=3

8. (a) Explain the working of an electric motor with the help of a labelled diagram.

3+1=4

OR

(b) Describe an experiment to show that a force is experienced by a current carrying conductor when placed in a magnetic field with the help of a diagram. 3+1=4

SECTION-B (CHEMISTRY) 23 Marks

9. Choose the correct answer : 5×1=5

(a) Which one of the following metals will not liberate hydrogen gas when treated with dilute hydrochloric acid ?

(i) Magnesium (ii) Zinc (iii) Copper (iv) Iron

(b) What is the pH of a solution which turns red litmus blue ?

(i) 2 (ii) 4 (iii) 7 (iv) 8

(c) If a member of alkane group have 25 carbon atoms. Its formula will be

(i) $C_{25}H_{48}$ (ii) $C_{25}H_{50}$ (iii) $C_{25}H_{52}$ (iv) $C_{25}H_{100}$

(d) The only non- metal which exist in liquid at room temperature is

(i) Flourine (ii) Bromine (iii) Mercury (iv) Iodine

(e) Which one of the following compound has a triple bond ?

(i) C_2H_2 (ii) C_5H_{12} (iii) C_4H_{10} (iv) C_4H_8

10. How does the valency of elements change on moving from left to right in the third period of the periodic table ? 1

11. What is Homologous series ? 1

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12. Draw any structural isomer of pentane. 1

13. An atom X has electronic configuration 2,8,7 2

(i) What is its atomic Number ?

(ii) What is its valency ?

14. Give reason why Aluminium is a highly reactive metal, yet it is used for making cooking utensils. 2

15. What is Baking soda ? Write two uses of Baking Soda. 2

16. Explain the mechanism of the cleansing action of soap. 2

17. (a) (i) Show the formation of Na_2O by the transfer of electrons between the combining atoms. 1

(ii) How is it that ionic compounds in solid state do not conduct electricity but they do so when they are in molten state ? 1

(iii) Why are ionic compounds usually hard ? 1

OR

(b) A compound which is prepared from gypsum has the property of hardening when mixed with proper quantity of water.

(i) Identify the compound 1

(ii) Write the chemical equation of its preparation. 1

(iii) Mention one important use of the compound. 1

18. (a) State Modern Periodic Law. Explain briefly the achievement of the modern periodic table. 1+3=4

OR

(b) Iron articles are shiny when new, but get coated with reddish brown powder when left for sometime. Give reason. What type of chemical reaction is involved in the corrosion of iron ? 2+2 =4

SECTION-C (BIOLOGY) 23 Marks

19. Choose the correct answer : 3×1=3

(a) Role of oxygen in photosynthesis is as

(i) a reactant (ii) food (iii) a catalyst (iv) a by-product

(b) The digested food is mainly absorbed by

(i) Stomach (ii) duodenum (iii) small intestine (iv) colon

(c) Artery is differentiated from vein in having

(i) Strong muscular wall (ii) narrow lumen

(iii) pigmented wall (iv) non-pigmented wall

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20. Name the structural and functional unit of kidney. 1

21. In which part of Sweet Potato vegetative propagation takes place ? 1

22. Where are genes located ? 1

23. Write the sequence of the passage of air in the body. 2

24. State any two significance of a food chain. 2

25. (a) How does excretion take place in a plant ? 3

OR

(b) Write two differences between aerobic and anaerobic respiration. List the end products for each. 2+1=3

26. Mention any three general practices that may help in protecting our environment. 3

27. What is heredity? Describe how the sex of the offspring is determined in the zygote in human beings. 1+2=3

28. (a) What is pollination? Differentiate between self-pollination and cross-pollination. Name the agents of pollination. 1+2+1=4

OR

(b) (i) Name two methods of fertilization that take place in animals. Give one example each. 1+1=2

(ii) Draw a diagram of a flower to show its male and female reproductive parts. 2

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Total number of printed pages – 3 **HS/004**

SOCIAL SCIENCE
SAMPLE QUESTION PAPER
Full Marks – 80
Time – 3 Hours

General Instructions :
(i) Answer all the questions.
(ii) Write the number and sub-number of the question before attempting it.
(iii) Figures in the margin indicate marks.

INDIA AND THE CONTEMPORARY WORLD – II (24 marks)

1. Answer the following questions briefly : 4x1=4
   (a) During which year were the Bourbons replaced by the Orleanists under Louis Phillippe?
   (b) Which trinity of great names stands in the forefront of Italy's unification?
   (c) What was the Inland Emigration Act of 1859?
   (d) Write one invention made in the textile industry.

2. Choose the correct answer : 4x1=4
   (a) The ideologies of nationalism and liberalism were a product of
   (i) The Indian war of Independence (ii) The first war of Independence
   (iii) The Industrial Revolution
   (b) The French Revolution pioneered and popularised the following principles:
   (i) Democratic rights (ii) Republican rights
   (iii) Liberty, equality and fraternity
   (c) Satyagraha was
   (i) Pure soul force (ii) Force of arms
   (iii) Power of truth (iv) Weapon of the weak
   (d) Who improved the steam engine?
   (i) Samuel Luke Fildes (ii) Bhai Bhosle
   (iii) James Watt (iv) None of these

3. Why did the rich peasants join the Civil Disobedience Movement ? 2
4. What were the advantages of the Bretton Woods System ? 2
5. What was the Great Depression ? 2
6. Give the reasons for the decline of India's textile industry during the colonial period. 3
7. What does EFTA stand for ? Why was it formed ? 1+2=3
8. (a) Why was the Non-Cooperation Movement called off by Gandhiji ? State four reasons. 4

OR

   (b) Explain the various other movements associated with the Civil Disobedience Movement. 4

INDIA - RESOURCES AND THEIR DEVELOPMENT (27 marks)

9. Answer the following questions briefly : 5x1=5
   (a) What are resources ?
   (b) Define biodiversity.
   (c) Which source of power is also known as 'black gold' ?
   (d) What are minerals ?
   (e) What is transportation ?

10. Choose the correct answer : 4x1=4

(a) One of the following methods help to conserve the soil

(i) Overgrazing (ii) Afforestation

(iii) Mining (iv) Soil erosion

(b) Shifting Cultivation is also known as

(i) Slash and fire agriculture (ii) Slash and hash agriculture

(iii) Slash and burn agriculture (iv) Hash and fire agriculture

(c) Iron is an example of a

(i) Placer deposit (ii) Source of energy

(iii) Non-metallic mineral (iv) Metallic mineral

(d) The fastest and most comfortable mode of transport is

(i) Air transport (ii) Road transport

(iii) Water transport (iv) Railways

11. How do forests purify the air we breathe ? 2

12. Distinguish between hydel power and thermal power. 2

13. Give the economic significance of transport and communication. 2

14. Why is it necessary to understand the land use pattern of our country ? 3

15. (a) What are the geographical conditions required for the cultivation of Tea. Mention any one state where tea is cultivated. 3+1=4

OR

(b) What measures will you suggest to improve the Indian agricultural scenario ? 4

16. Draw an outline map of India and insert the following : 2+ ½ + ½ + ½ + ½ + ½ + ½=5

(a) New Delhi (b) Chilka Lake (c) River Brahmaputra

(d) Nilgiri Hills (e) Thar Desert (f) Satpura Range

DEMOCRATIC POLITICS – II (12 marks)

17. Choose the correct answers : 3x1=3

(a) A holding together federation would also be found in _____ apart from India

(i) Pakistan (ii) Bhutan

(iii) Australia (iv) China

(b) Indian democracy follows

(i) One-party system (ii) National party system

(iii) Two-party system (iv) Multi-party system

(c) Anti-Arrack movement was led by women in

(i) Andhra Pradesh (ii) Maharashtra

(iii) Haryana (iv) Assam

18. Suggest two ways to reform politics in India. 2

19. How serious is the problem of corruption in India? 3

20. (a) What do you understand by horizontal sharing of power ? 4

OR

(b) Compare and contrast a hung parliament and a coalition government. 4

UNDERSTANDING ECONOMIC DEVELOPMENT - II (12 marks)

21. Choose the correct answer : 3x1=3

(a) Development of a country can be indicated by

(i) Literacy rate of the population (ii) Health status of the people

(iii) Per capita income (iv) All the three above

(b) Which of the following is not the function of money?

(i) A store of value (ii) A measure of economic activity

(iii) A medium of exchange (iv) A measure of value

(c) National Consumers' Day is celebrated on

(i) 15 March (ii) 24 March

(iii) 15 December (iv) 24 December

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22. What is meant by life expectancy ? 2
23. Distinguish between formal sector and informal sector institutions. 3
24. (a) Explain four reasons for the exploitation of consumers at the hands of the suppliers of product. 4

OR

(b) Briefly describe four rationale and salient features of Consumer Protection Act, 1986. 4

DISASTER MANAGEMENT (5 marks)

25. When and where was the Earth Summit held ? 1
26. What is meant by a disaster ? 2
27. State two principles that a rescuer should follow. 2

MIZO
SAMPLE QUESTION PAPER
Full Marks – 80
Time – 3 Hours

Inhriattirna :
(i) Zawhna zawng zawng hi chhan ngei ngei tur a ni.
(ii) Zawhna tin mark put zat chu a zawnah tarlan zel a ni.
(iii) Chhan dawnin zawhna nambar ziah zel tur a ni.

THEN KHATNA – HLA (18 Marks)

1. A dik zawk thlang chhuak rawh : 3x1= 3
   (a) Lalpa *chawimawi / fak* nan awte chhuah r'u.
   (b) 'Zofate inpumkhatna' tih hla phuahtu chu *C. Durthanga / C. Chhuanvawra* a ni.
   (c) 'Lenrual' tih hla thu awmzia chu *unaute / thiante* a ni.

2. (a) A hnuaia hla thu hi Mizo tawng tluang pangngaiin dah rawh : 2
   Liam mah se zalam phei chu,
   Chhingmit thla a ral chuang lo.

   (b) 'Chhul khat kual tih hla phuahtuin kan hnam himna tur nia a sawite kha han sawi teh. 2

3. (a) A tobula chhuiin hrilh fiah rawh : 3
   Ka thai chang mah lo la, khiangawi mi tawnah,
   Hmangaih lung i dum phawt chuan lawm zel ta'ng le.

   (b) 'Zo bawmtu chhawkhlei par' tih hla phuahtu hian, '*chuan ka nuam ngei e'* a tih hi khawi lai hmun nge sawi la, chhawkhlei par mawizia hla thu tlawh chhanin han sawi teh. 1+2= 3

4. *'Kawltu chawi nun iang chu zirlaite '*. He hla thu hi eng hla atanga lak chhuah nge a nih? Kawltu chawi chu tute nge an nih? Kawltu chawi nun leh zirlaite nun inanna hla thu beh chhanin han sawi teh. 1+1+3= 5

THEN HNIHNA – THU (18 Marks)

5. Kualkhung chhunga sawi ang zel hian chhang rawh: 5x1= 5
   (a) Hmangaihna hi a ropui hle tak naa, min *hruai sualtu/khaw lotu* a ni. (A dik zawk thlang chhuak rawh)
   (b) 'Thalaite Khawvel' tih ziaktu chu *Zikpuii Pa* a ni. (A dik nge dik lo sawi rawh)
   (c) Hnuaihnung thu ep (opposite) chu _____ a ni. (rethei/pachhia/challang)
   (d) Hmeichhe sualin laina an _____ . (Mizo thufinga ziak ang chiahin dah khat rawh)
   (e) Favang thlen dawnah *tlangsam/anthur* a par thin. (A dik zawk thlang chhuak rawh)

6. 'Peihna' tih ziaktuin tute thawhrimna nge entawn ila a tih sawi la, rilrua peihna hian innghahna a nei chhawng leh a, chu chu eng nge ni sawi bawk rawh. 1+1= 2

7. (a) Zawlbuk tap chung zawn sang deuh taka dap tah hlai tak an tawn beh kha eng nge ni sawi la, zawlbuk thing fawm an awl theih dan kawng hnih han sawi bawk teh. 1+2= 3

   (b) 'Ral a lian e' tih ziaktuin *ruihhlo* a sawi fiah dan kha han sawi teh. Ruihhlo ngai ni tura kawngka zau ber kha eng nge ni? 2+1= 3

8. *"Tumah hi hlawhchham tura siam kan ni lo va, hlawhtling tura siam vek kan ni",* tih sawitu kha tu nge? Pathianin a tanpui thin kha tute nge? America President hlui Jimmy Cartera'n hlawhtling tura ke a pen dante kha sawi bawk rawh. 1+1+3=5

THEN THUMNA – GRAMMAR (12 Marks)

9. Kual khung chhunga zawhna ang zel hian chhang rawh : 2x1= 2

   (a) Lal *ropui* tak a ni.(Ropui hi Adjective nge Adverb ?)
   (b) Rina chu sikul a kal _____ a haw leh.(Conjunction hmangin dah khat rawh)

10. (a) Verb hrilhfiah la**,** *noun* ni si *verb* anga kan hman thin pakhat hmangin thu phuah bawk rawh. 1+1= 2
    (b) PHEI tih thumal hi Adjective leh Adverb-a hmangin thu phuah rawh. 1+1= 2

11. (a) Khawvar lam arsi ang tih hi _____ sawina a ni.
    (tel ve ziah/arsi eng tak/khat pharh) 1
    (b) Inchen thap hi tawng upain _____ a ni. 1
    (Arpui mei ang/kawi kawm thin ang/tho thil ang)

12. A kar awlte hi a tawngkam dik zawkin dah khat rawh : 2×1= 2

    (a) Rul ka vaw _____ der mai. (hlum/thi)
    (b) Kawng chhukah ka tawlh _____ . (tlu/thlu)

13. Mizo tawng ziak dan dik zawk thlang la, ziak tha rawh : 2×1= 2
    (a) In *chhawlbuk / chhawl buk* chu a nuam hle mai.
    (b) Ka nu chu a *zaidam/ zai dam* khawp mai.

THEN LINA – DRAMA (6 Marks)

14. Kual khung chhunga a dik ber hmangin, a kar awlte hi dah khat rawh : 3×1= 3

    (a) I mi hriat angin i _____ nih chu ka duh ber zawng a nih hi. (hmangaih/thlir/nupui)
    (b) Hrilmawii kidnap-tute khan Hrilmawii tlan nan cheng _____ an phut. (Vaibelchhe khat/vaibelchhe hnih / nuai hnih)
    (c) Hrilmawii ru botute address chu _____ a ni. (Good luck/Bad luck/Venghlui)

15. Hrilmawii tlanna tura an hun tiam ni hnuhnung ber kha eng ni nge sawi la, Rothangliana'n Hrilmawii tlan chhuahsak a tiam avanga Hrilmawii nu Nubuangi'n Rothangliana hnenah eng thu nge a sawi ? 1+2= 3

THEN NGANA - THAWNTHU TAWI (5 Marks)

16. A chhanna dik ber thlang chhuak la, a kar awlte hi dah khat rawh : 2x1= 2

    (a) Ramhuai leh tui huai hnena inthawina hi ____ a ni. (Kel khal/Mubu zial/Daibawl)
    (b) Ral thattu, milu khai neite an tawntir thin chu _____ a ni.
    (Zawngchal / Arkeziak / Thimkual)

17. Lungdup khaw tlangval buan chak ber kha tu nge ni sawi la, lal khawnbawl fa sen thih avanga Lungdup khuaa zualko kalte thuchah ken kha sawi bawk rawh. 1+2= 3

THEN RUKNA – READING (5 Marks)

18. He thu hi ngun takin chhiar la, a thu beh chhan hian a tawpa zawhnate hi chhang ang che :

Harsatna su tlang peih lo chu mi engmah lo; engmah lo ai pawha tlaktlai lo zawk chu a ni. Harsatna kan tawh hian, thlemnaa tluk bo hlen sam tak a ni reng a; mawhphurhna pumpelh a, kawng awlsam lama dawihzep taka relhruk hi thil chakawm lo zawk zawk a ni lo.

Harsatna chhawr thei tur chuan mahni inthunun thei mi nih a ngai a. Mahni inthunun hi kan dam chhunga thil hlu ber pakhat chu a ni ve ngei mai. Mahni inthunun lo chu mi beidawng leh mi hlawhchham an ni fo thin. Mi hlawhtling ni tur chuan mahni inhriat thiamna leh mahni inthlir thiamna neih a ngai a ni.

Harsatna sut kian dan tha tak chu tawrh hi a ni. Miin eng pawh ti sela, tuar a huam loh chuan hlawhtlin harsa a ti hle ang. Thil tiha hlawhtling zel thei tur chuan tawrh a ngai a, dawhtheih pawh a ngai a ni. Harsatna tuar hram hram a, vawi hnih khat hlawhchham hnu pawha huaisen taka bei nawn leh tute chu mi hlawhtling an lo ni a, lawmna an hmu zawk thin. Mi tam tak chu vanduainaa fiaha an awmin an tling zo thin lo va, an tlu leh mai thin. Hei hi dawihzep vang leh zuau vang chauh a ni. Hetiang mite hian hlawhtlinna kawnga mi lo kal turte chu an dal a, tih thaihtute an lo ni thin. Choakten hnang var kual an hmuha an thlawk bo thin ang hian, harsatna su tlang ngam lova, vanneihna kawnga mi lo mute an hmuh chuan bei hramtute pawh an hnungtawlh mai thin. Nimahsela, harsatna su tlang a, hnehtu ropui rawn nite chu mi dangte tan lawm tlak, thik tlak, entawn tlak leh zui tlak an lo ni thin.

Harsatna hi siamtu thil thlawnpek a nih avangin kan lawm tur a ni. Harsatna chhawr thiamtute leh huai taka tawntute chu mi hawhtling an ni fova, malsawmna an dawng bik thin. Nimahsela dawihzep vanga pumpelhna zawngtute chu mi hlawhchham an ni fo. Mihring zinga chhiar tel tlak pawh an ni hek lo.

ZAWHNATE :

(a) Kan dam chhunga thil hlu ber pakhat chu _____ a ni. 1
(b) He thu ziaktuin, ‘Mihring zinga chhiar tel tlak pawh an ni lo’ a tih chu _____te an ni. 1
(c) Thil tiha hlawhtling zel thei tura thil pawimawh chu _____ a ni. 1
(d) Harsatna su tlang a, hnehtu ropui rawn nite chu eng ang mi nge an nih ? 2

THEN SARIHNA – WRITING (8 Marks)

19. A hnuaia thupui i duh zawk hmang hian thumal 200 – 250 velin Essay han ziak teh. 5
(a) Rilru Hriselna leh Lockdown (b) Politics leh Zirlaite

20. In sikul Literature Club Secretary i ni a. In sikul library tih changtlun nan lehkhabu tha engemaw zat lei tul nia in hriat avangin Headmaster hnena theh luh tur dilna han ziak teh. (Hming leh thil dang tul apiang chu phuah chawp mai ang che.) 3

THEN RIATNA – RAPID READING (8 Marks)

21. Chala’n khawiah nge Thangi vakiria a chhar a, khawiah nge a dah that ? 1+1= 2

22. Thangi tana ro hlu tak ai pawha hlu zawk kha sawi la, a hlutna chhan sawi bawk rawh. 1+2= 3

23. Khawnglung an runa zawlbuk an tuam dan kha han sawi teh. 3