## SAMPRF CONHFNTH

# A collection of BOARD QUESTIONS With Solutions 

CHAPTERWISE \& SECTIONWISE COMPILATION OF BOARD QUESTIONS TILL 2023

## SUBJECTS:

## - English Kumarbharati

- हिंदी लोकभारती
- मराठी अक्षरभारती
- Mathematics - I \& II
- Science \& Technology - 1 \& 2
- History and Political Science
- Geography


## Target Publications Pvt. Ltd.

## A collection of Board Questions With Solutions

## STD. X

(English Medium)


## Salient Features

- Subjects covered: English Kumarbharati, Hindi Lokbharati, Marathi Aksharbharati, Mathematics (Part I \& II), Science \& Technology (Part $1 \& 2$ ), History \& Political Science and Geography
- Section-wise \& Chapter-wise segregation of Board Questions along with marks.
- Covers relevant Board Questions of March \& July 2019 and all Board Questions of December 2020, March 2020, 2022, 2023.
- Answers and precise solutions provided to the questions as per latest edition of the textbook.

Printed at: Print to Print, Mumbai

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## PREFACE

Target's 'Board Questions with Solutions: Std. $\mathbf{X}$ ' is a compilation of all the questions (Objective questions, Theory Questions, Numericals, Map Based as well as Graph Based Questions, Grammar and Writing Skills Based Questions) that have been asked in the previous year's SSC Maharashtra Board Papers for English Kumarbharati, Hindi Lokbharati, Marathi Aksharbharati, Mathematics (Part I \& II), Science \& Technology (Part 1 \& 2), History \& Political Science and Geography. The objective of this book is to offer students quick access to previous year's board questions along with their answers.

The section-wise \& chapter-wise segregation of questions enable students gauge the weightage given and type of questions preferred for a chapter. The questions are further separated into different categories: Objective questions (MCQs and other types of questions carrying 1 mark), Theory questions and numericals / map based as well as graph based questions (for relevant chapters and subjects).

Flow of questions is set year wise with questions from the most recent examination placed last in a section. Marks allotted to a question in a section are mentioned next to it. The solutions are precise and supplied with suitable diagrams and graphs. Detailed solutions / explanations are provided to difficult objective questions. Since marks are not allotted in the paper for writing these explanations, these explanations are covered in round brackets.

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## Best of luck to all the aspirants!

Publisher
Edition: Second


#### Abstract

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## CONTENT

|  | Subject | Page No. |
| :---: | :---: | :---: |
| Question No. | English Kumarbharati |  |
| Section I - Language Study |  |  |
| Q. 1 (A) \& (B) | Language Study | 1 |
| Section II - Textual Passages (Reading Skills, Vocabulary and Grammar) |  |  |
| Q. 2 (A) \& (B) | Textual Passages for Comprehension | 5 |
| Section III - Poetry |  |  |
| Q. 3 (A) | Poems for Comprehension | 21 |
| Q. 3 (B) | Poems for Appreciation | 26 |
| Section IV - Non-Textual Passages <br> (Reading Skills, Vocabulary, Grammar, and Summary) |  |  |
| Q .4 (A) \& (B) | Non-Textual Passages for Comprehension and Summary | 31 |
| Section V - Writing Skills |  |  |
| $\begin{aligned} & \text { Q. } 5 \text { (A1) OR } \\ & \text { (A2) } \end{aligned}$ | Letter Writing | 39 |
| $\begin{gathered} \text { Q. } 6 \text { (A1) OR } \\ \text { (A2) } \end{gathered}$ | Information Transfer (Verbal to Non-verbal) <br> OR <br> Information Transfer (Non-verbal to Verbal) | 47 |
| $\begin{gathered} \text { Q. } 6 \text { (B1) OR } \\ \text { (B2) } \end{gathered}$ | Speech Writing OR View and Counterview | 54 |
| Section VI - Creative Writing |  |  |
| $\begin{aligned} & \text { Q. } 7 \text { (A1) } \\ & \text { OR } \\ & \text { Q. } 7 \text { (A2) } \end{aligned}$ | Expansion of Theme OR <br> News Report | 60 |
| $\begin{gathered} \text { Q. } 7 \text { (B1) } \\ \text { OR } \\ \text { Q. } 7 \text { (B2) } \end{gathered}$ | Developing a Story based on the given beginning / ending OR <br> Narrating an Experience based on the given beginning / ending | 64 |
| हिंदी लोकभारती |  |  |
| विभाग 1 - गद्य |  |  |
| प्र.1. (अ) व (आ) | पठित गद्यांश | 68 |
| प्र.1. (इ) | अपठित गद्यांश | 82 |
| विभाग 2-पद्य |  |  |
| प्र.2. (अ) व (आ) | पठित पद्यांश | 88 |
| विभाग 3 - पूरक पठन |  |  |
| प्र.3. (अ) | पठित गद्यांश | 98 |
| प्र.3. (आ) | पठित पद्यांश | 102 |
| विभाग 4-भाषा अध्ययन (व्याकरण) |  |  |
| प्र. 4. | भाषा अध्ययन (व्याकरण) | 107 |
| विभाग 5-उपयोजित लेखन |  |  |
| प्र.5. (अ) | पत्र-लेखन | 112 |
|  | गद्य-आकलन (प्रश्न निर्मित) | 120 |
| प्र. 5. (आ) | वृत्तांत-लेखन | 123 |
|  | कहानी-लेखन | 126 |
|  | विज्ञापन-लेखन | 130 |
| प्र.5. (इ) | निबंध-लेखन | 133 |



|  | Subject | Page No. |
| :---: | :---: | :---: |
| Chapter No. | Science \& Technology Part - 2 |  |
| 1. | Heredity and Evolution | 326 |
| 2. | Life Processes in Living Organisms Part - 1 | 328 |
| 3. | Life Processes in Living Organisms Part - 2 | 330 |
| 4. | Environmental Management | 335 |
| 5. | Towards Green Energy | 338 |
| 6. | Animal Classification | 341 |
| 7. | Introduction to Microbiology | 345 |
| 8. | Cell Biology and Biotechnology | 348 |
| 9. | Social Health | 351 |
| 10. | Disaster Management | 354 |
| History |  |  |
| 1. | Historiography: Development in the West | 356 |
| 2. | Historiography: Indian Tradition | 358 |
| 3. | Applied History | 361 |
| 4. | History of Indian Arts | 364 |
| 5. | Mass Media and History | 366 |
| 6. | Entertainment and History | 369 |
| 7. | Sports and History | 371 |
| 8. | Tourism and History | 374 |
| 9. | Heritage Management | 376 |
| Political Science |  |  |
| 1. | Working of the Constitution | 378 |
| 2. | The Electoral Process | 380 |
| 3. | Political Parties | 382 |
| 4. | Social and Political Movements | 384 |
| 5. | Challenges faced by Indian Democracy | 386 |
| Geography |  |  |
| 1. | Field Visit | 388 |
| 2. | Location and Extent | 390 |
| 3. | Physiography and Drainage | 392 |
| 4. | Climate | 394 |
| 5. | Natural Vegetation and Wildlife | 396 |
| 6. | Population | 398 |
| 7. | Human Settlements | 403 |
| 8. | Economy and Occupations | 406 |
| 9. | Tourism, Transport and Communication | 410 |
| 10. | Map Based Questions (Fill the map) | 413 |

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Q. 1 (A) \& (B) - Language Study

## DO AS DIRECTED (SIMPLE LEVEL ACTIVITIES)

[March 2019]

## A1. Do as Directed (any four out of five):

i. Make a meaningful sentence of your own using the following phrase: 'to look into'
Ans: The authorities are going to look into the matter and resolve it at the earliest.
ii. Pick out the infinitive from the following sentence:
I just had to do it.
Ans: to do - Infinitive
iii. Punctuate the following sentence:
did you hear him he whispered
Ans: "Did you hear him?" he whispered.
iv. Find out two hidden words of minimum four letters from: 'endurance'
Ans: acre, cane, card, care, cure, dare, dear, deer, earn, near, need, race, read, rude, crane, dance, under
(Any two words of minimum 4-letters will be accepted as the answer)
v. Complete the following word chain of verbs:
(1)
write, e $\qquad$
$\qquad$ , $\quad$ ,
Ans: write, emit, train, need, drag
[July 2019]
vi. Pick out the present participle from the sentence:
(1)

I don't like frightening stories.
Ans: frightening - Present Participle
vii. Write the 'root word' of the given word: unable
Ans: able
viii. Choose the appropriate alternative:

Neeta spoke in an $\qquad$ tone.
(excited/excitedly)
Ans: excited
ix. Fill in the blank with the proper form of the verb as per the subject:
(1)

Mother $\qquad$ a good meal. (cook/ cooks)
Ans: cooks
x. Make a meaningful sentence by using the following phrase: to get out of
Ans: Farhaan lied in order to get out of the awkward situation
[March 2020]
xi. Write two compound words of your own. (1)

Ans: blackboard, daylight, notebook
xii. Pick out the gerund from the following sentence:
This attitude of taking destroys families.
Ans: Gerund - taking
xiii. Punctuate the following sentence:
after all he doesnt pay me
Ans: After all, he doesn't pay me.
xiv. Form two present participles in which the last letter is doubled.
Ans: running, swimming, robbing
xv. Complete the following word chain of verbs:
examine, e $\qquad$ ,

Ans: examine, eat, teach, hit, train
[Dec 2020]
xvi. Make a meaningful sentence of your own using the following phrase: 'drop out'

Ans: Many girls drop out of school before the age of 15.
xvii. Pick out the present participle from the following sentence:
His eyes were shining.
Ans: shining - Present Participle
xviii. Fill in the blank with the proper form of the verb given in the bracket:
Either of the two guilty. (is/are)
Ans: Either of the two is guilty.
xix. Form past participle in which the last letter is doubled.
Ans: stop - stopped
xx. Complete the word chain of adjectives:
small, 1 $\qquad$ , $\qquad$ , $\qquad$
Ans: small, large, elegant, tall, loud

Page no. $\mathbf{2}$ to 67 are purposely left blank.
To see complete chapter buy Target Notes or Target E-Notes

## प्र. 1. (अ) व (आ) : पठित गद्यांश

## पहली इकाई

## पाठ २: लक्ष्मी

प्र.1. (अ) निम्नलिखित पठित गद्यांश पढ़कर दी गई सूचनाओं के अनुसार कृतियाँ कीजिए:
दूसरे दिन रहमान सवेरे आठ-नौ बजे के करीब लक्ष्मी को इलाके से बाहर जहाँ नाला बहता है, जहाँ झाड़-झंखाड़ और कहीं दूब के कारण जमीन हरी नजर आती है, छोड़ आया ताकि वह घास इत्यादि खाकर अपना कुछ पेट भर ले। लेकिन माँ-बेटे को यह देखकर आश्चर्य हुआ कि लक्ष्मी एक-डेढ़ घंटे बाद ही घर के सामने खड़ी थी। उसके गले में रस्सी थी। एक व्यक्ति उसी रस्सी को हाथ में थामे कह रहा था- "यह गाय क्या आप लोगों की है?"

रमजानी ने कहा, "हाँ।"
"यह हमारी गाय का सब चारा खा गई है। इसे आप लोग बाँधकर रखें नहीं तो काँजी हाउस में पहुँचा देंगे।"

रमजानी चुप खड़ी आगंतुक की बातें सुनती रही।
दोपहार बाद जब करामत अली ड्यूटी से लौटा और नहा-धोकर कुछ नाश्ते के लिए बैठा तो रमजानी उससे बोली- "मेरी मानो तो इसे बेच दो।"
"फिर बेचने की बात करती हो........? कौन खरीदेगा इस बुढ़िया को।"

1. संजाल पूर्ण कीजिए:

2. केवल एक/दो शब्दों में उत्तर लिखिए:
i. करामत अली इस समय ड्यूटी से लौटा
ii. दूसरों की गाय का चारा खानेवाली
iii. रमजानी इसकी बातें सुनती रही $\qquad$
iv. लक्ष्मी को देखकर आश्चर्यचकित होनेवाले
3. i. वचन परिवर्तन कीजिए:
4. इलाके
5. रस्सी
ii. लिंग परिवर्तन कीजिए:
6. बेटा
7. गाय
8. 'जानवरों के प्रति हमदर्दी' विषय पर अपने विचार लिखिए।

Page no. 69 to 143 are purposely left blank.
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# प्र. 1. (अ) व (आ) : पठित गदय उतारे 

## पाठ 3: शाल

प्र.1. (आ) उतारा वाचून सूचनेनुसार कृती करा:

## 1. वैशिष्टये लिहा:

i. कृष्णा नदीचा प्रवाह
ii. टोपलीत ठेवलेले मूल
iii. लेखकाने सुटकेसमधून काढलेली शाल

- $\qquad$ .
iv. कविवर्य नारायण सुर्वे यांचे कार्यक्रम

पुढे वाईला विश्वकोशाचा अध्यक्ष म्हणून मी गेलो. तिथे नदीकाठच्या प्राज पाठशाळेच्या खोलीत मी राहत असे. खोलीच्या दक्षिणेकडील खिडक्या कृष्णा नदीच्या चिंचोळ्या प्रवाहावर होत्या. थंडीच्या दिवसात एक बाई माइया खिडकीखालील घाटाच्या छोट्या तटावर तिचे छोटे मूल एका टोपलीत ठेवून मासे पकडण्याच्या उद्योगात होती. तिचे बाळ कडाक्याच्या थंडीने कुडकुडत रडत होते; पण आई तिकडे बघतही नव्हती. मला मात्र राहवले नाही. मी सुटकेसमधील ‘पुलकित’ शाल काढली, पाचपन्नास रुपयांच्या नोटा काढल्या व त्या बाईला हाक मारली. खिडकीतून ते सर्व खाली दिले आणि म्हटले, "त्या बाळाला आधी शालीत गुंडाळ आणि मग मासे मारत बैस." या घटनेची ऊब पुलकित शालीच्या उबेपेक्षा अधिक होती.

कविवर्य नारायण सुर्वे खूप सभा, संमेलने गाजवत. पुढे ते साहित्य संमेलनाचे अध्यक्षही झाले. परिणामत: त्यांच्या कार्यक्रमांना अहोरात्र भरतीच असे. प्रत्येक कार्यक्रमात सन्मानाची शाल व श्रीफळ त्यांना मिळत राही. एकदा ते मला म्हणाले, "या शाली घेऊन घेऊन मी आता ‘शालीन’ बनू लागलो आहे."
2. प्रत्येकी एका वाक्यात उत्तरे लिहा:
i. सन्मानाची प्रतीके लिहा.
ii. पाचपन्नास रुपयांच्या नोटा लेखकाने मासे पकडणान्या बाईला का दिल्या असाव्यात?
3. स्वमत:

लेखक - रा.ग. जाधव यांची संवेदनशीलता जाणवणारे कोणतेही एक उदाहरण पाठाच्या आधारे स्पष्ट करा.
[टीप: अद्ययावत कृतिपत्रिका आराखड्यानुसार सदर प्रश्न 3 गुणांकरता विचारला जातो.]
उत्तरे:

1. i. कृष्णा नदीचा प्रवाह
ii. टोपलीत ठेवलेले मूल
iii. लेखकाने सुटकेसमधून काढलेली शाल
iv. कविवर्य नारायण सुर्वे यांचे कार्यक्रम

- चिचोळा.
- छोटे, थंडीने कुडकुडून रडणारे.
- पुलकित.
- अहोरात्र भरती असणारे सन्मानाची शाल व श्रीफळ मिळवून देणारे.

2. i. शाल व श्रीफळ ही सन्मानाची प्रतीके आहेत
ii. त्या बाईकडे बाळाचे थंडीपासून संरक्षण करण्यासाठी पुरेसे कपडे नव्हते व त्याच्याकडे लक्ष द्यायला फुरसतही नव्हती, म्हणून त्या बाईला मदत करण्यासाठी लेखकाने तिला पाचपन्नास रुपयांच्या नोटा दिल्या असाव्यात.

Page no. 145 to 213 are purposely left blank.
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## Q. 1 (A) 1 Mark Questions

1. Find the value of $\left|\begin{array}{cc}5 & 3 \\ -7 & -4\end{array}\right| \quad$ [July 2019]
(A) -1
(B) -41
(C) 41
(D) 1
2. For simultaneous equations in variables $x$ and $y$, if $\mathrm{D}_{x}=49, \mathrm{D}_{y}=-63, \mathrm{D}=7$, then what is the value of $x$ ?
[Mar 2020]
(A) 7
(B) -7
(C) $\frac{1}{7}$
(D) $\frac{-1}{7}$
3. To draw graph of $4 x+5 y=19$, what will be the value of $y$ when $x=1$ : [Dec 2020; Mar 2023]
(A) 4
(B) 3
(C) 2
(D) -3
4. For simultaneous equations in variables $x$ and $y$, $D_{x}=49, D_{y}=-63, D=7$, then what is the value of $y$ ?
[Mar 2022]
(A) 9
(B) 7
(C) -7
(D) $\quad-9$

## Answers

1. (D)
(A)
(B) 4 .
(D)

## Hints:

1. $\left|\begin{array}{cc}5 & 3 \\ -7 & -4\end{array}\right|=5 \times(-4)-3 \times(-7)$

$$
=-20+21=1
$$

2. $x=\frac{\mathrm{D}_{x}}{\mathrm{D}}=\frac{49}{7}=7$
3. Refer Q. 1 (B) Q. 3
4. $y=\frac{\mathrm{D}_{y}}{\mathrm{D}}$

$$
=\frac{-63}{7}=-9
$$

## Q. 1 (B) 1 Mark Questions

1. If $15 x+17 y=21$ and $17 x+15 y=11$, then find the value of $x+y$.
[Mar 2020]

## Solution:

$$
\begin{gathered}
15 x+17 y=21 \\
\\
\\
+17 x+15 y=11 \\
\hline 32 x+32 y=32 \\
\therefore \quad x+y=1
\end{gathered}
$$

2. For simultaneous equations in variables $x$ and $y$, if $D_{x}=25, D_{y}=40, D=5$, then what is the value of $x$ ?
[Dec 2020]
Solution:
Using Cramer's rule, we get
$x=\frac{\mathrm{D}_{x}}{\mathrm{D}}=\frac{25}{5}=5$
3. To draw a graph of $4 x+5 y=19$, find $y$ when $x=1$.
[Mar 2022]

## Solution:

Substituting $x=1$ in $4 x+5 y=19$, we get
$4(1)+5 y=19$
$\therefore \quad 5 y=19-4=15$
$\therefore \quad y=\frac{15}{5}=3$
4. Find the value of the following determinant:

$$
\left|\begin{array}{ll}
4 & 3 \\
2 & 7
\end{array}\right|
$$

[Mar 2023]

## Solution:

$$
\begin{aligned}
& \left|\begin{array}{ll}
4 & 3 \\
2 & 7
\end{array}\right| & =(4 \times 7)-(3 \times 2)=28-6 \\
\therefore & \left|\begin{array}{ll}
4 & 3 \\
2 & 7
\end{array}\right| & =\mathbf{2 2}
\end{aligned}
$$

## Q. 2 (A) 2 Marks Questions

1. Complete the following table to draw the graph of $2 x-6 y=3$ :
[Mar 2020]

| $x$ | -5 | $\square$ |
| :---: | :---: | :---: |
| $y$ | $\square$ | 0 |
| $(x, y)$ | $\square$ | $\square$ |

Ans:

| $x$ | -5 | $\boxed{\frac{3}{2}}$ |
| :---: | :---: | :---: |
| $y$ | $\boxed{\frac{-13}{6}}$ | 0 |
| $(x, y)$ | $\left(-5, \frac{-13}{6}\right)$ | $\left(\frac{3}{2}, 0\right)$ |

Page no. 215 to 252 are purposely left blank.
To see complete chapter buy Target Notes or Target E-Notes

## Q. 1 (A) 1 Mark Questions

1. $\triangle \mathrm{ABC}$ and $\triangle \mathrm{DEF}$ are equilateral triangles, $\mathrm{A}(\triangle \mathrm{ABC}): \mathrm{A}(\triangle \mathrm{DEF})=1: 2$. If $\mathrm{AB}=4$, then what is length of $D E$ ?
[Mar 2019]
(A) $2 \sqrt{2}$
(B) 4
(C) 8
(D) $4 \sqrt{2}$
2. If $\triangle \mathrm{ABC} \sim \Delta \mathrm{PQR}$ and
$4 \mathrm{~A}(\Delta \mathrm{ABC})=25 \mathrm{~A}(\Delta \mathrm{PQR})$, then $\mathrm{AB}: \mathrm{PQ}=$ ?
[July 2019]
(A) $4: 25$
(B) $2: 5$
(C) $5: 2$
(D) $25: 4$
3. $\triangle \mathrm{ABC} \sim \triangle \mathrm{PQR}$ and $\angle \mathrm{A}=45^{\circ}, \angle \mathrm{Q}=87^{\circ}$, then $\angle C=$ $\qquad$ .
[Dec 2020]
(A) $45^{\circ}$
(B) $87^{\circ}$
(C) $48^{\circ}$
(D) $90^{\circ}$
4. If $\triangle \mathrm{ABC} \sim \triangle \mathrm{DEF}$ and $\angle \mathrm{A}=48^{\circ}$, then $\angle \mathrm{D}=$ $\qquad$ .
[Mar 2022]
(A) $48^{\circ}$
(B) $83^{\circ}$
(C) $49^{\circ}$
(D) $132^{\circ}$

## Answers

1. (D)
2. 

(C) 3 .
(C) 4 .
(A)

## Hints:

1. In $\triangle \mathrm{ABC}$ and $\triangle \mathrm{DEF}$,
$\angle \mathrm{A} \cong \angle \mathrm{D}$
 [Each angle is of measure $60^{\circ}$ ]
$\therefore \quad \triangle \mathrm{ABC} \sim \triangle \mathrm{DEF}$
$\ldots$ [AA test of similarity]
$\therefore \quad \frac{\mathrm{A}(\triangle \mathrm{ABC})}{\mathrm{A}(\Delta \mathrm{DEF})}=\frac{\mathrm{AB}^{2}}{\mathrm{DE}^{2}}$
.. [Theorem of areas of similar triangles]
$\therefore \quad \frac{1}{2}=\frac{4^{2}}{\mathrm{DE}^{2}}$
$\therefore \quad \mathrm{DE}^{2}=4^{2} \times 2$
$\therefore \quad \mathrm{DE}=4 \sqrt{2}$ units
...[Taking square root of both sides]
2. $4 \mathrm{~A}(\triangle \mathrm{ABC})=25 \mathrm{~A}(\triangle \mathrm{PQR})$
$\therefore \quad \frac{\mathrm{A}(\triangle \mathrm{ABC})}{\mathrm{A}(\triangle \mathrm{PQR})}=\frac{25}{4}$
$\triangle \mathrm{ABC} \sim \Delta \mathrm{PQR}$
$\therefore \quad \frac{\mathrm{A}(\triangle \mathrm{ABC})}{\mathrm{A}(\Delta \mathrm{PQR})}=\frac{\mathrm{AB}^{2}}{\mathrm{PQ}^{2}}$
$\therefore \quad \frac{25}{4}=\frac{\mathrm{AB}^{2}}{\mathrm{PQ}^{2}}$
$\therefore \quad \frac{\mathrm{AB}}{\mathrm{PQ}}=\frac{5}{2} \quad \ldots$ [Taking square root of both sides]
3. $\triangle \mathrm{ABC} \sim \triangle \mathrm{PQR}$
$\therefore \quad \angle \mathrm{A} \cong \angle \mathrm{P}, \angle \mathrm{B} \cong \angle \mathrm{Q}$ and $\angle \mathrm{C} \cong \angle \mathrm{R}$
$\ldots$ [Corresponding angles of similar triangles]
In $\triangle \mathrm{ABC}, \angle \mathrm{A}+\angle \mathrm{B}+\angle \mathrm{C}=180^{\circ}$
$\therefore \quad 45^{\circ}+87^{\circ}+\angle \mathrm{C}=180^{\circ}$
$\therefore \quad \angle \mathrm{C}=48^{\circ}$
4. $\triangle \mathrm{ABC} \sim \triangle \mathrm{DEF} \Rightarrow \mathrm{m} \angle \mathrm{A}=\mathrm{m} \angle \mathrm{D}$
$\Rightarrow \mathrm{m} \angle \mathrm{D}=48^{\circ}$

## Q. 1 (B) 1 Mark Questions

1. The ratio of corresponding sides of similar triangles is $3: 5$, then find the ratio of their areas.
[Mar 2020]

## Solution:

Let the corresponding sides of similar triangles be $\mathrm{s}_{1}$ and $\mathrm{s}_{2}$.
Let $\mathrm{A}_{1}$ and $\mathrm{A}_{2}$ be their corresponding areas.
$\mathrm{s}_{1}: \mathrm{s}_{2}=3: 5$
...[Given]
$\therefore \quad \frac{\mathrm{s}_{1}}{\mathrm{~s}_{2}}=\frac{3}{5}$
$\frac{\mathrm{A}_{1}}{\mathrm{~A}_{2}}=\frac{\mathrm{s}_{1}{ }^{2}}{\mathrm{~s}_{2}{ }^{2}}$
...[Theorem of areas of similar triangles]

$$
\begin{aligned}
& =\left(\frac{s_{1}}{s_{2}}\right)^{2} \\
& =\left(\frac{3}{5}\right)^{2} \\
& =\frac{9}{25}
\end{aligned}
$$

$\therefore \quad$ Ratio of areas of similar triangles $=9: \mathbf{2 5}$
2. In the given figure, $\operatorname{seg} A B \perp \operatorname{seg} B C$ and $\operatorname{seg} D C \perp \operatorname{seg} B C$.
If $\mathrm{AB}=3 \mathrm{~cm}$ and $C D=4 \mathrm{~cm}$, then find $\frac{\mathrm{A}(\triangle \mathrm{ABC})}{\mathrm{A}(\triangle \mathrm{DCB})}$.

[Dec 2020]

Page no. 254 to 296 are purposely left blank.
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## Objective Questions [1 Mark each]

1. Choose the correct Alternative:
i. The minimum velocity of the spacecraft to escape from earth's gravitational force must be
$\qquad$ .
[Dec 2020]
(A) $112 \mathrm{~km} / \mathrm{s}$
(B) $11.2 \mathrm{~km} / \mathrm{s}$
(C) $1.12 \mathrm{~km} / \mathrm{s}$
(D) $0.112 \mathrm{~km} / \mathrm{s}$

Ans: (B)
2. Answer the following:
i. Write proper answer in the box:

then $\mathrm{F}=$

[Mar 2019]
Ans: $\frac{\mathrm{Gm}_{1} \mathrm{~m}_{2}}{9 \mathrm{~d}^{2}}$

## Theory Questions

1. Explain why value of $\mathbf{g}$ changes if we go inside the earth.
[July 2019] [2 Marks]

## Ans:

i. The acceleration due to gravity (g) on earth's surface is given as, $g=\frac{G M}{R^{2}}$
The value of $g$ depends on the mass $M$ of the earth and the radius R of the earth.
ii. As we go inside the earth, our distance from the centre of the earth decreases and no longer remains equal to the radius of the earth $(\mathrm{R})$.
iii. Along-with the distance, the part of the earth which contributes towards the gravitational force felt also decreases, decreasing the value of (M).
iv. Due to combined result of change in $R$ and $M$, value of $g$ decreases as we go inside the earth and becomes zero at the centre of the earth.
2. Give scientific reasons:

The weight of an object changes from place to place though its mass is constant.
[Mar 2020] [2 Marks]

## Ans:

i. Mass is a fundamental quantity whose value remains same everywhere. Hence, the mass of an object is same everywhere in the universe.
ii. Weight of an object is product of mass and gravitational acceleration, i.e., $\mathrm{W}=\mathrm{F}=\mathrm{mg}$
iii. As the weight depends on the value of acceleration due to gravity (g). Since value of $g$ changes from place-to-place, the weight of the object is different at different places.
3. Observe the given figure showing the orbit of a planet moving around the Sun and write the three laws related to it:
[Mar 2020] [3 Marks]
OR
State the laws related to the given diagram:
[Mar 2022]/3 Marks]


The orbit of a planet moving around the Sun

Ans:
i. Kepler's first law: The orbit of a planet is an ellipse with the sun at one of the foci.
ii. Kepler's second law: The line joining the planet and the sun sweeps equal areas in equal intervals of time.
iii. Kepler's third law: The square of orbital period of revolution of a planet around the Sun is directly proportional to the cube of the mean distance of the planet from the Sun.
4. Distinguish between Mass and Weight.
[Mar 2023] [2 Marks]
Ans:

|  | Mass | Weight |
| :--- | :--- | :--- |
| i. | Mass is the quantity <br> of matter contained <br> in an object. | Weight is the force with <br> which the earth attracts <br> an object. |
| ii. | Mass remains same <br> everywhere. | Weight of a body keeps <br> on changing from place <br> to place. |
| iii. | Mass is measured in <br> kilogram (kg). | Weight is measured in <br> newton (N). |
| iv. | Mass is a scalar <br> quantity. | Weight is a vector <br> quantity. |
| v. | Mass of an object <br> can never be zero. | Weight of an object <br> becomes zero at the <br> centre of the earth. |

(Any four points of difference)

Page no. 298 to 325 are purposely left blank.
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## Objective Questions [1 Mark each]

1. Write the correct alternative:
i. is a connecting link between Annelida and Arthropoda.
[Mar 2019]
(A) Duck-billed platypus
(B) Peripatus
(C) Lungfish
(D) Whale

Ans: (B)
ii. Transfer of information from molecule of DNA to mRNA is called as $\qquad$ process. [Mar 2020]
(A) transcription
(B) translation
(C) translocation
(D) mutation

Ans: (A)
iii. Vestigial organ $\qquad$ present in human body is proof of evolution.
[Mar 2023]
(A) Human hand
(B) Appendix
(C) Ear muscles
(D) Tail-bone

Ans: Above question has three possible answers, [Option (B), (C) and (D)].

The above question has been modified for the better understanding of the student as it has three possible answers.
iii. Vestigial organ $\qquad$ present in
human body is proof of evolution.
(A) Human hand
(B) Appendix
(C) Ear
(D) Tail

Answer for modified question: (B)
2. Name the following:

I am connecting link between Reptilia and mammals. What is my name?
[Mar 2020]
Ans: Duck-billed platypus
3. Write the name of indicated part in diagram:

Human jaw

[Mar 2023]
Ans: Part indicated in the diagram: Wisdom teeth

## Theory Questions

1. i. What do you mean by central dogma?
ii. What is transcription?
iii. What is meant by triplet codon?
[Mar 2019] [3 Marks]

Ans:
i. Central dogma is the process of synthesis of proteins by DNA, through RNA.
ii. Transcription is the process of RNA synthesis.

## OR

Transcription is the process of synthesis of mRNA from DNA.
iii. Three nucleotides which code for each amino acid is known as triplet codon.
2. Complete the following chart.

[Mar 2019] [2 Marks]
Ans:


Vestigial organs and connecting links are the other evidences of evolution.
3. Define vestigial organs. Write any two names of vestigial organs in human body.
[July 2019] [2 Marks]
Ans:
i. Vestigial organs are degenerated or underdeveloped useless organs of organisms.
ii. Appendix, muscle of the ear pinna, tail-bone (coccyx), body hairs, nictitating membrane (third eyelid) and wisdom tooth are the vestigial organs in human body. (Write any two names)
4. Explain with suitable examples importance of anatomical evidences in evolution.
[July 2019] [3 Marks]

## OR

Explain the importance of Anatomical evidences with examples.
[Mar 2020] [3 Marks]

## Ans:

i. Anatomical evidences are the similarities in structures and anatomy between different organisms.
ii. The hand of human, foreleg of ox, flipper of whale and forelimbs of bat appear different superficially or morphologically.

Page no. 327 to 355 are purposely left blank.
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## Objective Questions [1 Mark each]

Q.1. (A) Choose the correct option from the given options and complete the sentences

1. It may be said that $\qquad$ was the founder of modern historiography.
[Mar, Dec, 2020]
(A) Voltaire
(B) René Descartes
(C) Leopold Ranké
(D) Karl Marx

Ans: It may be said that Voltaire was the founder of modern historiography.
Q.1. (B) Identify the wrong pair in the following and rewrite it.
1.
[Mar 2019]

| i. | Georg Wilhelm <br> Friedrich Hegel | 'Reason in History' |
| :---: | :--- | :--- |
| ii. | Leopold von Ranké | 'The Theory and <br> Practice of History' |
| iii. | Herodotus | 'The Histories' |
| iv. | Karl Marx | 'Discourse on the <br> Method' |

Ans: Karl Marx - Discourse on the Method
2.
[Mar 2023]

|  | Thinkers | Country |
| :---: | :--- | :--- |
| i. | Karl Marx | England |
| ii. | Michel Foucault | France |
| iii. | Leopold von Ranke | Germany |
| iv. | Herodotus | Greece |

Ans: Karl Marx - England

## Theory Questions

Q.2. (A) Complete the following concept chart/map:
[2 Marks]
Complete the concept map


## Ans:

i. René Descartes
ii. Leopold Von Ranké
iii. Georg Wilhelm Friedrich Hegel
iv. Voltaire

## v. Karl Marx

vi Simone de Beauvoir
vii Michel Foucault
[Note: Students are expected to write the name of any four notable scholars in Europe.]

## Q.2. (B) Write short notes on: <br> [2 Marks each]

## 1. Annales School

[Dec 2020]

## Ans:

i. Annales School, was a new school of historiography which arose in France at the onset of twentieth century.
ii. It was started by French historians.
iii. It gave a new direction to history writing.
iv. According to this school, history was not only about the political events, kings, great leaders, politics, diplomacy and wars but it also included the climate, local people, agriculture, trade, technology, means of communication, social divisions and their collective psychology, etc. in the historical times.

## 2. Dialectics

[Mar 2023]
Ans:
i. The method of analysis of history based on opposites, as presented by the German philosopher Georg Wilhelm Friedrich Hegel is known as 'Dialectics'.
ii. Hegel proposed that human mind can grasp any event only after understanding its meaning in terms of two direct opposites. For e.g. TrueFalse, Good-Bad, etc.
iii. According to this method, a theory is proposed at the beginning, which is called, 'Thesis' followed by another theory contrary to the thesis, called the 'Antithesis'.
iv. A new thesis is then proposed, after a thorough logical discussion, which includes the gist of both, the thesis and the antithesis. This process of arriving at the new thesis is called, 'Synthesis'.
Q.3. Explain the following statements with reasons:
[2 Marks each]

1. Foucault called his method, 'the Archaeology of Knowledge'.
[Dec 2020]
Ans:
i. In the twentieth century, Michel Foucault, a French historian, brought forth a new concept in historiography.
ii. He rejected the practice of arranging historical events in a chronological order. He explained that archaeology does not intend to reach the ultimate historical truth but attempts to explain various transitions in the past.

Page no. 357 to 377 are purposely left blank.
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## Objective Questions [1 Mark each]

Q.6. Choose the correct option from the given options and complete the sentences:

1. The essence of democracy is $\qquad$ .
[Mar 2019, 2020, 2022]
(A) universal adult franchise
(B) decentralisation of power
(C) policy of reservation of seats
(D) judicial decisions

Ans: The essence of democracy is decentralisation of power.
2. $\qquad$ has a power to make changes in the constitution.
[Dec 2020]
(A) Parliament
(B) Local self-governing institutions
(C) Legislative assembly
(D) Cooperative institutions

Ans: Parliament has a power to make changes in the constitution.
3. Which of the following laws created $a$ favourable environment for women to secure freedom and self-development?
[Mar 2023]
(A) Right to Information Act
(B) Dowry Prohibition Act
(C) Food Security Act
(D) Right to Education Act

Ans: Dowry Prohibition Act created a favourable environment for women to secure freedom and self-development.

## Theory Questions [2 Marks each]

Q.7. State whether the following statements are true or false. Give reasons for your answers:

1. The nature of Constitution is seen as a living document.
[Mar 2019, 2023; Dec 2020]
Ans: The above statement is True.

## Reasons:

i. Indian Constitution is dynamic.
ii. It accepts the necessity of modifications according to changing needs of the society. These changes can be brought about by the process of amendment.
iii. The Parliament has the power to make these changes. But the judiciary has declared that the parliament while amending the Constitution should not alter the 'basic structure' of the Constitution.
Therefore, it can be said that the Constitution is a living document rather than a closed and static rulebook.
2. Indian democracy is considered the largest democracy in the world.
[Mar 2020]
Ans: The above statement is True.

## Reasons:

i. In democracy, there is direct representation of the Indian people in the Parliament, State legislature and local government.
ii. Free and fair elections are held at regular intervals in democracy. Everyone has the right to vote irrespective of religion, gender, caste, etc.
iii. Earlier the voting age was 21 years. It was later reduced to 18 years. This lowering of voting age led to an increased participation of younger generation in the political process. Today, India has the largest number of voters compared to any other democratic nation.
Therefore, Indian democracy is considered as the largest democracy in the world.
3. The judgements of court on various subjects have made the political process in India more mature.
[Mar 2022]
Ans: The statement is True.
Reason:
i. The protection provided to the citizens by fundamental rights in the constitution has been made more meaningful through various decisions of judiciary.
ii. Some of the important subjects on which the court has given judgements include rights of children, protection of human rights, protection of the honour and dignity of women, individual freedom, and tribal empowerment.
Therefore, the judgements of court on various subjects have made the political process in India more mature.

## Q.8. (A) Write the following concept:

## 1. Right to Information

[Mar 2019, 2020]
Ans:
i. In 2005, the Parliament of India enacted a new legislation called the 'Right to Information Act'.
ii. The main objective of the Right to Information Act is to empower the citizens, promote transparency and accountability in the working of the Government and make our democracy work for the people in real sense.
iii. It increases people's participation in administration. It also makes administration more responsive to the requirements of people. This increased communication between citizens and government helps in strengthening democracy and in building a relationship of trust between them.

Page no. $\mathbf{3 7 9}$ to $\mathbf{3 8 7}$ are purposely left blank.
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## Objective Questions [1 Mark each]

## Q.1. Identify the odd man out:

1. Main purpose of field visit:
[Dec 2020]
i. Geographical
ii.
Historical
iii. Entertainment
iv. Cultural

Ans: Entertainment
Q.2. State whether the sentences are right or wrong. Correct the wrong ones:

1. During field visit, vegetation is not the indicator of difference in precipitation.
[Mar 2019]
Ans: Wrong
During field visit, vegetation is the indicator of difference in precipitation.
Q.3. Match the following:
[Mar 2022]

|  | 'A' |  | 'B' |
| :---: | :---: | :---: | :--- |
| (1) | Field Visit <br> (Chapter. 1) | (i) | Tourist place |
| (2) | Pico De Nebline <br> (Chapter. 3) | (ii) | Goa |
| (3) | Most Urbanised State <br> (Chapter. 7) | (iii) | Sample <br> questionnaire |
| (4) | Rio de Janeiro <br> (Chapter. 9) | (iv) | Himachal <br> Pradesh |
|  | (v) | Highest peak in <br> Brazil |  |

## Ans:

|  | 'A' |  | 'B' (Answers) |
| :---: | :--- | :---: | :--- |
| (1) | Field Visit | (iii) | Sample <br> questionnaire |
| (2) | Pico De Neblina | (v) | Highest peak in <br> Brazil |
| (3) | Most Urbanised <br> State | (ii) | Goa |
| (4) | Rio de Janeiro | (i) | Tourist place |

[Note: The included sub-questions in the above question are from various chapters, therefore we have given the no. of chapters along with each sub-question for better understanding.]

## Theory Questions

## Q.4. Write short notes:

[2 Marks]

## 1. Items to be carried for a field visit

[Mar 2023]
Ans: The aim of field visit is to gain geographical information of any region firsthand. So for a field visit, the following things should be carried:
i. Identity card
ii. Notebook and questionnaire
iii. Pen
iv. Pencil
v. Ziplock bags to collect samples
vi. Camera
vii. Binoculars
viii. Magnetic compass
ix. Map of the place
$x$. Information booklet about the place
to be visited
xi. First aid kit
xii. GPS enabled mobile phone
xiii. Cap
xiv. Water bottle, etc.
Q.5. Answer the following:
[4 Marks each]

1. How will you manage the litter during the field visit?
[Mar 2019]
Ans:
i. It is our social responsibility to ensure that the cleanliness and sanctity of the place of visit is not disturbed during our visit.
ii. So during field visit, we must ensure that we do not throw trash or litter around us.
iii. We must use the dustbins for throwing empty packets of snacks, empty water bottles, left-over food items, etc. Also, we must try to segregate dry and wet waste.
iv. We must carry huge garbage bags so as to use them to collect trash in absence of a dustbin or if the dustbin is overflowing with garbage. This garbage bag can be disposed later.
2. Prepare a questionnaire for a field visit to a sugar factory.
[Dec 2020]
Ans: A questionnaire for a field visit to a factory will be as follows:
i. When was the factory established?
ii. Which product is manufactured in the factory?
iii. Where does the raw material required for the production come from?
iv. Who provides water supply to the factory?
v. In which market is the final product sold? How far is this market from the factory?
vi. While setting up this factory, how many workers were provided with the means of livelihood?
vii. Which are the various roadways or railways that can be used to reach the factory?
viii. What provisions have been made for the betterment of workers?

Page no. 399 to 417 are purposely left blank.
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