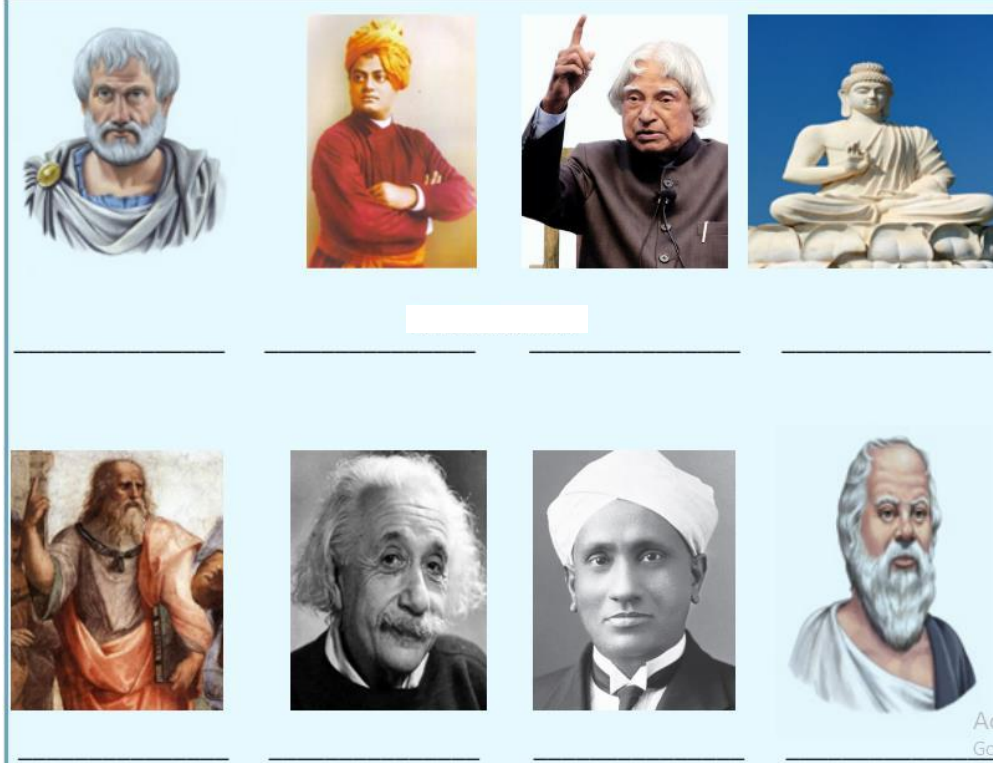


Unit - 3

Sir Isaac Newton – The Ingenious Scientist

Warm Up (Text Book Page No. 63)

In pairs, identify the great thinkers of the world and write the names from the box. (Text Book Page No. 63)



Aristotle
அரிஸ்டாடில்



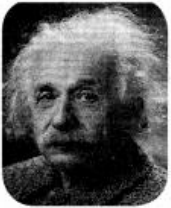
Vivekananda
விவேகானந்தா



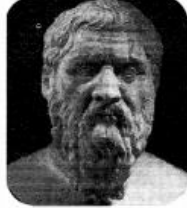
A.P.J. Abdul Kalam
ஏ.பி.ஜே. அப்துல் கலாம்



Buddha
புத்தர்



Einstein
ஐன்ஸ்டீன்



Socrates
சாக்ரேட்ஸ்



C.V. Raman
சி.வி. ராமன்



Plato
ப்ளேடோ

Section - I

Textual Exercise (Text Book Page No. 66)

Read and Understand (Text Book Page No. 66)

A. Fill in the blanks.

1. Isaac Newton was born at

Answer:

Woolsthorpe

2. Grandmother was advised to apprentice him to a

Answer:

clockmaker

3. Isaac made a clock, by the dropping of

Answer:

water

4. The sun-dial made by Isaac is still in existence at

Answer:

Woolsthorpe

5. Isaac constructed a model of the

Answer:

windmill

B. Choose the correct synonyms for the italicized words.

1. Isaac was chiefly remarkable for his ingenuity.

a) common

b) notable

c) neglected

d) unknown

Answer:

b) notable

2. He will make a capital workman.

a) wealth

b) excellent

c) profitable

d) head

Answer:

d) head

3. Nobody could tell what the sunshine was composed of.

- a) made
- b) known
- c) full
- d) felt

Answer:

- a) made

4. But he cared little for earthly fame and honors.

- a) disrespect
- b) attraction
- c) proud
- d) popularity

Answer:

- a) disrespect

Section - II

Textual Exercise (Text Book Page No. 69)

Read and Understand (Text Book Page No. 69)

A. Choose the correct Synonyms for the italicized word.

1. His Grandmother was very kind to him.

- a) affectionate
- b) loving
- c) disrespectful
- d) cruel.

Answer:

- d) cruel

2. The boy seemed to have a taste for mathematics.

- a) delicious
- b) sweet
- c) dislike
- d) against

Answer:

- c) dislike

3. Isaac possessed a wonderful faculty of acquiring knowledge.

- a) owned
- b) controlled
- c) lacks
- d) have

Answer:

c) lacks

4. He was observed to be usually busy with his tools.

a) common

b) rarely

c) unwantedly

d) usually

Answer:

b) rarely

B. Answer the following questions in one or two. (Text Book Page No. 70)

1. Who was taking care of Newton after his father's death?

Answer:

His grandmother was taking care of Newton after his father's death.

2. What did Isaac manufacture at his young age?

Answer:

Issac manufactured many curious articles at a young age.

3. How did the young boy find the strength of the wind?

Answer:

The young boy found the strength of the wind by first jumping against the wind. According to the length of his jump, he could calculate the force of a gentle breeze, a brisk gale or a tempest.

4. Why were his friends attracted by the windmill?

Answer:

The playmates of Newton were attracted by the model of windmill. They thought it to be pretty and wonderful.

5. How was Newton honored by the king?

Answer:

Newton was made a Member of the Parliament and received the honour of knighthood from the king.

C. Answer the following in about 100 words.

1. Why did Newton's friends advise his grandmother to apprentice him to a clockmaker?

Answer:

Issac seemed to have taste for mathematics besides his mechanical skills. His taste for Maths would be useful to him in clock making. Issac made a kind of clock which would work by the dropping of water. Besides the water clock, Issac made a sun-dial. The sundial

is said to be in still in existence at Woolsthorpe, on the corner of the house where Issac dwelt.

2. How did Newton learn about the way a windmill operated?

Answer:

Newton frequently went to the windmill that operated on a new plan. He spent hours examining the various parts of the windmill. When the mill was not working, he examined its internal machinery. When the windmill's broad sails were in motion by the wind, Newton examined the process by which the mill-stones revolved and crushed the grains, put into its hopper. Thus Newton gained a thorough knowledge of the construction and operation of the windmill.

3. Mention some of Newton's inventions.

Answer:

Reflecting telescope, laws of motion, law of gravity are the famous inventions of Sir Issac Newton. He also discovered Calculus. He was the first one to find out the nature of light. He searched out the laws by which the planets are guided through the sky.

Vocabulary (Text Book Page No. 70)

Prefix and Suffix

a. Underline the prefix in each word in the boxes: (Text Book Page No. 71)

unlock	rewrite	dislike	unsafe	remix	relocate
distrust	untrue	unhook	unlucky	disown	disclose
<u>un</u> lock	<u>re</u> write	<u>dis</u> like	<u>un</u> safe	<u>re</u> mix	<u>re</u> locate
<u>dis</u> trust	<u>un</u> true	<u>un</u> hook	<u>un</u> lucky	<u>dis</u> own	<u>dis</u> close

b. Pick a suitable Prefix and suffix from the given box and complete the following words:

able, ful, ly, sub, ion, un, tri, re, im, mis

____call	comfort____
____category	____understand
____proper	success____
equal____	____colour
construct____	new____

<u>re</u> call	Com <u>for</u> table
<u>sub</u> category	<u>mis</u> understand
<u>Im</u> proper	Success <u>ful</u>
Equ <u>ally</u>	<u>Tri</u> colour
Construction <u>ion</u>	New <u>ly</u>

Syllabification

Syllabify the words: (Text Book Page No. 73)

1. education - 4 Syllables
2. school - 1 Syllable
3. college - 2 Syllables
4. English - 2 Syllables
5. opportunity - 4 Syllables
6. friend - 1 Syllable
7. teacher - 2 Syllables
8. simultaneously - 6 Syllables
9. laboratory - 4 Syllables
10. beneficiary - 5 Syllables

Listening (Text Book Page No. 74)

Listen to the passage carefully and write the answer.

Note: The listening passage is given on page no. 227

Questions:

1. Name the scientist.

Answer:

The name of the scientist was Sir Alexander Fleming.

2. What did he discover?

Answer:

He discovered Penicillin.

3. Who approached the scientist?

Answer:

Two journalists approached the scientist.

4. What was the question by the journalist?

Answer:

The journalists wished to know what a great scientist would think before his breakfast.

5. When did they meet the scientist?

Answer:

They met the scientist when he was about to have his breakfast.

Speaking (Text Book Page No. 74)

Take a few minutes and make hints of the picture. Arrange your thoughts. Using the points you write, deliver a small speech focusing the issue pictured here. Give an interesting and informative speech. Your speech should include the cause and the solution.



Tips for effective speaking:

- Organise your points and ideas well.
- Don't memorise the speech. If you forget a point, it will make you nervous.
- Avoid the things that are of no value or interest to the audience.
- Before you speak, take a deep breath, smile, greet the audience.
- Don't be nervous about making a mistake.
- Interesting speech makes your mistakes nothing.

In this picture, we see a number of chimneys emitting smoke. These buildings may be factories or mills. There are green lawns and a few trees found in this picture. We also see a number of vehicles on the road. The smoke from the factories and vehicles create air pollution and noise pollution. There is a water source and dumping of garbage is found in the lower part of the picture. The garbage will make the water polluted. Water is already scarce in our towns. We must take serious remedial measures against air pollution, water pollution, and noise pollution to save our environment. We must promote eco-friendliness in the young minds.

Writing (Text Book Page No. 75)

H) Write a character sketch of any character from a fiction that has made an impact on you.

Headings:

1. Introduction of the person:

Answer:

Jane, an orphan, the heroine of the fiction, 'Jane Eyre' written by Charles Bronte is my favorite character.

2. Character:

Answer:

Jane a poor orphan, who lost both her parents at an early stage suffer hell at the house of her uncle Mr. Reed. Mr. Reed died. He liked her very much. Even when he died he asked his wife to promise of taking care of her after his death. Still, Mrs. Reed never liked Jane. Jane was treated cruelly by the children of Mrs. Reed. Once, Mrs. Reed sent Jane to a charity school at Lowood.

3. Talk about what others say about the character :

Answer:

The servant-maid Bessie sympathised with Jane for her sufferings. Miss. Temple and Miss. Miller's teachers of the charity school at Lowood took pity on her. They felt she was too young to be sent alone like that. They thought since she knew reading and writing she would do well in her studies.

4. Write if the character appealed to you, with reasons:

Answer:

Definitely, the character of Jane is impressive. She lost her parents. She was an orphan. She was tormented in her aunt's house. The school she studied gave her semi-starvation and unbearable cold environment. In the bathroom, they had only frozen water. In spite of the ordeal, Jane got educated. She started working as a teacher in the same school. She got an appointment as a governess in the house of Rochester at Thornfield.

5. Support your views with evidence from the text.

Answer:

Jane treats her pupil Adela, the ward of Mr. Rochester in a way that is convincing for the child. Adela likes painting, drawing, singing, and dancing. Jane appreciates her skills and talents. Adela gets attracted to Jane. Jane skilfully befriends the pupil Adela and breaks the ice. Adela starts liking Jane.

Grammar (Text Book Page No. 75)

a) Fill in the blanks by using correct preposition.

1. We go to school ____ Mondays, but not on Sunday

Answer:

on

2. Christmas falls ____ 25th December.

Answer:

on

3. Buy me a present ____ my birthday.

Answer:

on

4. Families often argue ____ Christmas time.

Answer:

in

5. I work faster ____ night.

Answer:

at

6. Her shift finished ____ 7 p.m.

Answer:

at

Model Verbs (Text Book Page No. 76)

Circle the modal verbs in the list given in the box (Text Book Page No. 75)

shall	should	will		have to	would	can	need to
could	may	ought to		might	dare	used to	need

shall	should	will	have to	would	can	need to
could	may	ought to	might	dare	used to	need

I. Use polite request when we seek help from others. Page - 78)

a) Fill in the blanks using would you or could you.

1. please close the door?

Answer:

Could you

2. please open the window?

Answer:

Could you

3. mind going to the backbench?

Answer:

Would you

4. please bring some water for me?

Answer:

Could you

b) Use the phrases could you or would you in the following situations with your friend.

1. Ask the policeman for directions.

Answer:

Could you direct me to the temple?

2. You need to borrow your friend's bike.

Answer:

Could you lend me your bike?

3. You would need to exchange the book purchased.

Answer:

Would you mind my exchanging the book purchased?

4. You want to open your classroom window.

Answer:

Would you mind opening the classroom window?

Sir Isaac Newton – The Ingenious Scientist Summary in English



Issac Newton was born on the Christmas day, at Woolstrophe in England in 1642. His mother got remarried after his father's death. Newton was with his grandmother. Newton created curious articles. He became an apprentice to a clockmaker. He observed the functioning of a windmill nearby. He then contacted a model of the windmill. Newton engaged himself in mathematics and philosophy. He found the nature of light, laws of motion, law of gravity, and also calculus. He was honoured with knighthood. He was a scientist, astronomer, and also a mechanical genius.

Sir Isaac Newton – The Ingenious Scientist Summary in Tamil

ஐசக் நியூட்டன் 1642ம் ஆண்டு கிறிஸ்துமஸ் தினத்தன்று உல்ஸ்த்தார்ப் என்ற இடத்தில் இங்கிலாந்தில் பிறந்தார். அவரது தந்தை இறந்த பிறகு அவரின் தாயார் மறுமணம் செய்து கொண்டார். நியூட்டன் தன் பாட்டியிடம் வளர்ந்தார். நியூட்டன் ஆச்சரியமான சிறியப் பொருட்களை உருவாக்கினார். கடிகாரம் செய்பவரிடம் தொழில் கற்கும் வேலைக்கு அமர்ந்தார். அருகில் உள்ள காற்றாலையின் செயல்பாட்டை உற்று நோக்கியவர் ஒரு சிறிய காற்றாலை மாதிரியை தானே உருவாக்கினார். நியூட்டன் கணிதம், தத்துவம் போன்ற புத்தகங்களைப் படிப்பதில் தன்னை ஈடுபடுத்திக் கொண்டார். அவர் ஒளியின் இயல்பு, இயக்க விதிகள், புவி ஈர்ப்பு விசை விதி போன்றவற்றைக் கண்டுபிடித்தார். அவர் வானியல், அறிவியல் மட்டுமல்ல, இயந்திரங்களை இயக்குவதிலும் வல்லுனராய் திகழ்ந்தார்.

Sir Isaac Newton – The Ingenious Scientist About the Author in English

The biography of Sir Isaac Newton was published in Nathaniel Hawthorne's, True Stories from History and Biography (1851). As Newton observed after a life–time of discoveries: "I seem to myself like a child," he observed, "playing on the seashore, and picking up here and

there a curious shell or a pretty pebble, while the boundless ocean of truth lies undiscovered before me".

Sir Isaac Newton – The Ingenious Scientist About the Author in Tamil

சர் ஐசக் நியூட்டனின் - வாழ்க்கை சரிதம், நாதனியல் ஹாத்தார்ன் என்பவரால் 1851ஆம் ஆண்டு வெளியிடப்பட்டது. "சரித்திரம் மற்றும் வாழ்க்கை சரிதம்: இவற்றின் உண்மைக் கதைகள்" என்ற புத்தகம் அது நியூட்டன் தன் வாழ்நாள் கண்டுபிடிப்புகளுக்கு பிறகு சொன்னார், 'நான் ஒரு குழந்தை போன்றவன். கடற்கரையில் சில சிப்பிகளையும் அழகிய கூழாங்கற்களையும் தான் கண்டெடுத்துள்ளேன். இன்னும் கண்டுபிடிக்க வேண்டிய விஷயங்கள் கரைகாணாத கடல் போல் என்முன்னே உள்ளன'.

Poem

Making Life Worth While

Warm Up

Observe the pictures and write the moral values. Share your experience. (Text Book Page No. 79)



Answer:

1. Taking care of the animals.
2. Helping the weaker person.

3. Supporting the differently abled person.
4. Helping the old people.

8th English Guide Making Life Worth While Textual Exercise Questions and Answers

1. Comprehension questions. (Text Book Page. 81)

1. What should we learn from every soul?

Answer:

We should learn the good from every soul.

2. What qualities will help us to brave the thickening ills of life?

Answer:

We must pass on good thoughts, kindness, aspiration, courage, and faith to brave the thickening ills of life.

3. Why should we make this life worthwhile?

Answer:

We should make this life worthwhile to have a glimpse of the brighter skies.

4. What does the poet assure us if we make our life worthwhile?

Answer:

The poet assures the inheritance of heaven for the people who live a purposeful life in this world.

2. Fill in the blanks:

1. We should have a in life.

Answer:

aspiration

2. A is needed for the darkening sky.

Answer:

a bit of courage

3. One must have a of brighter skies to make life worthwhile.

Answer:

glimpse

3. Figure of speech.

Pick out any two lines of repetition from the poem. (Text Book Page No. 81)

On page 81, we have four lines of a poem written by Robert Frost. He repeats the line

*And miles to go before I sleep,
and miles to go before I sleep,*

He uses this literary device called repetition to make the idea clearer and more memorable. It is used to emphasize a feeling or idea. Repetition creates rhythm and brings attention to the idea focussed.

Supplementary The Three

Section I

8th English Guide The Three Questions Textual Exercise Questions and Answers

A. Choose the correct answer from the options given below. (Text Book Page No. 86)

1. The king wanted to know the answers for questions.

- a) three
- b) five
- c) nine

Answer:

- a) three

2. The hermit lived in a

- a) cottage
- b) palace
- c) wood

Answer:

- c) wood

3. widely renowned for his wisdom.

- a) hermit
- b) messengers
- c) warriors

Answer:

- a) hermit

B. Fill in the blanks.

1. The answer for the first question was to have a to fix the proper time for everything.

Answer:

council of wisemen

2. were referred to know the right time for every action.

Answer:

The magicians

3. The king decided to consult a

Answer:

hermit

C. Who said these words?

1. "They all answered his questions differently."

Answer:

The learned men

2. How can I learn to do the right thing at the right time?

Answer:

The king

3. "Now rest awhile - and let me work a bit"?

Answer:

Hermit

D. Answer the following questions:

1. What were the king's questions?

Answer:

The king's questions were :

What was the right time for every action?

Who were the most necessary people?

How to know what was the most important thing to do?

2. Was the king satisfied with the answers? Why?

Answer:

The king was not satisfied with his answers because everyone gave different answers.

3. Why was the king advised to go to the magicians?

Answer:

The king was advised to go to the magicians in order to know the right time for every action.

4. Whose advice did the people say would be important to the king in answer to the second question?

Answer:

People said the most necessary people to the king were councilors, others, the priests, doctors and warriors.

Section II

A. Write 'True or False' for the following statement. (Text Book Page No. 89)

1. The bearded man was an enemy of the king.

Answer:

True

2. The king and the hermit refused to help the wounded man.

Answer:

False

3. The wounded man asked for the king's forgiveness.

Answer:

True

4. The king promised to restore the property of the bearded man.

Answer:

True

B. Match the words in column 'A' with their meanings in column 'B'.

A		B
physician	-	bring back
restore	-	surprise attack
repent	-	medical practitioner
ambush	-	regret

Answer:

A		B	ANSWERS
Physician	-	bring back	medical practitioner
Restore	-	surprise attack	bring back
Repent	-	medical practitioner	regret
Ambush	-	regret	surprise attack

C. Answers the following questions, (Text Book Page No. 90)

1. Who came running out of the wood? What happened to him?

Answer:

A bearded man came running out of the wood. He was wounded in his stomach. He was bleeding due to the large wound.

2. How did the king and the hermit restore the life of a wounded man?

Answer:

The king and the hermit washed the wound again and again. They bandaged and re-bandaged the wound and stopped bleeding. They gave him water to drink. They kept him on the bed.

3. Why did the king sleep through the night?

Answer:

The king was tired from his walk and from the work he had done in digging the earth to help the hermit. So, he fell asleep. He slept soundly all through the night.

4. What were the changes in the behaviour of the wounded man at the end?

Answer:

The bearded man asked for the forgiveness of the king. He confessed that he came to kill the king. He wished to serve the king throughout his life. The king was glad to have made peace with his enemy.

D. Answer the following in 100 words.

1. What were the answers to the three questions? What is the message of the hermit?

Answer:

- The only important time is now at present. Because we have power only in the present, not in the past or future.
- The most necessary person is the one who is with us at present.
- The most important business is to do good to others.
- Only for this purpose man is sent into this life.
- These were the answers of the hermit to the king.

2. Why did the bearded man ask for the king's forgiveness? What did the king do to show his forgiveness?

Answer:

The bearded man confessed to the king that he had been an enemy of the king. He came there to kill the king. He was recognized by the bodyguard and got wounded. The king had killed his brother and seized his property. So he wanted to take revenge on the king. Since the king nursed his wound and saved his life he changed his mind. He asked for the forgiveness of the king.

He wanted to be a faithful slave to the king for the rest of his life. He also said that his sons also would serve the king. The king forgave the bearded man. He promised to restore his property. He also said that he would send his physician and servants to cure the bearded

man. The king felt that he had gained a new friend. The king was glad to have made peace with his enemy so easily.

Step to Success

Read the English folk tale given below and fill up the blank spaces with suitable words.

There were once three tortoises - a father, a mother, and a baby. On one fine morning during the spring, they decided that they would like to go for a picnic. They picked the place where they would go a nice wood at some distance, and they began to put their things together. They got tins of cheese, vegetables, meat, and fruits. They were ready for the picnic. They set out Carrying their baskets. After eighteen months they sat down for rest. They enjoyed the picnic very much.
that, and, and, on, after, where

The Three Questions Summary in English

The king had three important questions in his mind. He wanted to get proper answers for them. He tried but could not get any answer. He met a wise hermit in the wood. He helped the hermit in his work. Still, the hermit gave no answer. Suddenly a stranger rushed to that spot. A wounded man came and fell fainting on the ground. The king and the hermit nursed and gave him water and bed in the night. The stranger asked for the king's forgiveness. He was a killer who came to kill the king. He confessed and made peace with the king. The king asked answers to the three questions again. The hermit said that doing good is the most important business. The most important time is the current time when we have any power. The most important person is the one with whom we are.

The Three Questions Summary in Tamil

அரசன் ஒருவர் அவரது மனதிலிருந்த மூன்று கேள்விகளுக்கு பதில் பெற விரும்பினார். ஆனால் முடியவில்லை . ஒரு அறிவார்ந்த சந்நியாசியை சந்தித்து விடை பெற விரும்பினார். அவர் பதில் அளிக்கவில்லை. அவரது பள்ளம் தோண்டும் வேலையில் மன்னர் உதவி செய்தார். மீண்டும் கேள்விகளுக்கு பதிலை வேண்டிக் கேட்டார். அப்போதும் சந்நியாசி பதில் அளிக்கவில்லை . அப்போது அங்கே ஒரு புதிய மனிதன் ஓடி வந்தார். காயங்களுடன் அவன் வந்து மயங்கி விழுந்தான். அரசரும் துறவியும் அவனுக்கு பணிவிடை செய்து உதவினர். காயத்தைக் கவனித்தனர். நீரும் புகலிடமும் கொடுத்து உதவினர். அவன் காலையில் மன்னரிடம் மன்னிப்புக் கேட்டான். ஏனென்றால் அவன் மன்னரைக் கொல்ல வந்ததவன். தன் தவறை வெளிப்படுத்தி மன்னிப்பும் கேட்டதால் மன்னரும் சமாதானமானார். அரசர் துறவியிடம் மீண்டும் தன் மூன்று கேள்விகளுக்கு பதில் என்னவென்று கேட்டார். மிக முக்கியமான காரியம் பிறர்க்கு நன்மை செய்வதாகும். மிக முக்கியமான நேரம் தற்சமயம் தான். ஏனெனில் அதுதான் நம்மிடம் சக்தி இருக்கும் நேரம். மிக முக்கிய மனிதர் உன்னோடு இருக்கும் நபர் தான் என்று பதில் அளித்தார் துறவி.

The Three Questions About the Author in English

Leo Tolstoy (1828 - 1910) was a Russian writer who is regarded as one of the greatest authors of all time. He is best known for the novels War and Peace (1869) and Anna Karenina (1877).

The Three Questions About the Author in Tamil

லியோ டால்ஸ்டாய் (1828-1910) எல்லா காலங்களிலும் போற்றப்படும் எழுத்தாளர்களில் ஒருவராவார். அவர் ஒரு ரஷ்ய எழுத்தாளர். போரும் சமாதானமும் (1869) மற்றும் அன்ன கரேன்னியா (1877) ஆகிய நாவல்களுக்காக மிகவும் அறியப்பட்டவ