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Workbook

Digitarijum







FOREWORD

More than 20 years ago, digitization of cultural and scientific heritage was acknowledged as a social challenge that could use scientific methods and research results of Mathematical Institute SANU associates. Digitization was understood as something more than just transforming the heritage from analogue to a digital form, it was understood as a comprehensive process that includes standardisation, research and development, conservation, presentation and appliance of digitized content in education, etc. That approach made Mathematical Institute SANU undoubtedly a leading research institution in the country and the region in the field of digitization, by designing and carrying out projects, and making cooperation with domestic and foreign partners. The institute's associates proposed to initiate the National centre for digitization that gathers our national cultural institutions (National Library of Serbia, National Museum of Serbian, Archives of Serbia, etc.) that engage in this multidisciplinary activity. Also, the Mathematical Institute SANU is the founder of the regional association South-Eastern European Digitization Initiative SEEDI. Among the projects that the Institute conducts are:

- Serbia Forum, in which the Digital National Library of Serbia is realized, the biggest digital repository in the region and one of the biggest in Europe, as well as the institute's repository in which there are exhibits of SANU Library, Archives of Serbia, Matica Srpska, the Museum of the Serbian Orthodox Church, etc.;
- eLib, for the presentation of electronic publication of mathematical journals which belongs to the five biggest European academic repositories of this kind;
- eCatalogue of immovable cultural monuments in Serbia;
- CENDARI, Collaborative European Digital Archive Infrastructure for social and humanistic sciences in which the Institute is one of the main technical partners; and
- NCD–standards for describing meta-data of the movable and immovable cultural objects, as well as the collections of cultural heritage.

All of these contents are freely available at Institute's web page.

The nature of digitization itself imposes a multidisciplinary approach, so that the teams of associates, beside the mathematicians, also include historians, archaeologists, architects, librarians, museologists, archivists, etc. On the other hand, one of the elements of Mathematical Institute SANU mission is also the popularization of mathematics and science in general. The Institute, together with the Center for the Promotion of Science, is the organizer of the May Month of Mathematics, the biggest domestic manifestation of science promotion.

The project Digitarijum, that is realized with the support of the Center for the Promotion of Science, combines these two activities of Mathematical Institute SANU – digitization and popularization, with the idea to bring closer the digitized content to the school population in an attractive way. This workbook isn't a goal by itself, but more of a method suggestion that can be used to enrich the standard teaching content. We believe that this kind of approach will make the everyday work of teachers and students more interesting, and that it will contribute to a better understanding of the curriculum. In particular, we hope that the experience gained using this workbook will guide the teachers and the students through the adventure of systematic use of immeasurable knowledge that Internet provides, and that by their own curiosity they will step into the IT era of the 21st century.

Dr. Zoran Ognjanovic
Director
The Mathematical Institute SANU



INTRODUCTION

This workbook is intended for the students of the 1st to the 4th grade of elementary school. It is created as a result of the Mathematical Institute SANU project called DIGITARIJUM, with the support of the Center for the Promotion of Science, and with the goal of cultural and scientific heritage digitization appliance in the elementary and high school curriculum.

The project includes the workshops, expert guidance and tours of relevant cultural institutions, through which the students get acquainted with the term "digitization", that is, why it is important for conservation of the cultural heritage of their local neighborhood and the country they live in. After each activity, the students are supposed to fill in this workbook with their teachers' help. The tasks content of the workbook is closely connected to the knowledge acquired through the practical experience and the active participation in the project activities, as well as to the knowledge acquired throughout the regular classes from the three school subjects: Serbian language, Mathematics and the World around us.

The main theme of this workbook was chosen with the help of the teachers who work with the elementary school students from the 1st to the 4th grade, and it refers to three important personalities from the Serbian history: Saint Sava, the first Serbian archbishop, considered to be the originator of education among Serbian people; Vuk Stefanovic Karadzic, creator of the Serbian language as we know it today, and the first important personality from Serbian history that the students learn about through learning the alphabet; and Dositej Obradovic, one of the most important Serbian educators. Actively learning about the lives of these three important personalities, the students will also get acquainted with the term "cultural heritage" which will instigate their intellectual curiosity and direct their interests to further learning about heritage and its conservation.

The workbook is based on digitized works of Vuk Stefanovic Karadzic and Dositej Obradovic available at Mathematical institute SANU digital repositories, (e.g. Serbian cultural heritage digital library "Serbia Forum"). The illustrations in the workbook are inspired by digitized photographs available at eCatalogue "Cultural Monuments in Serbia". Detailed review of literature and photographs are shown at the end of this edition.

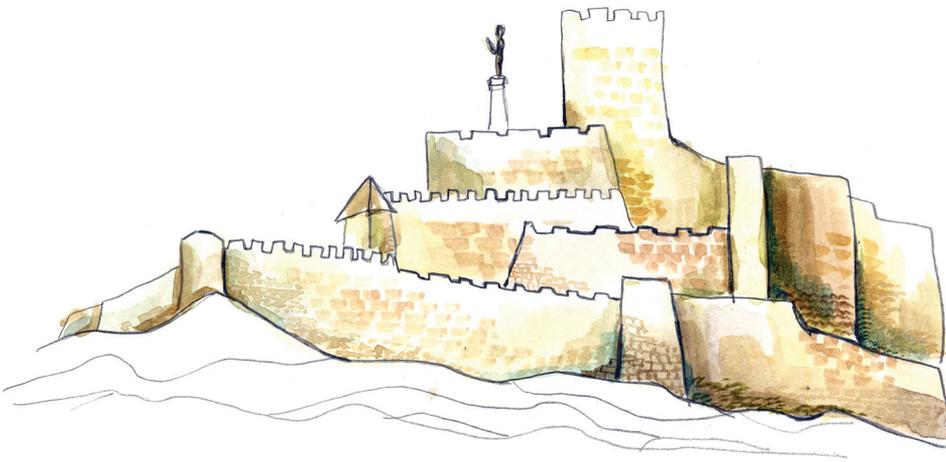
Conscious of the facts that with the active learning and with the independent discovery of new knowledge, the learning itself becomes fun, and the acquired knowledge is remembered longer, as well as the transfer of the knowledge is more simple, the authors of this workbook created it as a certain reminder of what the students learned through practical activities. In addition, by giving the different types of tasks, the authors wanted to maintain students' focus on the material that was processed, and with that, to encourage the interest and the desire for further learning. The whole project, including all the used materials, tools, methods, and sources, as well as this workbook, have an undoubtedly important role in students' education, pointing out the necessity of the use of multidisciplinary approaches in learning in the future, which is one more goal that the authors and the participants of this project have.

TASK 1



Circle the correct answer beside presented illustration.

Cultural heritage is the inherited, primarily immovable property – a cultural good that people or an ethnical group created in a certain period of time, in a certain epoch.



- a) tower
- b) castle
- c) fortress



- a) water mill
- б) tower
- В) windmill

- a) church
- b) mosque
- c) synagogue



- a) castle
- b) tower
- c) mosque





- a) castle
- b) synagogue
- c) church



- a) school
- b) residence
- c) foundation



- a) windmill
- b) water mill
- c) bridge



- a) windmill
- b) tower
- c) water mill



- a) residence
- b) foundation
- c) castle



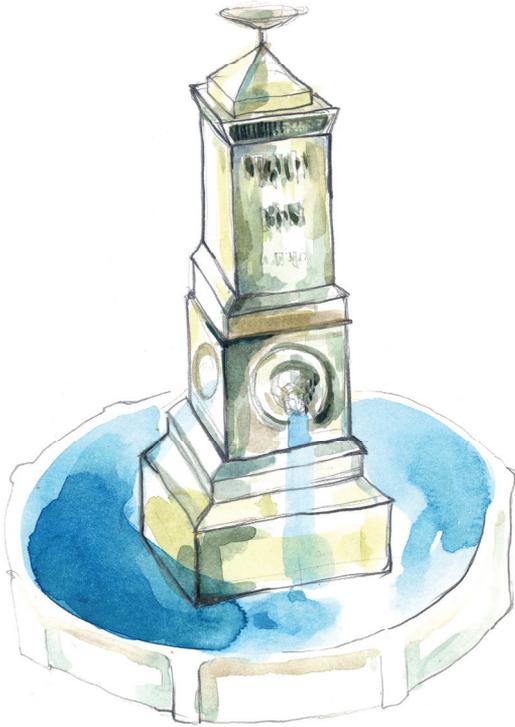
- a) water mill
- b) bridge
- c) fortress

- a) monument
- b) sculpture
- c) fountain



- a) sculpture
- b) monument
- c) memorial





- a) monument
- b) fountain
- c) memorial



- a) fortress
- б) residence
- в) castle

TASK 2

If you answer correctly, and then assign an appropriate letter to each number (as started), you'll know the names of the illustrated terms.



$$40 - 25 + 57 - 17 =$$

$$26 + 15 + 32 =$$

$$(94 - 36) + 5 =$$

$$(36 + 26) - (19 + 13) =$$

$$(22 - 18) + 16 =$$

$$40 - 17 + 22 =$$

$$99 - 36 - 44 =$$

H

R

N

F

T

C

E

$$40 - 25 + 57 - 17 =$$

$$26 + 15 + 32 =$$

$$(94 - 36) + 5 =$$

$$(36 + 26) - (19 + 13) =$$

$$(22 - 18) + 16 =$$

$$40 - 17 + 22 =$$

$$99 - 36 - 44 =$$

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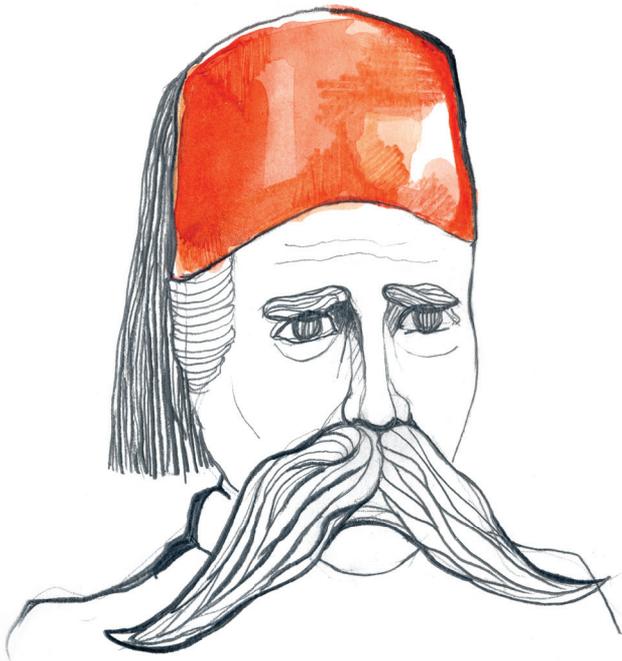
N

F

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C

E



56 19 41

**A felt hat, usually red. It was a Turkish national hat, and it was brought to the Balkans by the Turks. It is considered to be of Moroccan origin. Vuk Stefanovic Karadzic wore it, amongst the other Serbians.*



20 72 43 48 45 24 72

**A part of the men's suit, it is a coat that is shorter in front, and has a shape of a swallow's tail in the back. It was worn by our educator Dositej Obradovic, who made it popular in Serbia.*

$$100 - (65 - 37) = 100 - 28 = 72$$

$$89 - 56 - 9 =$$

$$42 + 19 - 27 =$$

$$23 + 34 - 17 + 8 =$$

$$(47 + 12) - (22 + 4) =$$

$$33 + 14 - 17 =$$

$$47 + 21 - 25 =$$

$$76 - 30 + 45 =$$

$$A \quad 100 - (65 - 37) = 100 - 28 = 72$$

$$O \quad 89 - 56 - 9 =$$

$$P \quad 42 + 19 - 27 =$$

$$L \quad 23 + 34 - 17 + 8 =$$

$$Z \quad (47 + 12) - (22 + 4) =$$

$$U \quad 33 + 14 - 17 =$$

$$I \quad 47 + 21 - 25 =$$

$$M \quad 76 - 30 + 45 =$$

A

O

P

L

Z

U

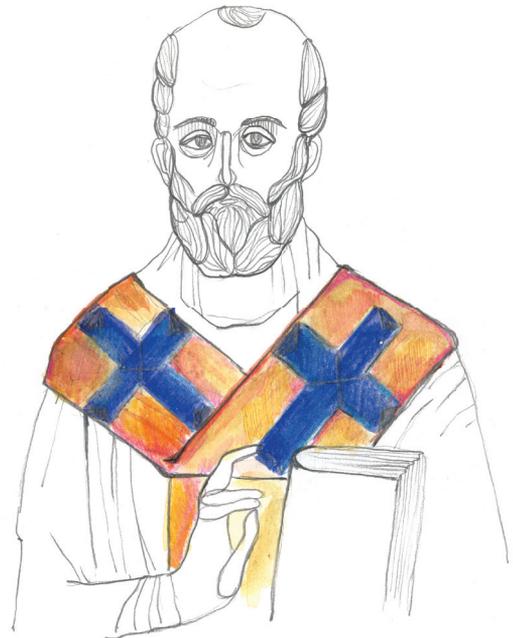
I

M



72 30 55 19 24 48 19

**A circle of light surrounding the head of a saint. In Christian art, it is a symbol around the head of a person who is considered to be holy or divine.*



24 91 24 34 73 24 55 43 24 63

**The most important part of archpriests' and patriarchs' clothes. It is a wide band that archpriest wears on his shoulders. There are four crosses embroidered on it. With these crosses, archpriest shows his acceptance to follow the Passion of the Christ.*

TASK 4



Fill in the blank spaces with the names of the traditional Serbian parts of clothing.



Traditional Serbian clothing has a prominent place in the Serbian culture. Its role through history is very important as a symbol of ethnical identity, and it also stands out with its artistic and aesthetic values. Nowadays, the clothing from the 19th and the first decades of the 20th century is preserved, with diverse shapes and ornaments of women's and men's costumes.

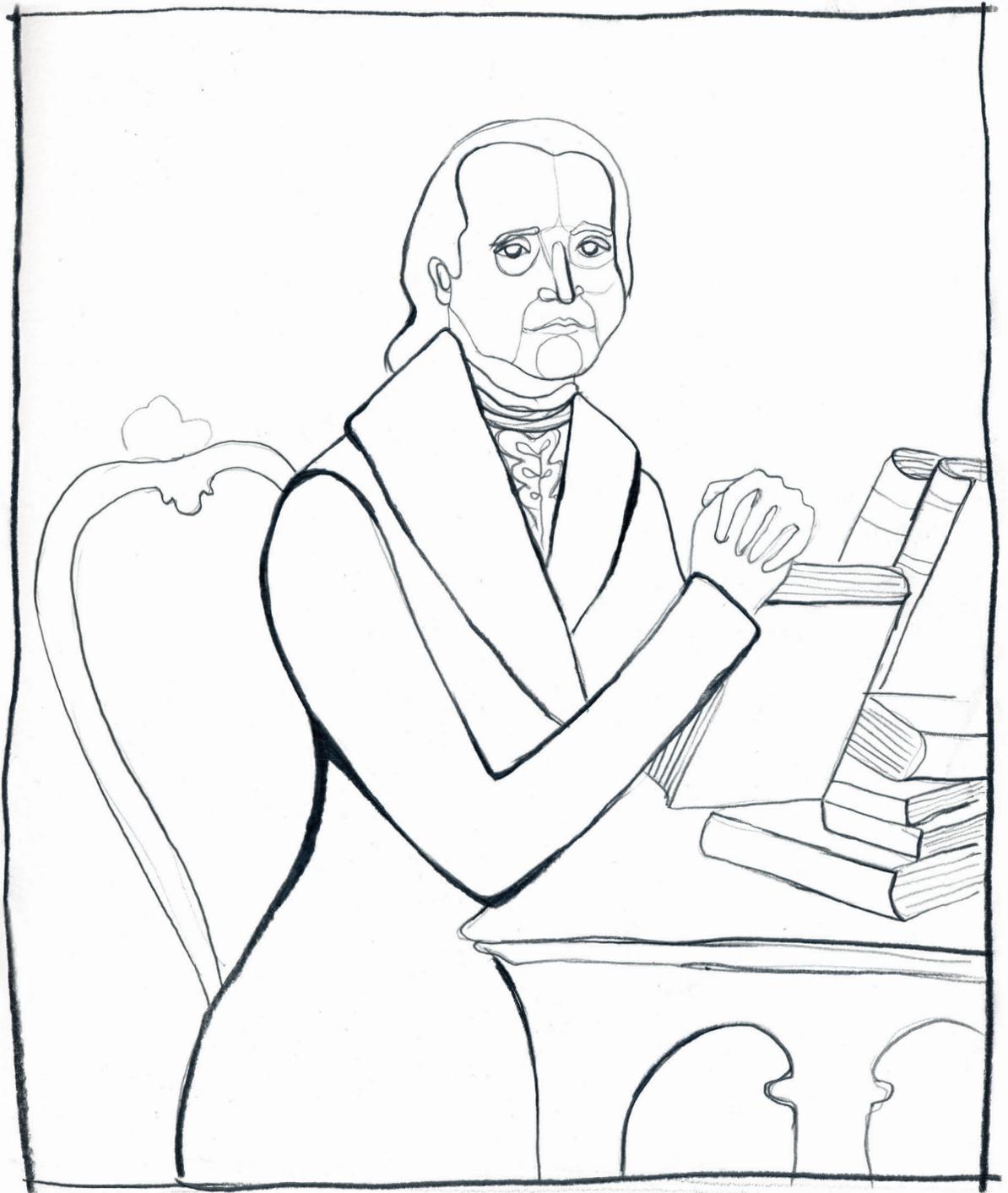
TASK 6



Color the illustrations



Saint Sava – portrait from the Mileseva monastery. This portrait was made during Saint Sava's life, after he became archpriest of the Serbian Church. Saint Sava is presented as an archpriest in his omophorion, giving blessings with one of his hands, while holding the closed gospel in his other hand. This portrait is considered to be one of the most faithful, and it was later used as a pattern to paint Saint Sava in many other Nemanjić's monasteries



Dositej Obradovic – the 1818 portrait by the painter Arsenije Teodorovic, preserved today in the National Museum in Belgrade. Dositej is depicted in a black suit, leaning his hands on books.



Vuk Stefanovic Karadzic – the 1846 portrait by the painter Uros Knezevic, preserved today in the National Museum in Belgrade. Vuk is depicted sitting with a red fez on his head, in a black suit, with the orders of merit around his neck and on his chest.



REFERENCES

- Digital Library of Serbian Cultural Heritage 'Serbia-Forum', available at:
<http://www.serbia-forum.org/> (accessed: 15.12.2015).
- Digital National Library of Serbia, available at: <http://digitalna.nb.rs/> (accessed: 15.12.2015).
- eCatalog 'The Cultural Monuments in Serbia', available at:
<http://spomenicikulture.mi.sanu.ac.rs/> (accessed: 15.12.2015).
- Rečnik srpskog jezika (2011). Novi Sad: Matica srpska.
- Dejan Medaković (1968). Srpski slikari XVIII – XX veka. Novi Sad: Matica srpska.

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