MINISTRY OF EDUCATION AND SCIENCE of UKRAINE

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Methodical recommendations

for practical classes

on an academic discipline

"FOREIGN LANGUAGE OF PROFESSIONAL GUIDANCE"

(English)

(for first-year full-time students first (bachelor's) level of higher education specialty 191 –Architecture and Town Building)

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INTRODUCTION

The course is designed for the students of non-language higher educational institutions studying architecture.

It consists of eight units and is expected to be covered during practical classes.

Each unit consists of

– an authentic selected for reading, translation and study in class with the supervisor and one's own;

– vocabulary according to the topic. Architectural terms are mostly taken from the text;

– various exercises which include multiple choice, matching, gap-filling and so on;

– additional text for reading.

The purpose of the course is to teach students working at English texts with the supervisor or on their own and to increase the level of their knowledge.

UNIT 1 GREEK ARCHITECTURE

Greek architecture

Most of our knowledge of Greek architecture comes from the few surviving buildings of the Classical, Hellenistic and Roman periods (since Roman architecture heavily copied Greek), and from late written sources such as Vitruvius (1st century AD). This means that there is a strong bias towards temples, the only buildings which survive in any number.

The standard format of Greek public buildings is well known from surviving examples such as the Parthenon, and even more so from Roman buildings built partly on the Greek model, such as the Pantheon in Rome. The building was usually either a cube or a rectangle made from limestone, of which Greece has an abundance, and which was cut into large blocks and dressed. Marble was an expensive building material in Greece: high quality marble came only from Mt Pentelus in Attica and from a few islands such as Paros, and its transportation in large blocks was difficult. It was used mainly for sculptural decoration, not structurally, except in the very grandest buildings of the Classical period such as the Parthenon.

There were two main styles (or “orders”) of Greek architecture, the Doric and the Ionic. These names were used by the Greeks themselves, and reflected their belief that the styles descended from the Dorian and Ionian Greeks of the Dark Ages, but this is unlikely to be true. The Doric style was used in mainland Greece and spread from there to the Greek colonies in Italy. The Doric style was more formal and austere, the Ionic more relaxed and decorative.

The more ornate Corinthian style was a later development of the Ionic. These styles are best known through the three orders of column capitals, but there are differences in most points of design and decoration between the orders.

Most of the best known surviving Greek buildings, such as the Parthenon and the Temple of Hephaestus in Athens, are Doric.

The Erechtheum, next to the Parthenon, however, is Ionic. The Ionic order became dominant in the Hellenistic period, since its more decorative style suited the aesthetic of the period better than the more restrained Doric.

Some of the best surviving Hellenistic buildings, such as the Library of Celsus, can be seen in Turkey, at cities such as Ephesus and Pergamum. But in the greatest of Hellenistic cities, Alexandria in Egypt, almost nothing survives.

Until the age of Alexander the Great, the Greeks erected permanent stone buildings almost exclusively for religious monuments, like the Egyptians, Sumerians, and Hindus. Their temples were not large enclosures of space but statue chambers containing a god's sacred image. These chambers were accessible only to priests.

Yet the Greek temple has always been seen as fundamentally distinct from and superior to most other early religious types, partly because of the simplicity of its form, partly because of the exquisite refinement of the best examples, and partly because it is seen to reflect the emergence in Greece of a rational, philosophical approach to art that replaced earlier belief systems.

1. Read and translate the text

2. Read the text again and find out if the following statements are true or false. Find and correct mistakes:

1. Temples are the only buildings which have survived because of Roman architects inability to create their own style of buildings.
2. Greeks used the most expensive and of high quality materials for building (f.e. marble).
3. There were three main styles (or "orders") of Greek architecture: the Doric, the Ionic and more ornate Corinthian style.
4. The best known surviving Greek buildings, such as the Parthenon, Coliseum and the Temple of Hephaestus in Athens, are Doric.
5. In spite of simplicity and exquisite refinement of most Greek buildings , these are considered not to be very distinct from early religious types of temples.

3. Find in the text English equivalents for the following:

архітектура

схильність

невелика кількість

храм

капітель

мармур

декоративний

священне зображення

кімната (преим. спальня)

витонченість

поява

вапняк

4. Questions

1. What does our knowledge of Greek architecture come from?
2. Why was marble used more rarely than limestone in Greece?
3. What are three orders of Greek architecture?
4. What did the Greeks erect the majority of permanent stone buildings for?
5. What order would you choose if you had an idea to build a house in a Classical Greek style? Why?

5.Fill in the gaps with the correct word(s) from the list below:

Egyptians Sumerians Erechtheum cube Parthenon temples Pantheon rectangle Hindus Library of Celsus

1. There is a strong bias towards _____, the only buildings which survive in any number.
2. The standard format of Greek public buildings is well known from surviving examples such as the _____, and even more so from Roman buildings built partly on the Greek model, such as the _____in Rome.
3. The building was usually either a _____ or a _____ made from limestone, of which Greece has an abundance.
4. The _____, next to the Parthenon, however, is Ionic.
5. Some of the best surviving Hellenistic buildings, such as the _____, can be seen in Turkey, at cities such as Ephesus and Pergamum.
6. Until the age of Alexander the Great, the Greeks erected permanent stone buildings almost exclusively for religious monuments, like the _____, _____, and _____.

UNIT 2 ORIENTAL ARCHITECTURE

Oriental Architecture

The great oriental countries like China, Japan, and India have their own styles of architecture .

In India there are many great buildings so wonderfully constructed, carved, and decorated as to have become truly famous. The styles are usually designated according to the three great religions of India: the Buddhist, the Jain, and the Brahman or Hindu. They all have traits in common and they present an appearance of similarity. Ornament is profuse and rich and sometimes covers all parts of the buildings. Sculpture is freely used, and the interiors show multitudes of columns adorning halls and corridors. The materials are usually sandstone or brick, and nearly all the great buildings are religious temples, shrines, and monasteries.

In Japan the creative activity of an architect obeys the strict rules of the comprehension of space, which were formed in the ancient times and retained its importance up to now. The principles of space organization, based on the fundamental world-outlook categories, are closely intertwined with religion, philosophy, way of life and aesthetic views. We would like to distinguish three main categories: “emptiness” – “interval” – “shade” as the basis of the spatial perception of architecture in Japan. These categories can be regarded as invariants of the culture of the Country of the Rising Sun, because they were applied not only in the Middle Ages, but also

nowadays. They contributed to the formation of a principle of harmony, which to this day remains one of the basic conditions of existence and development of culture.

The architecture of China is as old as Chinese civilization. From every source of information there is strong evidence that the Chinese have always employed an indigenous system of construction that has retained its principal characteristics from prehistoric times to the present day. Over the vast area from Chinese Turkistan to Japan, from Manchuria to the northern half of French Indochina, the same system of construction is prevalent; and this was the area of Chinese cultural influence. That this system of construction could perpetuate itself for more than four thousand years over such a vast territory and still remain a living architecture is a phenomenon comparable only to the continuity of the civilization of which it is an integral part.[1]

1. Read and translate the text

2. Read the text again and find out if the following statements are true or false. Find and correct mistakes

1. The architecture styles in India reflect the ideas of three great religions of India: the Buddhist, the Jain, and the Brahman or Hindu.

2. The materials used in India for building are usually sandstone or burnt lime.

3. In Japan the principles of space organization are closely intertwined with religion, philosophy, way of life and aesthetic views.

4. There are three main categories: “emptiness” – “interval” – “shade as the basis of the spatial perception of architecture in Japan.

5. For centuries the Chinese have always employed their native system of construction.

6. This system of construction immortalized itself for more than four thousand years.

3. Find in the text English equivalents for the following:

відповідно до

загальні риси

розрізнити

порожнеча

застосовувати

базові умови

культурний вплив

система конструювання

просторовий

багатий, щедрий

4. Find Word combinations

1) to have become	a) profuse
2) appearance of	b) space organization
3) ornament is	c) truly famous
4) strict	d) architecture
5) The principles of	e) evidence
6) Spatial perception of	f) rules
7) strong	g) similarity
8) the same system of	h) construction

5. Complete these sentences using the correct passive form of the verbs

1. The styles ___ usually _____ (designate) according to the three great religions of India: the Buddhist, the Jain, and the Brahman or Hindu. Sculpture ___ freely _____(use), and the interiors show multitudes of columns adorning halls and corridors.

2. In Japan the creative activity of an architect obeys the strict rules of the comprehension of space, which _____(form) in the ancient times and retained its importance up to now.

3. The principles of space organization___ closely _____(intertwine) with religion, philosophy, way of life and aesthetic views.

4. These categories can _____ (regard) as invariants of the culture of the Country of the Rising Sun.

5. They _____(apply) not only in the Middle Ages, but also nowadays.

Islamic architecture (in India)

With the advent of Islam, the arch and dome began to be used and the mosque or *masjid* began to form part of the landscape, adding to a new experience in form and space. The *sahn* or the open courtyard for congregational worship with the enclosing cloisters or *liwans* and the sanctuary at the Western end offered a different architectural vocabulary. The fundamental difference lay in the fact that Islam prohibited idol worship and therefore a concentrated point of focus such as the garbagriha was unnecessary. However, the *mihrab** on the Western wall of the sanctuary articulating the Qibla or the direction towards Mecca offered a notional focus. As idolatory was prohibited, the main means of adornment was surface

decoration through the use of geometry, arabesque and calligraphy. Early Indian mosques were built on the sites of Hindu temples, literally on their plinths, reusing the mortarless temple material after some minor forms of desecration. Later, mosques began to be built with original material. The Jami masjid at Delhi is a representative example of an Indian mosque.

The most famous Islamic building type in India is the tomb or the *mausoleum* which evolved from the basic cube and hemisphere vocabulary of the early phase into a more elaborate form during the Mughal period. The tomb chamber houses the cenotaph below which is the grave. Well known examples are the Gol Gumbaz, Bijapur and the Taj Mahal, Agra, the latter renowned for its beauty in white marble, its minarets and its setting.

A *mihrab* (Arabic: بارحملأ pl. بيراحم) is a niche in the wall of a mosque that indicates the qibla, that is, the direction of Mecca (that is where Kaaba(a cuboidal building located inside the mosque known as al-Masjid al-Haram in Mecca, Saudi Arabia) is, this is the way Muslims should face when praying. The wall in which a mihrab appears is thus the "qibla wall.")

1. Read and translate the text

2. Find Word combinations

1. congregational	a. temple
2. the enclosing	b. worship
3. the fundamental	c. form
4. the main	d. difference
5. surface	e. means
6. Hindu	f. cloister
7. a more elaborate	g. decoration

3. Choose the synonym to the word in italic

1. With the advent of Islam, the arch and dome *began* to be used.

a) set up b) started c) established d)led

2. The fundamental difference lay in the fact that Islam *prohibited* idol worship.

a) allowed b) introduced c) banned d)opposed

3. Indian mosques were built on the *sites* of Hindu temples.

a) hilly areas b) regions c) hikes d) areas of ground

4. The tomb chamber *houses* the cenotaph below which is the grave.

a) keeps b) takes c) provides d) attracts

5. The fundamental difference lay in the fact that Islam prohibited idol worship and *therefore* a concentrated point of focus such as the garba-griha was unnecessary.

a) yet b) although c) however d) thus

4. Questions

1. What began to be used with the advert of Islam?
2. What did Islam prohibit?
3. What is the main place for worship?
4. What became the main means of adornment?
5. What is the most famous Islamic building type in India?
6. What are the most famous tombs in India?

Feng Shui and Architecture

Stuck in your career? Trouble in your love life? The root of your problems may be in the design of your home, say practitioners of the ancient Chinese philosophy, feng shui.

What is Feng Shui?

The meaning of the Feng Shui word is “wind and water”. According to the Chinese ancient ideology, these two elements have the strongest energy and affect the forming of the landscape. Feng Shui art lies somewhere in the middle among art, philosophy and science. The main aim is to create the inner harmony in man through the harmony between him and the surroundings. In accordance with Feng Shui philosophy, well-being, happiness and health depend on the organization of working and living places.

“Feng Shui teaches us how to create harmony and balance around us,” says Stanley Bartlett, who uses the centuries-old art to design homes and businesses. The ideas date back at least 3,000 years, yet a growing number of architects and decorators are integrating feng shui ideas with contemporary building design.

Feng shui (pronounced fung shway) is an intuitive art.

Designers and decorators claim that they can “feel” positive energy -- called ch'i. But architects who incorporate the Eastern philosophy are not guided by intuition alone. The ancient art prescribes lengthy and complex rules that may strike modern

homeowners. For example, your home should not be built at the end of a dead-end road. Round pillars are better than square. Ceilings should be high and welllit.

To further confuse the uninitiated, there are several different ways to practice feng shui:

Use a compass to establish the most beneficial placement of rooms

Draw on information from the Chinese horoscope

Examine the surrounding land forms, streets, streams and buildings

Use high-tech equipment to examine environmental health hazards, such as electromagnetic radiation and toxic materials

Use some variation of a tool called the Ba-Gua -- an octagonal chart outlining the most favorable placement for rooms

"Everything is related to everything," says Bartlett. "If we pay attention to our environment, then we will find ways of creating different realities in our lives. When we move the bed, we also change our relationship with things around us in ways there aren't words for."

Having understood the general line in the Feng Shui Phylosophy, one reaches Harmony between him and the surroundings. Feng Shui is a life style that leads you to Success, Health, Love, Prosperity and good relationships among people.

Despite the numerous complicated rules, feng shui adapts to many architectural styles. Indeed, the clean, uncluttered appearance may be your only clue that a home or office building was designed according to feng shui principles.

1. Read and translate the text

2. Fill in the correct preposition

1. The meaning … the Feng Shui word is "wind and water".

a)on b)at c)of d)over

2. According … the Chinese ancient ideology, these two elements have the strongest energy.

a) with b) at c) to d) on

3. The main aim is to create the inner harmony in man … the harmony between him and the surroundings.

a) through b)during c)although d)throughout

4. For example, your home should not be built … the end of a dead-end road.

a)after b)before c)over d)at

5. "Everything is related … everything," says Bartlett.

a)on b)with c)to d)above

6. Feng Shui is a life style that leads you to Success, Health, Love, Prosperity and good relationships … people.

a)without b)between c)to d)among

3. Questions

1. What is feng shui?
2. What is your attitude to feng shui?
3. What does feng shui teach us?
4. Is there any sense in designing buildings according to feng shui principles?
5. What are the ways to practice feng shui?

Focus on Wit & Wisdom

Match the beginning of a proverb with the end. Give Ukrainian equivalents and explain their meaning.

1. Appetite	a) killed the cat
2. Curiosity	b) by the horns
3. The devil is not so black	c) comes with eating
4. The bull must be taken	d) is not gold
5. All that glitters	e) than the tongue
6. Better the foot slip	f) the brave
7. One is never	g) as he is painted
8. Fortune favors	h) too old to learn

UNIT 3 ARCHITECTURE OF INDIA, CHINA AND JAPAN

Indian architecture

The diversity of Indian culture is represented in its architecture. Indian architecture comprises a blend of ancient and varied native traditions, with building types, forms and technologies from West, Central Asia, and Europe. The earliest production in the Indus Valley Civilization was characterized by well planned cities and houses where religion did not seem to play an active role. The presence of drainage systems and public baths showed advanced standards of hygiene

and sanitation and ingenious planning. The Vedic village had certain distinct characteristics that influenced subsequent architectural production.

Buddhism gained prominence during the reign of the emperor Ashoka. It is primarily represented by three important building types- the Chaitya Hall (place of worship), the Vihara (monastery) and the Stupa (hemispherical mound for worship/ memory) - exemplified by the awesome caves of Ajanta and Ellora and the monumental Sanchi Stupa. Some of the elements of Buddhist architecture show influences from the structures of Vedic villages. The influence of Greek sculpture on the images has been well established. The Jaina temples are characterised by a richness of detail that can be seen in the Dilwara temple in Mt.Abu.

The reference to temples in literature go back early with Panini (520 BC - 460 BC) and Patanjali mentioning temples which were called *prasada*s. Early beginnings of Hindu temple architecture have been traced to the remains at Aihole and Pattadakal in present day Karnataka. Early temples were rock-cut, later structural temples evolved. The Kailasanatha temple at Ellora is a good example of the former, excavated from top to bottom out of a massive rock face.

With colonization, a new chapter began. Though the Dutch, Portuguese and the French made substantial forays, it was the English who had a lasting impact. The architecture of the colonial period varied from the beginning attempts at creating authority through classical prototypes to the later approach of producing a supposedly more responsive image through what is now termed Indo-Saracenic architecture - a mixture of Hindu, Islamic and Western elements.

1. Read and translate the text

2. Find Word combinations

1. ingenious	a. mound
2. awesome	b. prominence
3. gained	c. face
4. hemispherical	d. image
5. massive rock	e. planning
6. lasting	f. caves
7. more responsive	g. impact

3. Questions

1. What was Indus Valley Civilization characterized by?

2. What did Islam prohibit?
3. What is the main place for worship?
4. What became the main means of adornment?
5. What is the most famous Islamic building type in India?
6. What are the most famous tombs in India?

4. Match Country – Adjective –Person – Population

Country/ region	*Adjective*	*Person*	*Population*
Asia	French	A French	The French
India	European	An English	The European
Europe	Dutch	An Asian	The Dutch
England	Asian	A Portuguese	The Indian
Holland	Portuguese	An European	The Portuguese
Portugal	English	A Dutch	The English
France	Indian	An Indian	The Asian

Chinese architecture

Chinese architecture refers to a style of architecture that has taken shape in Asia over the centuries. The structural principles of Chinese architecture have remained largely unchanged, the main changes being only the decorative details. Since the Tang Dynasty, Chinese architecture has had a major influence on the architectural styles of Japan, Korea, Taiwan, and Vietnam.

There are certain features common to all Chinese architecture, regardless of specific region or use.

The most important is the emphasis on the horizontal axis, in particular the construction of a heavy platform and a large roof that floats over this base, with the vertical walls not as well emphasized. This contrasts Western architecture, which tends to grow in height and depth. Chinese architecture stresses the visual impact of the width of the buildings. The halls and palaces in the Forbidden City, for example, have rather low ceilings when compared to equivalent stately buildings in the West, but their external appearances suggest the all-embracing nature of imperial China. This of course does not apply to pagodas, which, in any case, are relatively rare.
These ideas have found their way into modern Western architecture.

Another important feature is its emphasis on symmetry, which connotes a sense of grandeur. A notable exception is in the design of gardens, which tends to be as asymmetrical as possible. The principle underlying the garden's composition is to create enduring flow and also to emulate nature.

Chinese buildings may be built with either red or grey bricks, but wooden structures are the most common. The roof of a typical Chinese building is curved. Beijing as reconstructed throughout the 15th and 16th century remains the best example of traditional Chinese town planning.

Throughout the 20th Century Western-trained Chinese architects have attempted to combine traditional Chinese designs into modern (usually government) buildings, with only limited success. In the great cities the demand for traditional Chinese buildings, which is normally lower than 3 levels, was taken place by the modern architecture. However, the traditional skills of Chinese architecture, including major carpentry, minor carpentry, masonry, and stone masonry, are still applied to the construction of vernacular architecture in the vast rural area in China.

1. Read and translate the text

2. Here are the answers to some questions about Chinese Architecture.

Write the questions (sometimes more than one question is possible)

1. _____

A style of architecture that has taken shape in Asia over the centuries.

2. _____ Japan, Korea, Taiwan, and Vietnam.

3. _____

Chinese architecture stresses the visual impact of the width of the buildings.

4. _____

Beijing was reconstructed throughout the 15th and 16th century.

5. _____

The traditional skills of Chinese architecture are still applied to the construction of vernacular architecture in the vast rural area in China.

3. Match Country – Adjective –Person – Population

Country/ region	*Adjective*	*Person*	*Population*
Asia	Vietnamese	A Korean	The Japanese
Japan	Taiwanese	An Asian	The Korean

China	Asian	A Japanese	The Vietnamese
Korea	Korean	A Chinese	The Taiwanese
Taiwan	Japanese	A Japanese	The Chinese
Vietnam	Chinese	A Vietnamese	The Asian

4. Find in the text English equivalents for the following:

загальні риси

не дивлячись на

горизонтальна вісь

масивна платформа

вертикальна стіна

візуальний вплив

важливий виняток

асиметричний

бути вигнутим

Addiitional text. Imperial architecture (peculiarities)

There were certain architectural features that were reserved solely for buildings built for the Emperor of China. One example is the use of yellow roof tiles; yellow having been the Imperial color, yellow roof tiles still adorn most of the buildings within the Forbidden City. The Temple of Heaven, however, uses blue roof tiles to symbolize the sky. The wooden columns of the buildings, as well as the surface of the walls, tend to be red in colour. Black is also a famous color often used in pagodas. They believe the gods inspired the color black to come into the earth.

The Chinese dragon, an emblem reserved for Imperial China, was heavily used on Imperial architecture - on the roofs, on the beams and pillars, and on the doors. Only the buildings used by the imperial family were allowed to have nine *gan* (space between two columns); only the gates used by the Emperor could have five arches, with the centre one, of course, being reserved for the Emperor himself. The ancient Chinese favored the color red. The buildings faced south because the north had a cold wind.

1. Questions

1. What colors are mostly used in Imperial China?
2. What was the purpose of each color?

3. Why is the color black used in pagodas?
4. Where was the Chinese Dragon used?
5. What was the favorite color for the ancient Chinese?

Focus on Wit & Wisdom

Fill in the following proverbs and sayings with the verbs in the Present or Past Simple. Give the Ukrainian equivalents.

1. Charity _____(begin) at home.
2. He who never _____(climb), never fell.
3. He who _____(please) everybody died before he was born.
4. Practice _____(make) perfect.
5. Birds of a feather _____(flock) together.
6. What the doctor _____(order).
7. Every day _____(be) not Sunday.

Japanese architecture

Japanese architecture (日本建築 *Nihon kenchiku*?) has as long a history as any other aspect of Japanese culture. Originally heavily influenced by Chinese architecture, it also develops many differences and aspects which are indigenous to Japan.

There are no surviving architectures built in prehistoric times, and the oldest Japanese texts, such as
Kojiki and Nihonshoki hardly mentioned the architectures at all. Excavations and researches show these houses had thatched roofs and dirt floors. Houses in areas of high temperature and humidity had wooden floors.

The earliest Buddhist structures still extant in Japan, and the oldest surviving wooden buildings in the world are found at the Hōryū-ji to the southwest of Nara. They serve as the core examples of architecture in Asuka period.

Temple building in the 8th century was focused around the Tōdaiji in Nara.

Constructed as the headquarters for a network of temples in each of the provinces, the Tōdaiji is the most ambitious religious complex erected in the early centuries of Buddhist worship in Japan.

After Kamakura period, Japanese political power was dominated by the armed Samurai, such as Seiwa Genji. Their *simple and sturdy* ideas effected the architecture style, and many samurai houses are mixture of shinden-dukuri and turrets or trenches.

Important development of the period was the tea ceremony and the tea house in which it was held. The purpose of the ceremony is to spend time with friends who enjoy the arts, to cleanse the mind of the concerns of daily life, and to receive a bowl of tea served in a gracious and tasteful manner. Some buddhism ideas such as Zen was the basical philosophy. The rustic style of the rural cottage was adopted for the tea house, emphasizing such natural materials as bark-covered logs and woven straw.

Two new forms of architecture were developed in response to the militaristic climate of the times: the castle, a defensive structure built to house a feudal lord and his soldiers in times of trouble; and the shoin, a reception hall and private study area designed to reflect the relationships of lord and vassal within a feudal society. Himeji Castle (built in its present form 1609), popularly known as White Heron Castle, with its gracefully curving roofs and its complex of three subsidiary towers around the main tenshu (or keep), is one of the most beautiful structures of the Momoyama period.

As with so many other aspects of Japanese culture and society, the change to modern technology brought a quite noticeable change in architecture as well. The current look of Japanese cities is the result of and a contributor to 20th century architectural attitudes. With the introduction of Western building techniques, materials, and styles into Meiji Japan, new steel and concrete structures were built in strong contrast to traditional styles. After World War II, the majority of buildings ceased to be built of wood (which is easily flammable in the case of earthquakes and bombing raids), and instead were internally constructed of steel.

1. Read and translate the text

2. Phrase Match

1. **Japanese architecture** has as long a history	a) focused around the Tōdaiji in Nara.
2. Excavations and researches show these houses	b) and the tea house in which it was held.
3. Temple building in the 8th century was	c) of and a contributor to 20th century architectural attitudes.
4. Important development of the period was the tea ceremony	d) as any other aspect of Japanese culture.
5. The rustic style of the rural cottage was adopted for the tea house, emphasizing	e) such natural materials as barkcovered logs and woven straw.
6. The current look of Japanese cities is the result	f) had thatched roofs and dirt floors.

3. Fill in the gaps

relationships trouble castle roofs known structures towers Two new forms of architecture were developed in response to the militaristic climate of the times: the 1)_____, a defensive structure built to house a feudal lord and his soldiers in times of 2)_____; and the shoin, a reception hall and private study area designed to reflect the 3)_____of lord and vassal within a feudal society. Himeji Castle (built in its present form 1609), popularly 4)_____as White Heron Castle, with its gracefully curving 5)_____and its complex of three subsidiary 6)_____around the main tenshu (or keep), is one of the most beautiful 7)_____of the Momoyama period.

4. Using Internet resource, find information about tea ceremony.

Describe its peculiarities

5. In "Philosophie der Kunst" Friedrich von Schelling wrote:

"Architecture in general is frozen music". Taking as an example Oriental architecture, what kind of music could it be? Classical, Romantic, Jazz etc.? Think about your own saying about architecture

Additional text. Pagoda

A pagoda is the general term in the English language for a tiered tower with multiple eaves common in China, Japan, Korea, Vietnam, and other parts of Asia. Most pagodas were built to have a religious function, most commonly Buddhist, and were often located in or near temples. The pagoda's original purpose was to house relics and sacred writings. This purpose was popularized due to the efforts of Buddhist missionaries, pilgrims, rulers, and ordinary devotees to seek out, distribute, and extol Buddhist relics.This term may refer to other religious structures in some countries. In Thailand, "pagoda" usually means the same as stupa while in Vietnam "pagoda" is a more generic term referring to a place of worship. The modern pagoda is an evolution of the Ancient Indian stupa, a tomb-like structure where sacred relics could be kept safe and venerated.

1. Read and translate the text

2. Complete the sentences by choosing one out of four words below

1. A pagoda is the general term in the English language for a tiered tower with multiple _____ common in China, Japan, Korea, Vietnam, and other parts of Asia.

a) leaves b) eaves c) slaves d)lives

2. Most pagodas were built to have a _____ function, most commonly Buddhist, and were often located in or near temples.

a) commercial b) decorative c)religious d) practical

3. The pagoda's original _____ was to house relics and sacred writings.

a) purpose b) goal c) meaning d)place

4. In _____, "pagoda" usually means the same as stupa while in _____ "pagoda" is a more generic term referring to a place of worship.

a) Korea , Vietnam b)Thailand, Japan c) Thailand, Vietnam

5. The modern pagoda is an evolution of the Ancient Indian stupa, a tomb-like structure where _____relics could be kept safe and venerated.

a) historical b) sacred c) untouched d)modern

3. Questions

1. What is "pagoda"?
2. Where were pagodas located?
3. What was the pagoda's original purpose ?
4. What does term "pagoda" mean in other countries such as Thailand, Vietnam etc.?
5. What can you say about modern pagodas?

UNIT 4 RENAISSANCE ARCHITECTURE

Renaissance Architecture

Renaissance architecture is the architecture of the period beginning between the early 15th and the early 17th centuries in different regions of Europe, where there was a conscious revival and development of certain elements of Classical Greek and Roman thought and material culture.

The Renaissance style places emphasis on symmetry, proportion, geometry and the regularity of parts as they are demonstrated in the architecture of Classical antiquity and in particular, the architecture of Ancient Rome, of which many examples existed. Orderly arrangements of columns, pilasters and lintels, as well as the use of semicircular arches, hemispherical domes, niches replaced the more complex proportional systems and irregular profiles of medieval buildings.

Developed first in Florence, with Filippo Brunelleschi as one of its innovators, the Renaissance style quickly spread to other Italian cities and then to France, Germany, England, Russia and elsewhere.
Historians often divide the Renaissance in Italy into three phases.

- ***Renaissance*** (ca. 1400-1500); also known as the ***Quattrocento***. and sometimes Early Renaissance

In the *Quattrocento,* concepts of architectural order were explored and rules were formulated. The study of classical antiquity led in particular to the adoption of Classical detail and ornamentation.

Space, as an element of architecture, was utilized differently to the way it had been in the Middle Ages. Space was organized by proportional logic, its form and rhythm subject to geometry, rather than being created by intuition as in Medieval buildings. The prime example of this is the Basilica di San Lorenzo in Florence by Filippo Brunelleschi(1377-1446).[

- ***High Renaissance*** (ca.1500-1525)

During the *High Renaissance*, concepts derived from classical antiquity were developed and used with greater surety. The most representative architect is Bramante (1444-1514) who expanded the applicability of classical architecture to contemporary buildings. His San Pietro in Montorio (1503) was directly inspired by circular Roman temples. He was, however, hardly a slave to the classical forms and it was his style that was to dominate Italian architecture in the 16th century. This architectural period coincides with the age of Leonardo, Michelangelo and Raphael.

- ***Mannerism*** (ca. 1520-1600)

During the *Mannerist* period, architects experimented with using architectural forms to emphasize solid and spatial relationships. The Renaissance ideal of harmony gave way to freer and more imaginative rhythms. The best known architect associated with the Mannerist style was Michelangelo (1475-1564), who is credited with inventing the giant order, a large pilaster that stretches from the bottom to the top of a facade. He used this in his design for the Campidoglio in Rome.

Prior to the 20th century, the term *Mannerism* had negative connotations, but it is now used to describe the historical period in more general non-judgmental terms.

The influence of Renaissance architecture can still be seen in many of the modern styles and rules of architecture today.

1. Read and translate the text

2. Read the text again and find out if the following statements are true or false. Find and correct mistakes

a Renaissance architecture is the architecture of the period beginning between the late 15th and the late 17th centuries.

b The Renaissance style places emphasis on symmetry, proportion, geometry and the regularity of parts.

c Historians divide the Renaissance in Italy into three phases:

Quattrocento, Light Renaissance, Mannerism.

d Filippo Brunelleschi is an architect who lived in 16th century.

e Bramante is famous for designing San Pietro in Montorio.

f The architectural period called Mannerism coincides with the age of Leonardo, Michelangelo and Raphael.

g The best known architect associated with the Mannerist style was Michelangelo

3. Synonym match

1. Renaissance	a.Distant Past
2. Emphasis	b.Occur simultaneously
3. Antiquity	c. Inventor
4. Arrangement	d. Revival
5. Innovator	e.Focus
6. Coincide	f. Disposition
7. Connotation	g. Implication

4. Fill in the gaps

complex in particular culture emphasis revival period replaced

Renaissance architecture is the architecture of the ……beginning between the early 15th and the early 17th centuries in different regions of Europe, where there was a conscious …….. and development of certain elements of Classical Greek and Roman thought and material ……..

The Renaissance style places …… on symmetry, proportion, geometry and the regularity of parts as they are demonstrated in the architecture of Classical antiquity and ……., the architecture of Ancient Rome, of which many examples existed. Orderly arrangements of columns, pilasters and lintels, as well as the use of semicircular arches, hemispherical domes, niches …….. the more …… proportional systems and irregular profiles of medieval buildings.

5. Questions

1. What does concept “Renaissance” mean?
2. What are the names of the most famous architects of Renaissance?
3. What countries did the Renaissance style spread to?
4. What phases did historians divide the Renaissance in Italy in?
5. During the *Mannerist* period, what did architects emphasize?

6. Read the passage quickly and decide what the main idea of the passage is

During the Renaissance the development of printed books, the rediscovery of ancient writings, the expanding of political and trade contacts and the exploration of the world all increased knowledge and the desire for education.The reading of philosophies that were not based in Christian theology led to the development of Humanism through which it was clear that while God had established and maintained order in the Universe, it was the role of Man to establish and maintain order in Society.[

As in the Platonic academy of Athens, it was seen by those of Humanist understanding that those people who had the benefit of wealth and education ought to promote the pursuit of learning and the creation of that which was beautiful. Wealthy families: the Medici in Florence, the Gonzaga family of Mantua, the Farnese in Rome, the Sforzas in Milan, gathered around them people of learning and talent, promoting the skills and creating employment for the most talented artists and architects of their day.

In your opinion, what inspired people to contribute money into development of education promoting the skills and creating employment for artists and architects at that time? Does it happen nowadays? Give examples.

Additional text. (Peculiarities of Renaissance Architecture).

Façades are symmetrical around their vertical axis. Church facades are generally surmounted by a pediment and organized by a system of pilasters, arches and entablatures. The columns and windows show a progression towards the center.

Domestic buildings are often surmounted by a cornice. There is a regular repetition of openings on each floor, and the centrally placed door is marked by a feature such as a balcony, or rusticated surround. An early and much copied prototype was the façade for the Palazzo Rucellai (1446 and 1451) in Florence with its three registers of pilasters.

The Roman orders of columns are used: – Tuscan, Doric, Ionic, Corinthian and Composite. The orders can either be structural, supporting an arcade or architrave, or purely decorative, set against a wall in the form of pilasters. During the Renaissance, architects aimed to use columns, pilasters, and entablatures as an integrated system.

Arches are semi-circular or (in the Mannerist style) segmental. Arches are often used in arcades, supported on piers or columns with capitals. There may be a section of entablature between the capital and the springing of the arch.

Vaults do not have ribs. They are semi-circular or segmental and on a square plan, unlike the Gothic vault which is frequently rectangular.

The dome is used frequently, both as a very large structural feature that is visible from the exterior, and also as a means of roofing smaller spaces where they are only visible internally. Domes had been used only rarely in the Middle Ages, but after the success of the dome in Brunelleschi's design for the Basilica di Santa Maria del Fiore and its use in Bramante's plan for St. Peter's Basilica (1506) in Rome, the dome became

an indispensable element in church architecture and later even for secular architecture, such as Palladio's Villa Rotonda.

Roofs are fitted with flat or coffered ceilings. They are not left open as in Medieval architecture. They are frequently painted or decorated.

Door usually have square lintels. They may be set within an arch or surmounted by a triangular or segmental pediment. Openings that do not have doors are usually arched and frequently have a large or decorative keystone.

Windows may be paired and set within a semi-circular arch. They may have square lintels and triangular or segmental pediments, which are often used alternately. Courses, moldings and all decorative details are carved with great precision. Studying and mastering the details of the ancient Romans was one of the important aspects of Renaissance theory. The different orders each required different sets of details. Some architects were stricter in their use of classical details than others, but there was also a good deal of innovation in solving problems, especially at corners.

Moldings stand out around doors and windows rather than being recessed, as in Gothic Architecture. Sculptured figures may be set in niches or placed on plinths. They are not integral to the building as in Medieval architecture.[

1. Read and translate the text

2. Translate the following word combinations into your own language

Facade	springing of the arch
To be surmounted by	vaults
Pilasters	ribs
Arches	indispensable element
Entablatures	secular architecture
Cornice	coffered ceiling
Rusticated surround	square lintels
Arcade	triangular pediments
Architrave	courses
Semi-circular	moldings
Piers	plinth

3. In each sentence there are two mistakes (one – grammatical, another – lexical). Find and correct them

1. Pilasters is symmetrical around their vertical axis.

2. Church facades are generally surmounting by a pediment and organized by a system of pilasters, arcades and entablatures.

3. The orders can either to be structural, supporting an arcade or architrave, or purely decorative, set against a ceiling in the form of pilasters.
4. During the Renaissance, architects were aimed to use colours, pilasters, and entablatures as an integrated system.
5. Vaults does not have robes.
6. The dome has being used frequently, both as a very large structural feature that is visible from the exterior, and also as a support of roofing smaller spaces where they are only visible internally.
7. Some architects were strictest in their use of classical details than others, but there was also a small amount of innovation in solving problems, especially at corners.

The Sistine Chapel

The return of the Pope from Avignon in 1377 and the new emphasis on Rome as the center of Christian spirituality brought about a boom in the building of churches in Rome such as had not taken place for nearly a thousand years. This commenced in the mid15th century
and gained momentum in the 16th century, reaching its peak in the Baroque period. The construction of the Sistine Chapel with its uniquely important decorations was part of this process. The Sistine Chapel was built between 1475 and 1483, in the time of Pope Sixtus IV della Rovere. Its basic feature is the papal function, as the pope's chapel and the location of the elections of new popes. It was consecrated and dedicated to the Assumption of the Virgin on 15th August 1483.

The chapel has no architectural distinction, it is rectangular in shape and measures 40,93 meters long by 13,41 meters wide, i.e., the exact dimensions of the Temple of Solomon, as given in the Old Testament. It is 20,70 meters high and is roofed by a flattened barrel vault, with six tall windows cut into the long sides, forming a series of pendentives between them. The architectural plans were made by Baccio Pontelli and the construction was supervised by Giovannino de'Dolci. Later alterations modified the original exterior.

In 1481 Pope Sixtus IV summoned to Rome the Florentine painters Sandro Botticelli, Domenico Ghirlandaio and Cosimo Rosselli, as well as the Perugian Pietro

Perugino to decorate the walls with frescoes. Michelangelo was commissioned by Pope Julius II della Rovere in 1508 to repaint the ceiling; the work was completed between 1508 and 1512. He painted the Last Judgement over the altar, between 1535 and 1541, being commissioned by Pope Paul III Farnese.

For great ceremonial occasions the lowest portions of the side walls were covered with a series of tapestries depicting events from the Gospels and the Acts of the Apostles. These were designed by Raphael and woven in 1515-19 at Brussels.

The building in some respects can be considered a personal monument to the Della Rovere family, since Sixtus IV saw to its actual construction and the frescoes beneath the vaults, and his nephew Julius II commissioned the ceiling decoration. Oak

leaves and acorns abound, heraldic symbols of the family whose name means literally "from the oak."

The elements of decoration together created an enchanting Quattrocento interior, both contemplative and spiritual.

Michelangelo returned to Rome in 1508. He was to paint the Twelve Apostles and a few ornaments on the ceiling of the Sistine Chapel. He, who had always insisted that he was a sculptor, was thus to learn the art of fresco painting, and practice it on a vault decorated by fifteenth-century artists as a starry sky. However, as he began work on the project, Michelangelo conceived grander designs for the decoration of the ceiling. He spent the time between then and the 31st of October 1512 painting more than 300 figures on the ceiling of the Sistine Chapel.

The decoration of the chapel was cleaned and restored in recent decades. The project started with the fifteenth century frescoes in 1965. The restoration of the lunettes, the vault and the Last Judgment started in 1980 and was terminated in 1994. The restoration produced a spectacular result.

1. Read and translate the text

2. Complete these sentences using the correct passive form of the verbs

1. The Sistine Chapel _____ (build) between 1475 and 1483.

2. It _____(consecrate and dedicate) to the Assumption of the Virgin on 15th August 1483.

3. The architectural plans _____ (make) by Baccio Pontelli and the construction _____(supervise) by Giovannino de'Dolci.

4. Michelangelo _____(commission) by Pope Julius II della Rovere in 1508 to repaint the ceiling; the work _____(complete) between 1508 and 1512.

5. For great ceremonial occasions the lowest portions of the side walls _____(cover) with a series of tapestries depicting events from the Gospels and the Acts of the Apostles.

6. The decoration of the chapel _____(clean and restore) in recent decades.

3. Questions

1. When was the Sistine Chapel built?

2. What is its basic function?

3. What are the dimensions of the Sistine Chapel?

4. Who decorated the ceiling of the Sistine Chapel?

5. If you were a painter, would you like to spend some years decorating the grand ceiling without rest like Michelangelo did?

4. What do these dates refer to ?

1475 1483 1481 1508 1512 1535 1541 1965 1994

5. Once Philip Johnson in "New York Times" said: "Architecture is the art of how to waste space". Can you disprove this statement taking as an example Renaissance Architecture?

Additional texts. **Anecdotes Of Bramante Da Urbino (1444-1514)**

This great master was born in Urbino about 1444, his parents being very poor. In his childhood he was taught to read and write, and was early devoted to drawing and the art of painting. Arithmetic became his favorite study.

He soon developed a love for architectural study and perspective, and, in order to learn more he departed to Lombardy, going from one city to another and working as best he could. He reached Milan where he gave much time to the study of the great Gothic cathedral there. From there he went to Rome. He had some money with him, and it was his desire to spend it very slowly, that he might have leisure to make accurate measurements of the ancient buildings. In solitude and deep thought he carried this out to completion, measuring all the buildings of antiquity situated in Rome and all the surrounding country, going as far as Naples in his quest.

Here he became known to the cardinal of Naples, who began to favor his progress. For the cardinal he built a cloister, which was the beginning of his reputation and success. As we see in most lives, the hard thing was to get a start. Upon this beginning other commissions followed, and Bramante was invited to consult with eminent architects regarding the building of a new palace. All his works proved to be successful, he soon had much credit in Rome, and distinguished personages employed him in important undertakings.

He did much at Bologna also, making ground plans for numerous edifices, which were very fine in proportion. He imparted instruction in the rules of architecture to Raphael, who afterwards painted his portrait into one of his famous works, " The School of Athens."

But his greatest work was on St. Peter's. He laid the foundations of this stupendous church, and continued his labors upon it until his own death. He raised the building to the height of the cornice, but after his death the plans were much altered by Raphael and Antonio san Gallo, and afterwards by Michaelangelo. Michaelangelo himself remarked that he was only executing Bramante's design, and that it was the master who founded a great edifice who ought to be regarded as its author.

Vasari says that Bramante was a person of most cheerful and amiable disposition, delighting to do everything whereby he could bring benefit to his neighbor. He delighted greatly in poetry and music, practicing upon the lyre and occasionally composing a poem. The event of his death in the year 1514 at the age of 70 years caused the erection of St. Peter's to be suspended for several years. He was entombed in St. Peter's. His death was a loss to architecture for his investigations led to the discovery of many useful inventions that enriched the art. He was to the second part of the Renaissance what Brunelleschi had been to the first and he rendered the road to the true science of architecture much easier to all who came after him.

1. Read and translate the text

2. Fill in the gaps

1. This great master was born in Urbino about 1444, his parents being very _____.

a) rich b) poor c)known d) unknown.

2. He reached _____ where he gave much time to the study of the great _____ cathedral there.

a)Milan, Roman b)Malta, Gothic c)Milan, Gothic d)Malta, Roman

3. Here he became known to the _____ of Naples, who began to favor his progress.

a) Pope b) Duke c)Cardinal d) Earl

4. For the cardinal he built a_____, which was the beginning of his reputation and success.

a) church b) convent c) cathedral d) cloister

5. All his works proved to be _____, and he soon had much credit in Rome.

a) booming b) intriguing c)successful d) the most glamorous

6. He delighted greatly in poetry and music, practicing upon the _____ and occasionally composing a _____.

a)lyre, verse b) violin, poem c)lyre, poem d)organ, poem

3. Questions

1. When and where was the great master born?
2. What do you know about his childhood?
3. What did he do in Rome?
4. What did he build for e cardinal of Naples?
5. How did he gain popularity?
6. What kind of person he was?

7. What were his interests in life?

Michelangelo Buonarroti (1475-1564), was one of the creative giants whose achievements mark the High Renaissance. He excelled in each of the fields of painting, sculpture and architecture and his achievements brought about significant changes in each area. His architectural fame lies chiefly in two buildings: - the interiors of the Laurentian Library and its lobby at the monastery of San Lorenzo in Florence, and the Basilica of St. Peter in Rome. St Peter's was *"the greatest creation of the Renaissance*" and a great number of architects contributed their skills to it. But at its completion, there was more of Michelangelo's design than of any other architect, before or after him.

St. Peter's. The plan that was accepted at the laying of the foundation stone in 1506 was that by Bramante. Various changes in plan occurred in the series of architects that succeeded him, but Michelangelo, when he took over the project in 1546, reverted to Bramante's Greek-cross plan and redesigned the piers, the walls and the dome, giving the lower weight-bearing members massive proportions and eliminating the encircling aisles from the chancel and identical transept arms. Helen Gardner says: "Michelangelo, with a few strokes of the pen, converted its snowflake complexity into a massive, cohesive unity."

Michelangelo's dome was a masterpiece of design using two masonry shells, one within the other and crowned by a massive lantern supported, as at Florence, on ribs. For the exterior of the building he designed a giant order which defines every external bay, the whole lot being held together by a wide cornice which runs unbroken like a rippling ribbon around the entire building.

There is a wooden model of the dome, showing its outer shell as hemispherical. When Michelangelo died in 1564, the building had reached the height of the drum. The architect who succeeded Michelangelo was Giacomo della Porta. The dome, as built, has a much steeper projection than the dome of the model. It is generally presumed that it was della Porta who made this change to the design, to lessen the outward thrust. But, in fact it is unknown who it was that made this change, and it equally possible, and in fact a stylistic likelihood that the person who decided upon the more dynamic outline was Michelangelo himself, at some time during the years that he supervised the project.

1. Read and translate the text

2. Fill in the gaps with the correct comparative or superlative form of the adjectives in brackets

1. St Peter's was *" _____(great) creation of the Renaissance"*, and a great number of architects contributed their skills to it.

2. Michelangelo reverted to Bramante's Greek-cross plan and redesigned the piers, the walls and the dome, giving the _____ (low) weight-bearing members massive proportions .
3. The dome, as built, has a much _____(steep) projection than the dome of the model.
4. It is likely that the person who decided upon _____(dynamic) outline was Michelangelo himself.

3. Make up the comparative and superlative forms of the following adjectives

Beautiful –	Exciting –	Bad –
Ugly –	Crowded –	Interesting –
Big –	Modern –	Fascinating –
Small –	Old –	Ancient –
Cheap –	Far –	Near –
Expensive –	Good –	Dirty –

Leonardo da Vinci (April 15, 1452 – May 2, 1519) was an Italian Renaissance architect, musician, anatomist, inventor, engineer, sculptor, geometer, and painter. He has been described as the archetype of the "Renaissance man" and as a universal genius. Leonardo is famous for his masterly paintings, such as *The Last Supper* and *Mona Lisa*. He is also known for designing many inventions that anticipated modern technology but were rarely constructed in his lifetime. In addition, he helped advance the study of anatomy, astronomy, and civil engineering.

Leonardo was born in Anchiano, near Vinci, Italy. He was an illegitimate child. His father, Ser Piero da Vinci was a young lawyer and his mother, Caterina, was most likely a peasant girl.

Leonardo grew up with his father in Florence. Here, he started drawing and painting. His early sketches were of such quality that his father soon showed them to the painter Andrea del Verrocchio who subsequently took the fourteen-year old Leonardo on as an apprentice. Later, he became an independent painter in Florence

Leonardo often planned grandiose paintings with many drawings and sketches, only to leave the projects unfinished.

In Milan he spent 17 years making plans and models for a monumental sevenmetre (24-foot) high horse statue in bronze called "Gran Cavallo". Because of war with France, the project was never finished. Based on private initiative, a similar statue was completed according to some of his plans in 1999 in New York, given to Milan and erected there. The Hunt Museum in Limerick, Ireland has a small bronze horse, thought to be the work of an apprentice from Leonardo's original design.

After returning to Florence, he was commissioned for a large public mural, the "Battle of Anghiari"; his rival Michelangelo was to paint the opposite wall. After

producing a fantastic variety of studies in preparation for the work, he left the city, with the mural unfinished due to technical difficulties.

1. Read and translate the text

2. Match the words with their definitions

Architecture	the scientific study of the structure of human or animal bodies
Sculpture	the study in mathematics oh the angles and shapes formed by the relationships of lines, surfaces and solid objects in space
Geometry	the scientific study of the stars and planets
Anatomy	the work involved in designing and building roads, bridges, machines etc
Astronomy	the art or skill of making objects out of stone, wood, clay etc
Engineering	the art and practice of planning or designing of buildings

3. Questions

1. When and where was Leonardo born?
2. What is he famous for?
3. What do you know about his parents?
4. Did he always finish his projects?
5. Can you prove that Leonardo was a genius?

UNIT 5. INFLUENCE OF CLIMATE ON ARCHITECTURE OF ENGLAND

Influence of climate on Architecture of England

The English climate, with its winds and rain, had always its effect upon the plan and certain features of buildings. When a new style was introduced, the dull English

climate caused it to be adapted to the northern use. Thus, while great western portals were typical features of French cathedrals, porches in England were generally planned in the side aisles and were deep and narrow, so as to act as screens against the wind. The general dullness of the climate and the absence of strong sunlight contributed to the increased size of traceried windows which in late Gothic often stretched across the whole width of the nave. The high-pitched roof to throw off snow and rain was another result of climatic conditions. The influence of climate was operative in the Renaissance as in former periods. In order to admit light, large windows still continued, especially in the early period, in contrast to those of Italy. A growing desire for comfort, coinciding with the more general use of coal as fuel in the reign of Charles I, brought about the introduction of a fireplace in each room; while chimneys continued, as in Tudor period, to be important symmetrical features of the external design, instead of being disguised as in Italy.

1. Read and translate the text

2. Choose the synonyms to the words in italics

1. The English climate, with its winds and rain, had always its effect upon the plan and certain *features* of buildings.

a) quantities b) qualities c)sides

2. Porches in England were generally *planned* in the side aisles and were deep and narrow.

a) constructed b) implied c) designed

3. The high-pitched roof to *throw off* snow and rain was another result of climatic conditions.

a) to put up b) leave off c) to free from

4. A growing desire for comfort, coinciding with the more general use of coal as fuel in the reign of Charles I, *brought about* the introduction of a fireplace in each room.

a) worked out b) caused c) exploded

3. In each sentence there is one word which is wrong. Find and correct it

1. The English climate has always spoilt the plan and certain features of buildings because of its winds and rain.
2. As a rule, porches in England were planned in the side aisles and were deep and shallow, so as to act as screens against the wind.
3. The monotony of the climate and the absence of strong sunlight led to to the increased size of traceried windows which in late Gothic often spread out across the whole depth of the nave.
4. In the reign of Charles I the English started to use more fossil.
5. The introduction of a fireplace in each room of the English was caused by an increasing desire for light.

4. Questions

1. What did the English climate have its effect upon?
2. How has climate influenced Architecture of England?
3. Why is a fireplace used in English houses?
4. What is important feature of the external design of English buildings?

UNIT 6 THE ARCHITECTURE OF WESTMINSTER ABBEY

The Library and Achives - the Architecture of Westminster Abbey

The present building dates mainly from the reign of King Henry III. In 1245 he pulled down the eastern part of the 11th century Abbey, which had been founded by King Edward the Confessor and dedicated in 1065. It is said that Henry's devotion to St Edward later prompted him to build a more magnificent church in the newest Gothic style, and also to provide a new Shrine for the Saint, near to whom Henry himself could be buried. The characteristics of Gothic are flying buttresses, pointed arches and ribbed vaulting. The three master masons supervising the work were Henry of Reyns, John of Gloucester and Robert of Beverley. It is not known if Henry was English or French but the architect was greatly influenced by the new cathedrals at Reims, Amiens and Chartres, borrowing the ideas of an apse with radiating chapels, rose windows and flying buttresses. The design is based on the continental system of geometrical proportion, but its English features include single rather than double aisles and a long nave with projecting transepts. The Abbey has the highest Gothic vault in England (nearly 102 feet) and it was made to seem higher by making the aisles narrow. The Englishness is also apparent in the elaborate mouldings of the main arches, the lavish use of polished Purbeck marble for the columns and the overall sculptural decoration. The stonework (which came from Caen in France and Reigate in Surrey), the sculptured roof bosses and carvings would have been brightly coloured and the wall arcades may have been decorated in vermilion and gold. By 1269 the apse, radiating chapels, transepts and choir were complete and the new Shrine received the bones of St Edward on 13 October. But Henry died in 1272 with only one bay of
the nave beyond the choir screen having been completed. Since then work had progressed slowly for nearly a hundred and fifty years.

Henry V ordered his lavishly sculptured Chantry Chapel to be built at the eastern end of St Edward's chapel, forming a bridge over the ambulatory.

The great addition to the Abbey was the construction of a magnificent new Lady Chapel by Henry VII between 1503 and 1519 to replace the 13th century chapel. The Perpendicular architecture here is in total contrast to the rest of the Abbey. No accounts for this building have been found but it is thought that the architects were Robert Janyns and William Vertue. It has been called "one of the most perfect buildings ever erected

in England" and "the wonder of the world". Henry spent lavish sums on its decoration. The glory of the chapel is its delicately carved fan vaulted roof, with hanging pendants. All around the chapel are Tudor emblems such as the rose and portcullis, and nearly one hundred statues of saints
still remain in niches around the walls. The original jewel-like stained glass by Bernard Flower has, however, disappeared.

1.Read the text and underline adjectives ending in –ing or –ed. Translate the sentences containing these adjectives

F.e. The characteristics of Gothic are flying buttresses, pointed arches and ribbed vaulting.

2.What do these numbers refer to?

1245 11 3 102 13 150

3. Read the text again and find out if the following statements are true or false. Find and correct mistakes

1. In 1245 King Henry III erected the eastern part of the 11th century Abbey.
2. The characteristics of Gothic are flying buttresses, pointed arcades and ribbed vaulting.
3. The three master masons supervising the work were Henry of Reyns, John of Gloucester and Robert of Beverley.
4. The Abbey has the highest Gothic vault in England and it was made to seem higher by making the long passages between rows of seats in the church narrow.
5. By 1269 the apse, radiating chapels, transepts and choir were complete and the new Shrine received the bones of King Henry III on 13 October.
6. The original jewel-like stained glass of the Abbey has been stolen.

UNIT 7 MODERN ARCHITECTURE

The Industrial Revolution, which began in England at about 1760, made radical changes in every level of civilization all over the world. The heavy industry growth brought a flood of new building materials, such as cast iron, steel, and glass and so on with which architects and engineers devised structures of unimaginable size, form, and function.

In the second half of the 19th century dislocations brought about by the Industrial Revolution started to be overwhelming. Many were frightened by the hideous new urban districts of factories and workers' housing and the public taste of the newly rich. Architects were employed to build canals, tunnels, bridges, and railroad stations.

The Skyscraper which the architect Louis Sullivan designed, gave new meaning to the form of urban commercial buildings. His career evolved with the socalled Chicago School of Architecture. Their challenge was to build a skyscraper or high-rise building which was to be facilitated by the introduction of the electric elevator and massive abundance of steel. They made a great transition from the masonry walls to the steel frame. The building's skeleton could be constructed quickly and the rest of the building's remaining components could be hung on it to complete it, which was a great advantage for the high-rise buildings on busy city streets. Two of the most famous architects during the modern period are I.M Pei and Frank Lloyd Wright.

Reinforced concrete was the center of attention in France when Augusta Perret's apartment building, the Rue Franklin, and his Theatre des Champs-Elysees were built in France.

The Bauhaus school encouraged the modern movement to move along. It brought together architects, painters, and designers from many countries to set goals for the visual arts in the modern age.

International Style was started by the Bahaus architects and prevailed after the 1930s. The theory and practice of this style was introduced in the United States largely because of Philip C. Johnson's efforts.

Postmodern Architecture started when architects and critics between 1965 and 1980 said that there was no better style than postmodern. Even though postmodern was not as great as movement, such as modernism, they said that postmodernists value individuality, complexity, and sometimes even humor.

1. Read and translate the text

2. Suggest the Ukrainian equivalents for the words below

The Industrial Revolution, the Skyscraper**,** urban commercial buildings, a high-rise building, reinforced concrete, the electric elevator, massive abundance of steel, Postmodern Architecture

3. Choose the right form of the verb

1. **The Industrial Revolution** _____ in England at about 1760.

a) begun b)begin c)began

2. Architects and engineers _____ structures of unimaginable size, form, and function.

a) devised b)were devising c)devises

3. Many _____by the hideous new urban districts of factories and workers' housing and the public taste of the newly rich.

a)have frightened b)were frightened c) was frightened

4. Architects were _____to build canals, tunnels, bridges, and railroad stations.

a) employing b) employ c)employed

5. The building's skeleton could _____quickly.

a) was constructed b)construct c)be constructed

4. Match the left column with the right one

Iron	Сталь
Cast iron	Чавун
Steel	Латунь
Glass	лісоматеріали
Lime	залізо
Timber	Шифер
Concrete	Черепиця, плитка
Slate	Бетон
Brass	Скло

5. Synonym match

To devise	To develop gradually by a long process
To bring about	To fix at the top so that the lower part is free
To overwhelm	To make powerless by greater force of numbers
To be frightened	To cause to happen
To evolve	To be terrified
To hang	To invent

6. Questions

1. When did the Industrial Revolution begin in England?
2. What building materials were brought into the process of building?
3. What did Louis Sullivan design?
4. What are the names of the most famous architects of modern period?
5. What establishment encouraged the modern movement to move along ?

Additional texts.

BAUHAUS

Bauhaus is the common term for the **Staatliches Bauhaus**, an art and architecture school in Germany that operated from 1919 to 1933, and for its approach to design that it publicized and taught. The most natural meaning for its name (related to the German verb for "build") is *Architecture House*. Bauhaus style became one of the most influential currents in Modernist architecture, and one of the most important currents of the New Objectivity.

The Bauhaus art school had a profound influence upon subsequent developments in art, architecture, graphic design, interior design, industrial design and typography.

The Bauhaus art school existed in three German cities (Weimar from 1919 to 1925, Dessau from 1925 to 1932, Berlin from 1932 to 1933), under three different architect-directors (Walter Gropius from 1919 to 1927, Hannes Meyer from 1928 to 1930, Ludwig Mies van der Rohe from 1930 to 1933). The changes of venue and leadership resulted in a constant shifting of focus, technique, instructors, and politics. When the school moved from Weimar to Dessau, for instance, although it had been an important revenue source, the pottery shop was discontinued. When Mies took over the school in 1930, he transformed it into a private school, and would not allow any supporters of Hannes Meyer to attend it.

Constructivism was an artistic and architectural movement in Russia from 1919 onward (especially present after the October Revolution) which dismissed "pure" art in favour of an art used as an instrument for social purposes, specifically the construction of a socialist system. Constructivism as an active force lasted until around 1934, having a great deal of effect on developments in the art of the Weimar Republic and elsewhere, before being replaced by Socialist Realism. Its motifs have sporadically recurred in other art movements since.

Organic architecture is a philosophy of architecture which promotes harmony between human habitation and the natural world through design approaches so sympathetic and well integrated with its site that buildings, furnishings, and surroundings become part of a unified, interrelated composition. Architects Gustav Stickley, Antoni Gaudi, Frank Lloyd Wright, Louis Sullivan, Bruce Goff, Rudolf Steiner, Bruno Zevi, Hundertwasser,Imre Makovecz and most recently Anton Alberts and Laurie Baker are all famous for their work with organic architecture.

The term "Organic Architecture" was coined by the famous architect, Frank Lloyd Wright (1868-1959).

Brutalism is an architectural style that spawned from the modernist architectural movement and which flourished from the 1950s to the 1970s. The early style was

inspired largely by the work of Swiss architect, Le Corbusier, and in particular his Unité d'Habitation (1952) and the 1953 Secretariat Building in Chandigarh, India.

The term Brutalist Architecture originates from the French *béton brut*, or "raw concrete", a term used by Le Corbusier to describe his choice of material. In 1954, the English architects Alison and Peter Smithson coined the term, but it gained currency when the British architectural critic Reyner Banham used it in the title of his 1954 book, "New Brutalism", to identify the emerging style. The impact of the work of Le Corbusier on the modern architectural development is obvious. The style has been refined at times and experienced historic appreciation and resurgences into the twenty-first century.

Brutalist buildings usually are formed with striking repetitive angular geometries, and often revealing the textures of the wooden forms used to shape the material, which is normally rough, unadorned poured concrete. Not all Brutalist buildings are formed from concrete. Instead, a building may achieve its Brutalist quality through a rough, blocky appearance, and the expression of its structural materials, forms, and services on its exterior. Many of Alison and Peter Smithson's private houses are built from brick, and Richard Rogers & Renzo Piano's Centre Pompidou often is regarded as a Brutalist structure. Brutalist building materials may include brick, glass, steel, rough-hewn stone, and gabion (also known as trapion).

1. Read and translate the text

2. Suggest the Ukranian equivalents for the words below

Pottery shop, furnishings, surroundings, interrelated composition, social purposes, sporadically recurred, resurgence, brick, steel, rough-hewn stone, gabion.

3. Find in the text three English equivalents for the word "вплив***(***впливати***)"***

UNIT 8 POSTMODERN ARCHITECTURE

Postmodern architecture is an international style whose first examples are generally cited as being from the 1950s, and which continues to influence present-day architecture. Postmodernity in architecture is generally thought to be heralded by the return of "wit, ornament and reference" to architecture in response to the formalism of the International Style of modernism. As
with many cultural movements, some of postmodernism's most pronounced and visible ideas can be seen in architecture. The functional and formalized shapes and spaces of the modernist movement are replaced by unapologetically diverse aesthetics: styles

collide, form is adopted for its own sake, and new ways of viewing familiar styles and space abound.

Classic examples of modern architecture are the Lever House and the Seagram Building in commercial space, and the architecture of Frank Lloyd Wright or the Bauhaus movement in private or communal spaces. Transitional examples of postmodern architecture are the Portland Building in Portland, Oregon and the Sony Building (New York City) (originally AT&T Building) in New York City, which borrows elements and references from the past and reintroduces color and symbolism to architecture. A prime example of inspiration for postmodern architecture lies along the Las Vegas Strip, which was studied by Robert Venturi in his 1977 book *Learning from Las Vegas* celebrating the strip's ordinary and common architecture.

Postmodern architecture has also been described as "neo-eclectic", where reference and ornament have returned to the facade, replacing the aggressively unornamented modern styles. This eclecticism is often combined with the use of nonorthogonal angles and unusual surfaces, most famously in the State Gallery of Stuttgart (New wing of the Staatsgalerie Stuttgart) and the Piazza d'Italia by Charles Willard Moore. The Scottish Parliament buildings in Edinburgh have also been cited as being of postmodern vogue.

Modernist architects regard post-modern buildings as vulgar and cluttered with "gew-gaws". Postmodern architects often regard modern spaces as soulless and blind. The divergence in opinions comes down to a difference in goals: modernism is rooted in minimal and true use of material as well as absence of ornament, while postmodernism is a rejection of strict rules set by the early modernists and seeks exuberance in the use of building techniques, angles, and stylistic references.

1. Read and translate the text

2. Complete these sentences using the correct passive form of the verbs

1. Postmodern architecture is an international style whose first examples _____ _____(generally, cite) as being from the 1950s.
2. As with many cultural movements, some of postmodernism's most pronounced and visible ideas _____(can, see) in architecture.
3. The functional and formalized shapes and spaces of the modernist movement _____(replace) by unapologetically diverse aesthetics.
4. Postmodern architecture _____(also, describe) as "neo-eclectic".
5. This eclecticism _____(often, combine) with the use of nonorthogonal angles and unusual surfaces.

Focus on Poetry

Read the passage from the poem "This is the house that Mark build" written by Mark Twain.

THIS IS THE HOUSE THAT MARK BUILD

These are the bricks of various hue
And shape and position, straight and askew,
With the nooks and angles and gables too,
Which make up the house that Mark built.

This is the sunny and snug retreat,
At once both city and country seat,
Where he grinds out many a comical grist,

The author, architect, humorist,
The auctioner and dramatist,
Who lives in the house that Mark built…

1. Translate the following words into your language

Brick	hue
Shape	position
straight	askew
nooks	angles
gables	snug
retreat	grist

2. Match the words with their definitions

Author	someone who is in charge of selling the things at an auction
Architect	someone who writes plays, especially serious ones
Humorist	someone, especially a writer, who tells funny stories
Auctioner	someone whose job is to design buildings

Dramatist someone who has written a book, report etc.

3. Match the idioms with their explanations

1.Every nook and cranny To run away

2.Like a cat on hot bricks To cause great suffering to (people,esp. who are poor or without power) by cruel or unjust treatment

3.A hue and cry Every part of place

4.Beat a retreat Very nervous or worried

5.Grind the face of Loud public opposition or annoyance

4. Fill in the gaps with the idioms from above

1. Put this woman in the dock and our newspapers will raise such _____ that you will wish you never heard of her in your life.
2. The boys _____after crashing the car they had stolen.
3. She was _____ before her examination.
4. I've searched _____ but can't find the button Ilost yesterday.
5. From the Bible:"What mean ye that ye beat my people to pieces, and _____ of the poor? Saith the Lord God of hosts" (Isaiah 3:15).

Read the quotations about house and discuss them with each other

The doctor can bury his mistakes, but an architect can only advise his clients to plant vines.

F.Wright

The city is not concrete jungle. It is the human zoo.

D.Morris

We shape our buildings, there after they shape us.

W.Churchill

A man builds a fine house; and now he has a master, and a task for life: he is to furnish, watch, show it and keep it in repair the rest of his days.

R. Emerson

ARCHITECTURAL GLOSSARY

A

Aisle – Subsidiary space alongside the body of a building, separated from it by columns, piers or posts. Also (especially Scots) projecting wing of a church, often foe special use, e.g. by a guild or by a landed family whose burial place it may contain.

Acropolis – Greek citadel sited prominently above the rest of a city. A citadel – Athens; Greek highest polis, a city.

Altar – An elevated place or structure, block or stone, or the like on which sacrifices were offered.

Apse – Semicircular or polygonal end of en apartment, especially of a chancel or chapel. In classical architecture sometimes called an exedra.

Arcading – rows of arches supported on columns, free-standing or attached to a wall(blind arcade)

Arch – A curved structure so built that the stones or other component parts support each other by mutual pressure and can sustain a load ,of the foot, the part from the head to toes of the body structure, normally having an upward curve.

Array – A repetitive series of similar components.

B

Base – lower part of built structure: the lower part of a built structure such as a wall, pillar, or column.

Basilica – The most slender and ornate of the tree main classical orders. It has a basket-shaped capital ornamented with acanthus foliage.

Bay – Division of an elevation or interior space as defined by regular vertical features such as arches, columns, windows etc.

Beam – A structural member that resists load which bend it. Beams also include joists and girders.

Byzantine – A style which originated as Byzantium (Constantinople), the Eastern capital of the Roman Empire, in the 5th century, spreading around the Mediterranean and, with Eastern (Orthodox) Christianity, from Sicily and Russia in later centuries. It developed the round arches, vaults and domes of Roman architecture but eschewed formalized classical detail in favour of lavish decoration and ornament of emblematic and symbolic significance. Introduced to late 19th and early 20th-century Britain as an alternative to Gothic, usually for church architecture; often cvalled Neo-Byzantine.

C

Capital – Head of crowing feature of a column or pilaster.

Cloisters – Roofed passage between a chapel of a monastery and the monks quarters.

Colonnade – A range of columns placed at regular intervals :a similar row, as of trees.

Colossal order – The classical architecture, an order whose height is that of two or more storeys of the building to which is applied. Also called a giant order.

Corinthian – The most slender and ornate of the three main classical orders. It has a basket-shaped capital ornamented with acanthus foliage.

Cornice – Projecting molding running along the top of a building, an arch or a column.

Cupola – (lit. dome) : Especially, a small dome on a circular or polygonal base crowing a larger dome, roof, or turret. Also (Scots) a small dome or skylight as an internal feature, especially over a stairwell.

D

Dome – A structure raised above a large building, usually hemispherical, a large cupola.

Drum – Circular or polygonal wall that supports a dome.

E

Elevation – Drawing of one aspect of a planned building in a vertical plane.

Enrichments – The carved decoration of certain classical mouldings.

Exterior – Outer, outward, external.

External wall - An outer wall of a building not being party wall even through adjoining to a wall of another building of another building and also means a wall abutting on an interior open space of any building.

F

Façade – Exterior front or face of the building, the appearance presented to the world.
Finial – a slender piece of stone used to decorate the tops of the merlons.

Foundation – The part of the structure, which in the direct contact with transmitting loads to the grounds.

Frieze – a horizontal band which runs above doorways and windows or below the cornice. The frieze may be decorated with designs or carvings.

G

Gallery – An intermediate floors or platform projecting from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation etc. Long thin room, also in a church, an upper floor overlooking the nave

Greek Doric – A version of the simplest and plainest of the three main classical orders, featuring a frieze with trygliphs and metopes.. A Greek Doric column has a thin spreading convex capital end no base to the column. Compare Roman Doric.

I

Interior decoration - The construction and furnishing of the interior of a building.

Ionic – One of the orders of classical architecture, distinguished in particular by downward- and inward-curling spirals (called volutes) on the capital of the column.

J

Joists – Horizontal timbers laid in parallel to support the floor of a building.

L

Landscape – Portion of land that eye can comprehend in a single view.

Lancet window – Thin, pointed window typical of the Early English style of Gothic.

Loggia – (Italian): A gallery or room with regular openings along one main side, sometimes free-standing.

M

Metropolis – The capital of a country.

Minaret – Thin tall tower attached to a mosque, from which a muezzin calls to the faithful to prayer.

Mosaic – A kind of work in which designs are formed by small pieces of colored marble, glass and anything composed of piecing together different materials.

Mosque –Mohammedan place of worship.

Mullion – Vertical spar dividing a window or any other opening.

O

Open Space – An area forming an integral part of the site, left open to sky.

P

Pagoda – An eastern temple, esp. in the form of many storied, tapering tower.

Palazzo – (Italian, palace) : used for any compact and ornate building like a large Italian town house, usually classical in style.

Parapet – A low wall or railing built along the edge or roof or a floor.

Pedestal – The support of a column, statue, vase.

Pediment – In classical style the low pitched gable above the entablature; since Renaissance times, any roof end.

Peristyle - A range of columns around a building or a square or court with columns all around.

Pier – The mass of stone work between the openings in the wall of a building, the support of an arch, bridge, gate pillar.

Pilaster – A square column, partly built into, partly projecting from a wall.

Pillar – Free-standing upright member of any section, not conforming to one of the classical orders.

Porch – A building forming an enclosure or protection for doorway, a portico or colonnade, a veranda.

Portico – A porch with the roof and frequently a pediment supported by a row of columns. Porticoes are described by the number of columns, e.g. distyle (two), tetrastyle

(four) , hexastyle (six), octostyle (eight). A prostyle portico has columns standing free. A portico in antis has columns on the same plane as the front of the building. Blind portico: the front features of a portico applied to a wall; also called a temple front.

Post Modern – Contemporary form of Architecture described as 'more a spirit than a style' that features especially patterned brick works, pitched roofs, turrets and round windows.

Pylon – A gateway of an Egyptian temple.

R

Reinforced concrete – Concrete that is strengthened by the insertion of rods of steel, wire mesh or strands of glass reinforced plastic or similar materials.

Rococo – Final phase of Baroque style, involving light and often naturalistic ornamentation.

Roof – Top covering of a building, a ceiling, upper covering of a dwelling.

S

Shaft – body of column: the main body of a column, between the capital and base.

Shelter – A structure that shields or protects, esp. against weather: a place of refuge, retreat, or temporary lodging in distress: protection.

Space frame construction – The use of high tech materials to construct buildings which enclose large areas without internal support; tension and elasticity are the principles mostly involved.

Spandrel – Triangular section of masonry above the junction of two arches in the sequence.

Spire – narrow tapering structure topping something: a tall narrow pointed structure on the top of a roof, tower, or steeple.

Storey – The portion of a building included between the surface of any floor and the surface of floor next above it.

T

Terrace – A raised flat place; the flat roof of the house.

Timber – large wooden building support: a large piece of wood, usually squared, used in a building, e.g. as a beam.

Tower – A lofty building, standing alone or forming part of another.

Turret – A small tower on a building or a structure, rising above it, a tower.

Tuscan – One of the orders of classical architecture, a simpler variant of Roman Doric.

U

Urban – Belonging to a city, town like as opposed to rural character.

V

Vault – Arched ceiling or roof, usually in brick or stone.

Vernacular – In architecture, of traditional and indigenous historical style.

Volute – Spiral scroll carved on the capital of an Ionic column.

W

Wicket – A small gate, a small door or gate forming part of a large one.

Електронне навчальне видання

Методичні рекомендації

для проведення практичних занять

з навчальної дисципліни

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