ANGKA GILIRAN:**……………………..**

UNIVERSITI SAINS MALAYSIA

Second Semester Examination
2009/2010 Academic Session

April/May 2010

RAK 344 – History and Theory of Architecture 1
[Sejarah dan Teori Senibina 1]

Duration: 3 hours
[Masa: 3 jam]

Please check that this examination paper consists of NINE pages of printed material before you begin the examination.

Sila pastikan bahawa kertas peperiksaan ini mengandungi SEMBILAN muka surat yang tercetak sebelum anda memulakan peperiksaan ini.

Write your name on the first page of this question paper. Please submit this question paper with your answer paper. Without submission of question and answer papers, you are considered not sitting for this examination.

Tulis angka giliran anda pada mukasurat pertama kertas soalan ini. Sila hantar kertas soalan ini bersama-sama kertas jawapan. Tanpa hantaran kertas jawapan bersama kertas soalan, anda dikira tidak menduduki peperiksaan ini.

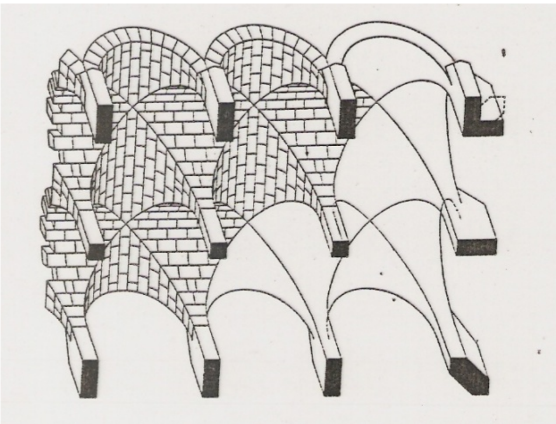
Instruction:	**Section A**:	**COMPULSORY**
	Section B:	Answer **THREE** questions
	Section C:	**COMPULSORY**
	Section D:	Answer **TWO** questions

Arahan:	***Bahagian A**:*	***WAJIB***
	***Bahagian B**:*	*Jawab **TIGA** soalan*
	***Bahagian C**:*	***WAJIB***
	***Bahagian D**:*	*Jawab **DUA** soalan*

In the event of any discrepancies, the English version shall be used.

[Sekiranya terdapat sebarang percanggahan pada soalan peperiksaan, versi Bahasa Inggeris hendaklah digunapakai].

SECTION A: (COMPULSORY - 20 marks)
BAHAGIAN A: (WAJIB – 20 markah)



Figure/*Gambarajah 1(a)*

Figure/*Gambarajah 1(b)*

Figure/*Gambarajah 1(c)*

1. **Figures 1(a)**, **1(b)** and **1(c)** illustrates development of cross vault system in history of architecture.

   (a) Write the relationship of each cross vault system in Figures **1(a), 1(b)** and **1(c)** in the history of architecture.

   (b) Explain the differences of cross vault system in Figures **1(a), 1(b)** and **1(c)** in aspect of the construction techniques.

   *Gambarajah **1(a), 1(b)** dan **1(c)** menunjukkan perkembangan rekabentuk sistem kubah bersilang dalam sejarah senibina.*

   *(a) Nyatakan hubungan setiap sistem kubah bersilang dalam Gambarajah **1(a), 1(b)** dan **1(c)** di antara satu sama lain dalam sejarah senibina.*

   *(b) Terangkan perbezaan rekabentuk sistem kubah bersilang dalam Gambarajah **1(a), 1(b)** dan **1(c)** dalam aspek teknik binaannya.*

(10 marks/*markah*)

Figure 2/*Gambarajah 2*

2. **Figure 2** above illustrates a mosque in Malaysia.

   (a) Describe the types of architectural styles applied by the architects in his design of this mosque, and how these styles are combined together.

   (b) Explain the characters of the construction technique of each type of the mosque styles (in history of architecture) used in this mosque design.

   ***Gambarajah 2** di atas menunjukkan sebuah masjid di Malaysia.*

   (a) Terangkan jenis-jenis stail senibina yang digabungkan oleh arkitek masjid ini dalam merekabentuk masjid ini, dan bagaimana stail-stail ini digabungkan.

   (b) Nyatakan ciri-ciri teknik binaan setiap jenis stail masjid (dalam sejarah senibina) yang digabungkan.

(10 marks/*markah*)

SECTION B: Answer **THREE** questions only. **(30 marks)**
BAHAGIAN B: *Jawab* ***TIGA*** *soalan sahaja.* ***(30 markah)***

3. In Ancient Egyptian Civilisation, the master builders were able to build three great pyramids, Khufu, Menkaure and Khafre at Giza. You need to sketch a section of Khufu (Cheop) Pyramid. Please use arrow leaders to illustrate its architectural elements as follows:-

   Semasa Zaman Mesir Purba, tukang-tukang binaannya mampu membina tiga buah piramid utama iaitu Piramid Khufu, Menkaure dan Khafre di Giza. Anda dikehendaki membuat satu lakaran keratan Piramid Khufu (Cheop). Sila gunakan anak panah untuk menunjukkan elemen-elemen senibina seperti berikut:-

   (a) Main Chamber/*Main Chamber*
   (b) Upper Shafts/*Upper Shafts*
   (c) Subterranean Chamber/*Subterranean Chamber*
   (d) Grand Gallery/*Grand Gallery*
   (e) Passages and Entrances/*Passages and Entrances*

(10marks/*markah*)

4. Andrea Palladio is one of the great architects in history of western architecture. You need to describe (by sketching) **FIVE** architectural styles used by this architect in his design of the aristocrat houses.

   Andrea Palladio merupakan salah seorang arkitek terkenal dalam sejarah senibina barat. Anda dikehendaki menerangkan ***LIMA*** *elemen rekabentuk stail senibina (dengan berbantukan lakaran) yang digunakan oleh beliau dalam merekabentuk sesebuah bangunan rumah bangsawan/aristokrat.*

(10 marks/*markah*)

5. Sketch one section which illustrates the construction concept of traditional Chinese mosque. You are required to identify **Five (5)** main construction elements in your sketches.

   Lakarkan satu keratan yang menunjukkan konsep binaan bangunan masjid traditional di China. Nyatakan ***Lima (5)*** *elemen binaan utama dalam lakaran-lakaran anda.*

(10 marks/*markah*)

…5/-

6. Sketch the sectional design construction concept of dome's structure in Florence Cathedral. You need to indicate the **Five (5)** primary dome's construction elements of Florence Cathedral which symbolize Renaissance architecture.

   *Lakarkan keratan rekabentuk konsep pembinaan struktur kubah bangunan bangunan Katedral Florence. Nyatakan **Lima (5)** elemen-elemen utama teknik binaan Katedral Florence yang melambangkan senibina Renaisan.*

(10 marks/*markah*)

SECTION C: (*COMPULSORY)*
BAHAGIAN C: (WAJIB)

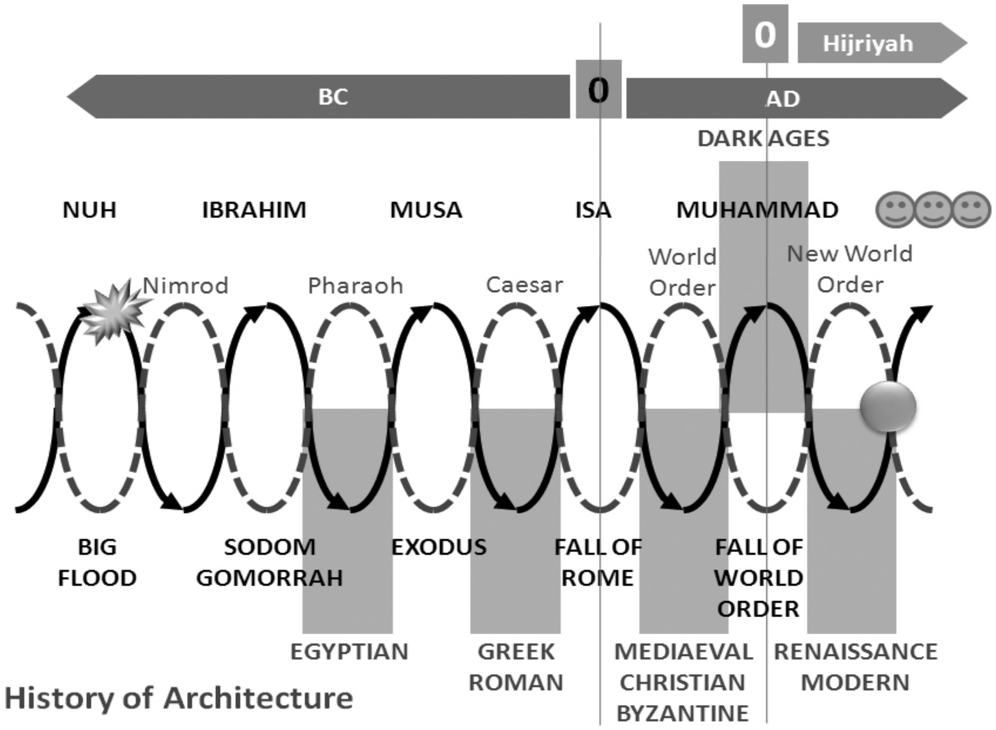


Illustration 1/*Ilustrasi 1*

7. **Illustration 1** shows the Cyclical Timeline.

(a) What are the characteristics of a Eurocentric explanation of history of architecture?
(b) What is one alternative form of historical explanation?
(c) Why is the alternative form of historical explanation needed?
(d) How can it change the understanding of the production of stories architecture?

***Ilustrasi 1** menunjukkan Gariswaktu Berkitar.*

(a) Apakah ciri-ciri penerangan Eurosentrik sejarah seni bina?
(b) Apakah satu bentuk penerangan alternatif kepada bentuk penerangan sejarah di atas?
(c) Mengapakah penerangan alternatif ini diperlukan?
(d) Bagaimanakah dapat ianya mengubah pemahaman tentang penghasilan cerita-cerita arkitektur?

(20 marks/*markah*)

SECTION D: Answer **TWO** questions only.
BAHAGIAN D: *JAWAB* ***DUA*** *soalan sahaja.*

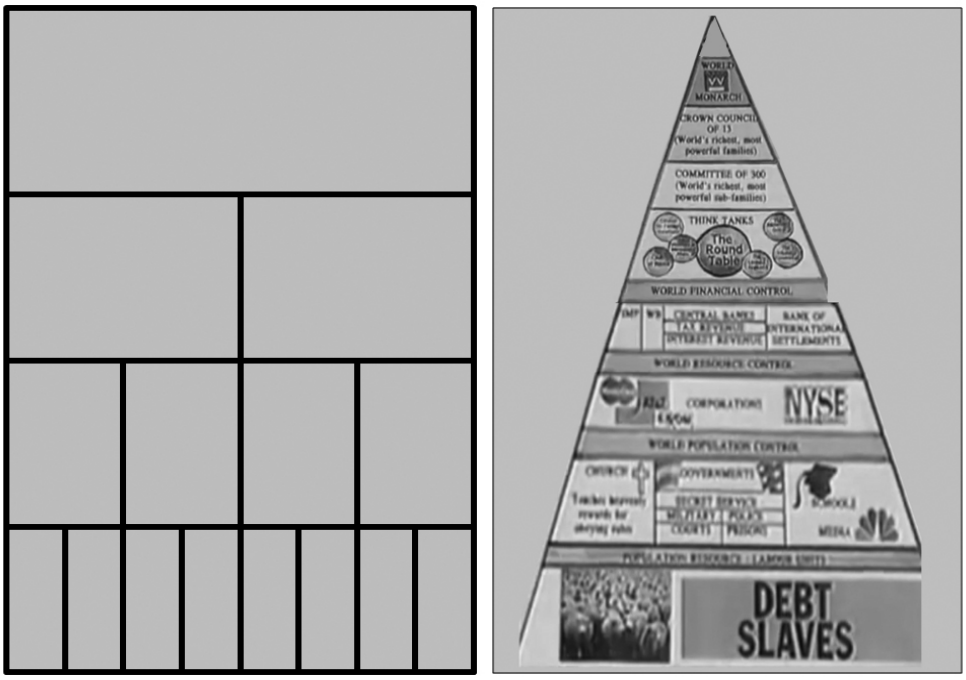


Illustration 2/*Ilustrasi 2*

8. **Illustration 2** shows the forms of explanation of power.

(a) Use the above illustration to show how power operates in the production of Egyptian architecture.
(b) Compare and contrast that with the production of Greek OR Roman architecture.
(c) Also compare and contrast it with the production of contemporary architecture in Malaysia.

Ilustrasi 2 *menunjukkan bentuk-bentuk penerangan tentang kuasa.*

(a) Gunakan ilustrasi di atas untuk menunjukkan bagaimana kuasa ini beroperasi dalam penghasilan seni bina Mesir.
(b) Beza dan bandingkannya dengan penghasilan seni bina Yunani ATAU Rumawi.
(c) Beza dan bandingkan pula dengan penghasilan seni bina di Malaysia hari ini.

(15 marks/*markah*)

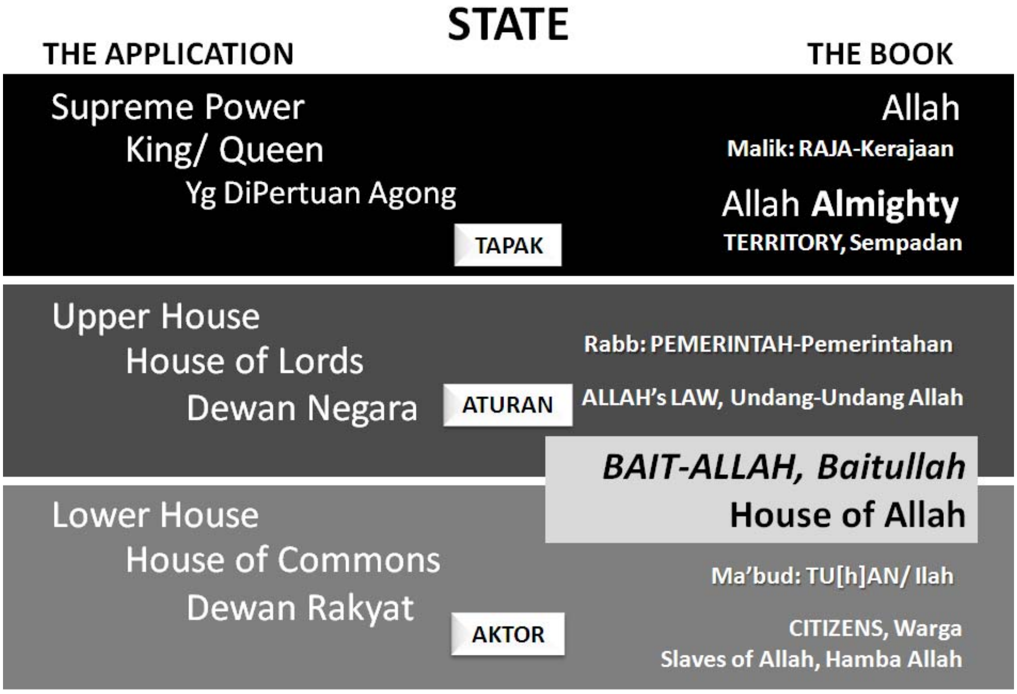


Illustration 3/*Ilustrasi 3*

9. **Illustration 3** shows the basic structure of the state, applied and in theory from *The Book*.

   (a) Explain what it means by "architecture is the function of the state" in the context of Roman OR Greek Empire.
   (b) How did the term Christian Architecture come about?
   (c) Besides government and religion, what other categories are used to identify architecture?

   ***Ilustrasi 3** menunjukkan kerangka negara dan amalan dan teori dari Al-Kitab.*

   (a) Jelaskan erti "Arkitektur ialah fungsi negara" dalam konteks Empayar Rumawi ATAU Yunani.
   (b) Bagaimanakah timbul istilah 'Christian Architecture'?
   (c) Selain daripada negara dan agama apakah kategori-kategori lain yang digunakan untuk mengenalpasti arkitektur?

(15 marks/*markah*)

…9/-

10. (a) Explain what it means by ORNAMENTATION in architecture.
    (b) Why did Moden Architecture herald “ornamentation is a sin?
    (c) Why are ornaments of Roman architecture still applied in contemporary architecture in Malaysia?

    (a) Terangkan maksud ORNAMENTASI dalam seni bina.
    (b) Mengapakah arkitektur Moden melaungkan “ornamentasi itu dosa”?
    (c) Mengapakah ornamen dari seni bina Rumawi masih digunakan di dalam arkitektur kontemporer di Malaysia?

(15 marks/*markah*)

11. (a) There were two main materials in building, wood and stone. While carpenters remain until today, masons have become architects. Explain how it happened.
    (b) What’s the significance of your narrative?
    (c) Where does disinformation operate?

    (a) Terdapat dua bahan utama dalam bangunan, kayu dan batu. Tukang kayu sehingga hari ini masih tetap tukang kayu, sementara tukang batu sudah berubah statusnya menjadi arkitek. Terangkan bagaimana berlakunya ini.
    (b) Apakah pentingnya naratif anda?
    (c) Di manakah yang disinformasi itu beroperasi?

(15 marks/*markah*)

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