
UNIVERSITI SAINS MALAYSIA

Second Semester Examination
Academic Session 2008/2009

April/May 2009

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

Duration: 3 hours
[Masa: 3 jam]

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

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

Students are allowed to answer all questions either in English OR in Bahasa Malaysia only.

Pelajar dibenarkan menjawab semua soalan dalam Bahasa Inggeris ATAU Bahasa Malaysia sahaja.

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

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

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SECTION A: Answer **TWO** questions only
BAHAGIAN A: Jawab **DUA** soalan sahaja

1. You need to sketch a 'half section' of a side section of Gothic Cathedral. Using arrow pointers to show the following:-

Anda dikehendaki membuat satu lakaran 'separuh keratan' untuk keratan sisi bangunan Gereja Gothik. Namakan (menggunakan garisan beranak panah) dalam lukisan anda:-

- | | |
|----------------------------|------------------|
| (a) Pointed Rib Arch; | (f) Nave; |
| (b) Inner Buttress; | (g) Pinnacle; |
| (c) Inner Flying Buttress; | (h) Inner Aisle; |
| (d) Outer Buttress; | (i) Outer Aisle; |
| (e) Outer Flying Buttress; | (j) Triforium |

(15 marks/markah)

2. Japanese traditional architecture is one of the great architectural masterpieces, forgotten due to the domination of modern architectural style and construction. Japanese architecture is very unique because it is an architectural design construction applying the 'bracket system'. You need to sketch a section of this traditional building. This building has two columns (based on the building section), and the bracket system is used for the construction of its roof. Please use arrow leaders to illustrate its 10 architectural elements.

Rekabentuk senibina tradisional Jepun merupakan salah satu rekabentuk stail senibina yang telah dilupai kerana dominasi stail dan sistem binaan senibina moden. Senibina Jepun mempunyai rekabentuk senibina yang unik kerana ia adalah binaan yang menggunakan 'sistem balak' (bracket system). Anda dikehendaki melukis satu lakaran keratan bangunan ini. Bangunan ini mempunyai dua tiang (berasaskan keratan bangunan) dan sistem balak digunakan untuk mereka bentuk bumbungnya. Sila guna anak panah menunjukkan 10 elemen senibinanya.

(15 marks/markah)



Photo 1 (*Gambarajah 1*)

3. The above **Figure/Photo 1** is a mosque built in Malaysia. You need to do an analysis (written answer) to support your argument based on 5 factors of its architectural elements adopted in the design of this mosque (**No sketches needed**).

Gambarajah 1 (foto) di atas merupakan sebuah masjid yang dibina di Malaysia. Anda dikehendaki membuat analisis (jawapan bertulis) mengenai masjid ini berasaskan 5 faktor elemen senibinanya yang digunakan dalam rekabentuk masjid ini (Lakaran tidak diperlukan dalam jawapan ini) untuk menyokong hujah dalam jawapan anda.

(15 marks/markah)

SECTION B : Answer **FOUR** questions only
BAHAGIAN B: Jawab **EMPAT** soalan sahaja

You need to produce sketches based on the definition of their architectural design in architectural history and theory as follows:-

Anda perlu melakarkan lukisan berasaskan definisi rekabentuk senibina dalam teori dan sejarah senibina seperti berikut:-

4. Sketch out a plan of Early Christian 'Basilica'. Please indicate (using arrow leaders):-

Satu lakaran pelan 'Basilika' pada Zaman Awal Kristian. Namakan (gunakan garisan beranak panah):-

- (a) Nave;
- (b) Inner Aisle;
- (c) Transept;
- (d) Narthex;
- (e) Apse.

(5 marks/markah)

5. Sketch out a plan of an Arab Mosque. (Please indicate using arrow leaders its **FIVE (5)** architectural elements).

*Lakarkan satu Pelan Masjid Arab. (Namakan **LIMA (5)** elemen senibinanya).*

(5 marks/markah)

6. Sketch out one column of a building/mosque with its 'muqarnas capital'.

Lakarkan satu tiang bangunan/masjid yang mempunyai 'kapital muqarnas'

(5 marks/markah)

7. One sketch of a pisthaq 'Iranian Mosque'.

Satu lakaran 'pisthaq' Masjid Iran.

(5 marks/markah)

8. One sketch of an exterior perspective of a Hindu Temple with Nagara style.

Satu lakaran lukisan perspektif (pandangan luar) Kuil Hindu berstail Nagara.

(5 marks/markah)

9. One sketch of a perspective of the 'pedentive dome'.

Satu lakaran lukisan perspektif 'kubah pedentif'.

(5 marks/markah)

SECTION C (COMPULSORY)
BAHAGIAN C (WAJIB)

10. (a) Using the Production Chart, explain the production in **Figure 2**.

*Menggunakan Carta Penghasilan, jelaskan tentang penghasilan di dalam **Gambarajah 2**.*

AKTOR ACTOR	NIAT INTENTION	ATURAN RULE	LAKU ACT	TAPAK SITE	HASIL PRODUCT
			Etimologi (alat arkeologi budaya)		Keterangan Sejarah ARKitektur Dunia
			<i>Etymology (tool for cultural archaeo- logy)</i>		<i>Historical Explanation of World ARchitecture</i>

Figure 2 : The Production of Historical Explanation
Gambarajah 2: Penghasilan Keterangan Sejarah.

- (b) How do we determine that a product is a DISINFORMATION?

Bagaimanakah dapat kita menentukan bahawa sesuatu hasil itu adalah DISINFORMASI?

- (c) How can we avoid disinforming and being disinformed.

Bagaimanakah dapat kita elakkan MENdisinformasi dan DIdisinformasi?

(20 marks/markah)

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SECTION D : Answer **THREE** questions only
BAHAGIAN D : Jawab **TIGA** soalan sahaja

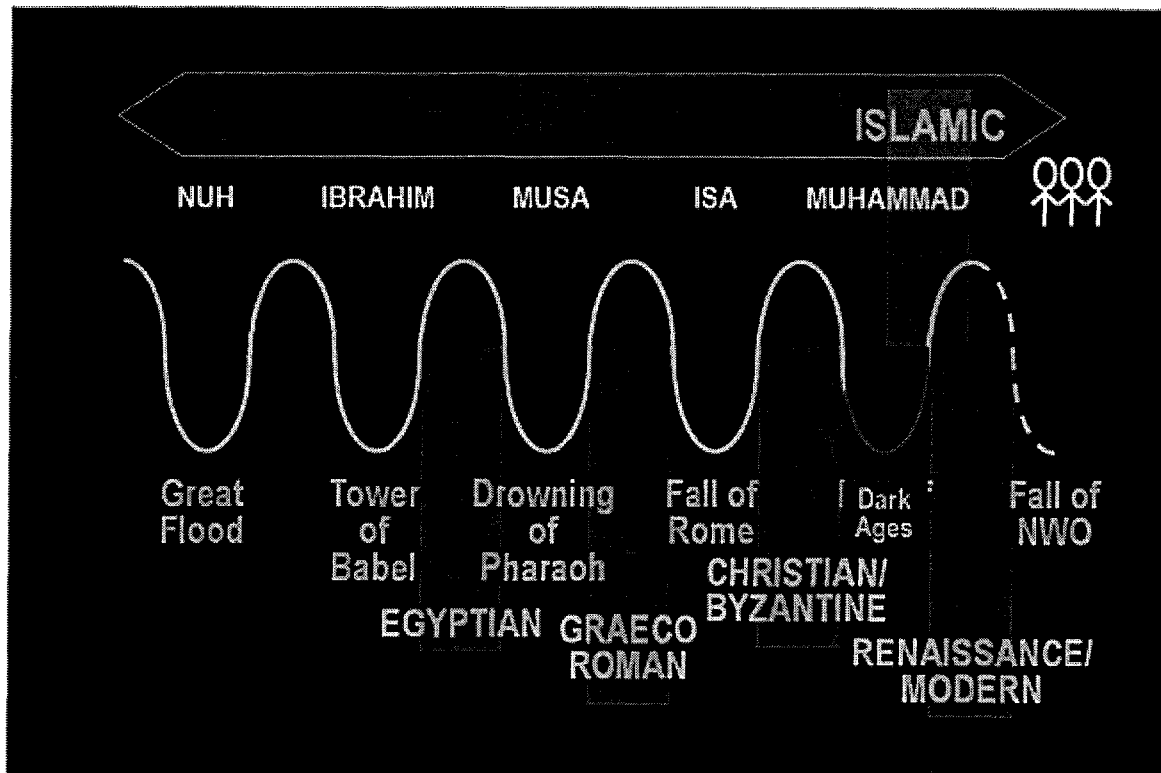


Figure 3: The Shifting Civilizations
Gambarajah 3: Peredaran Tamadun

11. (a) What is the relationship between European and Egyptian Civilizations in **Figure 3**?

Apakah kaitan di antara tamadun-tamadun Eropah dan Mesir dalam Gambarajah 3?

- (b) What is the relationship between the above civilizations and the production of architecture today?

Apakah kaitan di antara tamadun-tamadun di atas dengan penghasilan arkitektur hari ini?

(10 marks/markah)

12. (a) What is the relationship between the civilization of The People of The Book and the other civilizations in **Figure 3**?
- Apakah kaitan tamadun Ahli Kitab dengan tamadun-tamadun lain dalam **Gambarajah 3**?*
- (b) How can it be determined that the production of architecture is from one civilization or the other?
- Bagaimanakah dapat ditentukan bahawa penghasilan arkitektur itu dari satu tamadun atau yang lainnya?*
- (10 marks/markah)
13. (a) With reference to **Figure 3**, explain the production of the rise and fall of **ONE** of the civilizations.
- Merujuk kepada **Gambarajah 3**, terangkan tentang penghasilan berdiri runtuhnya mana-mana **SATU** tamadun.*
- (b) Which position is architecture in, in a collapsing civilization?
- Di posisi manakah kita arkitektur hari ini dalam tamadun yang akan runtuh.*
- (10 marks/markah)
14. (a) Trace the efforts of the production of the architecture of paradise.
- Galurkan usaha-usaha penjanaan arkitektur syurga hingga kini.*
- (b) What is the role of the architect in the production of paradise above.
- Apakah peranan arkitek di dalam penghasilan syurga di atas.*
- (10 marks/markah)
15. (a) Show how architecture can enhance USM's status as an APEX University?
- Tunjukkan bagaimanakah sesuatu penghasilan arkitektur itu dapat menambah-nilai USM sebagai Universiti APEX?*
- (b) What is at the core of this architecture?
- Apakah inti arkitektur ini?*
- (10 marks/markah)