

Exercise 10

Currently, the paramount problem in the field of biomaterials, the science of replacing diseased tissue with human-made implants, is control over the interface, or Line surface, between implanted biomaterials and living 5 tissues. The physical properties of most tissues can be matched by careful selection of raw materials: metals, ceramics, or several varieties of polymer materials. Even the requirement that biomaterials processed from these materials be nontoxic to host tissue can be met by 10 techniques derived from studying the reactions of tissue cultures to biomaterials or from short-term implants. But achieving necessary matches in physical properties across interfaces between living and non-living matter requires knowledge of which molecules control the bonding of 15 cells to each other—an area that we have not yet explored thoroughly. Although recent research has allowed us to stabilize the tissue-biomaterial interface by controlling either the chemical reactions or the microstructure of the biomaterials, our fundamental understanding of how 20 implant devices adhere to tissues remains woefully incomplete. (159 words)

1. According to the passage, the major problem currently facing scientists in the field of bio-materials is

- (A) assessing and regulating the bonding between host tissue and implants
- (B) controlling the transfer of potentially toxic materials across the interface of tissue and implant
- (C) discovering new materials from which to construct implant devices
- (D) deciding in what situations implants are needed
- (E) determining the importance of short-term implants to long-term stability of tissue implant interfaces

2. The passage suggests which of the following about the recent research mentioned in the last

sentence ?

- (A) It has solved one set of problems but has created another.
- (B) It has concentrated on secondary concerns but has ignored primary concerns.
- (C) It has improved practical applications of biomaterial technology without providing a complete theoretical explanation of that improvement.
- (D) It has thoroughly investigated properties of biomaterials but has paid little attention to relevant characteristics of human tissue.
- (E) It has provided considerable information on short-term implant technology but little on long-term implant technology.

阅读 1:

Q1:

定位至原文: line 11; But achieving necessary matches in physical properties across interfaces between living and non-living matter requires knowledge of which molecules control the bonding of cells to each other—an area that we have not yet explored thoroughly. 所以选 A;

Q2: 原文说 fundamental understanding 还是 incomplete, 尽管要的结果可以实现了。选 C;

Islamic law is a particularly instructive example of—sacred law. Islamic law is a phenomenon so different from all other forms of law—notwithstanding, of course, Line a considerable and inevitable number of coincidences 5 with one or the other of them as far as subject matter and positive enactment are concerned—that its study is indispensable in order to appreciate adequately the full range of possible legal phenomena. Even the two other representatives of sacred law that are historically and 10 geographically nearest to it, Jewish law and Roman Catholic canon law, are perceptibly different. Both Jewish law and canon law are more uniform than Islamic law. Though historically there is a discernible break between Jewish law of the sovereign 15 state of ancient Israel and of the Diaspora (the dispersion of Jewish people after the conquest of Israel), the spirit of the legal matter in later parts of the Old Testament is very close to that of the Talmud, one of the primary codifications of Jewish law in the Diaspora. Islam, on the 20 other hand, represented a radical breakaway from the Arab paganism that preceded it; Islamic law is the result of an examination, from a religious angle, of legal subject

matter that was far from uniform, comprising as it did the various components of the laws of pre-Islamic Arabia and 25 numerous legal elements taken over from the non-Arab peoples of the conquered territories. All this was unified by being subjected to the same kind of religious scrutiny, the impact of which varied greatly, being almost nonexistent in some fields, and in others originating novel 30 institutions. This central duality of legal subject matter and religious norm is additional to the variety of legal, ethical, and ritual rules that is typical of sacred law.

In its relation to the secular state, Islamic law differed from both Jewish and canon law. Jewish law was 35 buttressed by the cohesion of the community, reinforced by pressure from outside; its rules are the direct expression of this feeling of cohesion, tending toward the accommodation of dissent. Canon and Islamic law, on the contrary, were dominated by the dualism of religion and 40 state, where the state was not, in contrast with Judaism, an alien power but the political expression of the same religion. But the conflict between state and religion took different forms; in Christianity it appeared as the struggle for political power on the part of a tightly organized 45 ecclesiastical hierarchy, and canon law was one of its political weapons. Islamic law, on the other hand, was never supported by an organized institution; consequently, there never developed an overt trial of strength. There merely existed discordance between application of the 50 sacred law and many of the regulations framed by Islamic states; this antagonism varied according to place and time.

For the following question, consider each of the choices separately and select all that apply

3. The passage provides information to answer which of the following questions EXCEPT?

- ☐ A Does Islamic law depend on sources other than Arab legal principles?
- ☐ B What secular practices of Islamic states conflicted with Islamic law?
- ☐ C Is Jewish law more uniform than canon law?

4. It can be inferred from the passage that the application of Islamic law in Islamic states has (A) systematically been opposed by groups who believe it is contrary to their interests

- (B) suffered irreparably from the lack of firm institutional backing
- (C) frequently been at odds with the legal activity of government institutions
- (D) remained unaffected by the political forces operating alongside it
- (E) benefited from the fact that it never experienced a direct confrontation with the state

5. Which of the following most accurately describes the organization of the passage?

- (A) A universal principle is advanced and then discussed in relation to a particular historical phenomenon.
- (B) A methodological innovation is suggested and then examples of its efficacy are provided.
- (C) A traditional interpretation is questioned and then modified to include new data.
- (D) A general opinion is expressed and then supportive illustrations are advanced.
- (E) A controversial viewpoint is presented and then both supportive evidence and contradictory evidence are cited.

6. The passage suggests that canon law differs from Islamic law in that only canon law

- (A) contains prescriptions that nonsacred legal systems might regard as properly legal
- (B) concerns itself with the duties of a person in regard to the community as a whole
- (C) was affected by the tension of the conflict between religion and state
- (D) developed in a political environment that did not challenge its fundamental existence
- (E) played a role in the direct confrontation between institutions vying for power

伊斯兰法（Islamic）是有关“宗教法”（sacred law）的一个特别具有启迪意义的实例。伊斯兰法是一种如此不同于所有其它法律形式的现象——毋庸置疑，尽管就其主要内容和有积极意义的法规而言，与其它法律形式中的这种或那种形式存在着相当数量的且不可避免的巧合相似之处——以致于对它进行研究便显得不可或缺，以便充分理解有可能存在的法律现象的全部范围。即使是犹太教法（Jewish law）和罗马天主教教规法（Roman Catholic canon law）这两个在历史和地理方面与它最近似的宗教法的典型代表，也是令人感觉到迥然有别。

无论是犹太教法还是教规法，都要比伊斯兰法更具统一性。尽管从历史角度来看，在古代以色列作为独立主权国家的犹太教法与大流散时期（Diaspora，即以色列被征服后古代犹太人被迫逐出故土）的犹太教法之间存在着一个明晰可辨的断裂，然则，《旧约全书》（Old Testament）后半部分中法律内容的精神与《犹太教法典》（Talmud）极为一脉相承，而所谓的《犹太教法典》，是指大流散时期犹太教法的主要典籍辑录之一。另一方面，伊斯兰教则代表着与此前存在的阿拉伯异教（Arab paganism）的一种根本上的决裂；伊斯兰法是从宗教的角度，对各种杂乱无章、绝无共同点的法律内容进行考察所致的结果，而这些法律内容实际上是由前伊斯兰阿拉伯国家（Pre-Islamic Arabia）法律的不尽相同的组成部分以及由从被征服的土地上非阿拉伯民族借鉴过来的无数法律因素所构成。所有这一切通过接受同样一种宗教审查而得以统一起来，而这种审查的影响差异甚大，在有些领域中几乎毫不存在，而在其它领域中则创立起全新的建制。这种由法律内容和宗教标准构成的至关重要的双重性，相对于那种由法律的、伦理的、以及宗教仪式的规定所构成的宗教法的典型形态而言是额外的。

在其与世俗国家的关系上，伊斯兰法亦有别于犹太教法和教规法。犹太教法为社会凝聚力所支持，由于来自外界的压力而得以强化；其法规是这种凝聚力情感的直接表现，倾向于对意见分歧能兼容并蓄。相反，教规法和伊斯兰法则受到宗教与国家二元性的主宰，这与犹太教（Judaism）构成一种对比，这里，国家并不是一种外部势力，而是同一种宗教在政治上的表达。然则，国家和宗教之间的冲突呈现出不同的形态；在基督教（Christianity）中，它表现为由一个组织严密的教会统治集团对政治权力的争夺，而教规法则成为其政治武器之一。另一方面，伊斯兰法却从未得到过一个有组织的机构的支持。因此，从不曾形成过任何一次公开的力的较量（trial of strength）。只是在宗教法的实施以及由伊斯兰国家制定的诸多法规之间存在着某些不协调；而这种矛盾依照地点和时间亦有所不同。

文章层次分析

【1】 第一段

文章的第一行的关键词是 particularly,说明 Islamic law（简称 I law）如何的 particular ly。第二行紧接着 I law 如何 so different。紧接着简单的让步，有一个很典型的词，notwithstanding。句意不变，因此还是说 I law 如何 different。最后，来了一个递进，还是说 I law different。

本段的重点词主要是：I law, particularly, so different。

本段可以看作一个句群，因为意思都是在讲 I law 如何的 different。尽管有让步的递进的成分。

【2】 第二段

文章的第一句话的重点词是 Jewish law（简称 J law）,Canon law(简称 C law), uniform, I law.说到了 J、C、I 的三个方面，主要是说 J & C uniform than I。

文章紧接着单独说道 J law 的方面，因此，第一句因该算作一个独立的句群。

从 14 行开始讲到 J law 的方面，因此，可以进入下一个句群。一直到 21 行的 Islam 前，都在讲 J law 的方方面面。主要关键词是 J law, close。

从 21 行开始讲到 I law 的方面，因此，又进入下一个句群。一直到 32 行。

这个句群意思较多，因该多看看。从 21 行开始，说到 I law, radical 和以前的不一样。紧接着说到 I law 其实是各个法律来源的审查的结果。关键词是 radical, far from uniform, various components。

从 32 行开始，不再单独讲到 I law，而开始讲到 sacred law 的一些特性。笔者认为应该算作另一个句群。其关键词是，duality, subject matter, religious norm, variety, typical

。

总体说来，第二段可以划分成 4 个句群，首先说 J、C law uniform than I law，然后单独说 J law 如何 close，再说 I law 如何的 far from uniform，如何来自 various components。最后，总结了一下 sacred law 在 subject matter 和 religious norm 两个方面的一些特征。

【3】 第三段

文章的第一句话说在 secular state 方面，I law 还是 different from J 和 C law

因为紧接着的话是说 J law 如何，因此第一句话可以认为是一个句群。关键词是 secular state, I, J, C law, differ。

从文章的 37 行开始到 41 行，一直说 J law 在 secular state 方面如何。关键词是 buttress, cohesion。

从文章的 41 行开始到 47 行，在说 C 和 I 在 secular state 方面如何。关键词是 dualism。说的是 C 和 I law 有共性也有不一样的地方

从文章的 47 行到 50 行，单独说明在 C law 里，religion 和 state 的关系。关键词是 struggle。

从文章的 50 行到最后，一直在说在 I law 里，religion 和 state 的关系。关键词是 never supported, discordance。

总体说来，文章的第三段可以划分成 5 个句群。先总说在 secular state 方面，I 和 J 以及 C 都不一样，然后下一个句群说明 J law 如何。紧接着的句群说明，C 和 I law 在 religion 和 state 关系方面有共性但还是不一样。然后最后的两个句群分别说 C law 和 I law 在 religion 和 state 关系。说到 C law 里，law 成为一种 struggle 的 weapon，而 I law 里，never supported，只是存在 discordance。

文章的总体层次是论述文（presentation 类型的），全文都在阐述 I law 如何和其他的 sacred law 如何 different。因此文章的 Topic Sentence 因该是第一句。在做题中因该抓住这个 Topic Sentence（TS）。

Q3；题目类型：细节题 解题思路：这种题，说到原文说明了哪些方面，只能一个一个排除。笔者希望大家能根据以前讲过的方法，先进行句群定位，然后在进行句子定位，从大方面到小方面进行定位。

选项 A，题干说到，I law，的 sources 问题，迅速定位到 21—32 行那个句群，也就是第二段的三个句群中去，大家快速阅读，从 21 行开始，先说 I law radical 和以前的不一样，紧接着说到 I law 是从 various components 审查的结果。因此可以说明，I law 是来源于不同的 sources。因此，A 有答案，正确选项 BC；

Q4：题目类型：推理题

解体思路：这种题根据选项的关键词定位到相应的句群，然后再推理。

题干说到，I law 在 application 方面和 I state 的关系。迅速定位到第三段的第 5 个句群。即

原文 50-56 行。先看原文，原文两句话，第一句话说，I law never supported by institution。

第二句话说，I law 和 I state 之间存在 discordance。再回来看选项。

选项 A，I law 被那些认为违背他们利益的人所反对，原文未提起，不对。

选项 B，不可避免的遭受缺乏 firm institution 支持的苦处，不对。

选项 C，经常和 government institution 存在 at odds，因此真确。At odds 和原文的 discordance 意思相符。

选项 D，不受政治影响，与原文不符，不对。

选项 E，从来没有面对 state 的冲突，不对。

Q5：题目类型：文章结构

解体思路，这种题在于全文把握。从句群与句群之间的联系来看出文章的整体结构。

本文，从开始就一直说 I law 如何 different，然后第二段又继续说明，I law 的来源如何和他的 sacred law different。第三段又进一步说，I law 在 secular state 也和 J 和 C law different。因此，全文都是在说 I law 如何 different。

因此来看题干，选项 D 最符合文章的结构。

一个观点提出，然后进一步证实。

Q6: 题目类型: 推理题

题干说到，C law 和 I law 不同之处在于 C law 如何。

文中有两处提到 C law 和 I law 的区别，第二段说到 I law 如何来自多个 components，然而，C law 是 uniform 的。

第二处提到 C law 和 I law 的区别，是第三段说到 C law 和 I law 在 religion 和 state 关系上的不同之处。定位到 47-50 这个句群。也就是第三段的第四个句群。说道 C law 成为 ecclesiastical hierarchy 的 struggle 的 weapon。

再来看选项。

选项 A，包含可能会被认为合法的非宗教法体系。原文根本未提，不对

选项 B，包含个人与群体关系的职责的规定。

选项 C，受 religion 和 state 冲突的紧张程度的影响

选项 D，在没有改变它存在的环境的政治环境产生的。原文未提，不对。

选项 E，对那些渴望权利的组织之间的直接冲突中起作用。这与原文相符。原文说 C law 成为一个 struggle 的 weapon 的。答案选择 E。

If a supernova (the explosion of a massive star) triggered star formation from dense clouds of gas and dust, and if the most massive star to be formed from the cloud evolved into a supernova and triggered a new round of star formation, and so on, then a chain of star-forming regions would result. If many such chains were created in a differentially rotating galaxy, the distribution of stars would resemble the observed distribution in a spiral galaxy.

This line of reasoning underlies an exciting new theory of spiral-galaxy structure. A computer simulation based on this theory has reproduced the appearance of many spiral galaxies without assuming an underlying density wave, the hallmark of the most widely accepted theory of the large-scale structure of spiral galaxies.

That theory maintains that a density wave of spiral form sweeps through the central plane of a galaxy, compressing clouds of gas and dust, which collapse into stars that form a spiral pattern. (160 words)

7. The primary purpose of the passage is to

(A) describe what results when a supernova triggers the creation of chains of star-forming regions

(B) propose a modification in the most widely accepted theory of spiral-galaxy structure

(C) compare and contrast the roles of clouds of gas and dust in two theories of spiral-galaxy structure

(D) describe a new theory of spiral-galaxy structure and contrast it with the most widely accepted theory

(E) describe a new theory of spiral-galaxy structure and discuss a reason why it is inferior to the most widely accepted theory

8. The passage implies that, according to the new theory of spiral-galaxy structure, a spiral galaxy can be created by supernovas when the supernovas are

(A) producing an underlying density wave

(B) affected by a density wave of spiral form

(C) distributed in a spiral pattern

(D) located in the central plane of a galaxy

(E) located in a differentially rotating galaxy

9. Which of the following, if true, would most discredit the new theory as described in the passage?

(A) The exact mechanism by which a star becomes a supernova is not yet completely known and may even differ for different stars.

(B) Chains of star-forming regions like those postulated in the new theory have been observed in the vicinity of dense clouds of gas and dust.

(C) The most massive stars formed from supernova explosions are unlikely to evolve into supernovas.

(D) Computer simulations of supernovas provide a poor picture of what occurs just before a supernova explosion.

(E) A density wave cannot compress clouds of gas and dust to a density high enough to create a star.

阅读 2:

倘若一颗超新星 (supernova, 即一颗质量庞大的星星的爆炸) 触发星星从稠密的气体 and 尘埃云中形成, 且倘若从云层中形成的质量最庞大的星星演变成一颗超新星并触发新一轮星星形成过程, 如此循环下去的话, 那么, 一系列能形成星星的区域便告产生。倘若许多这样的系列在一个以不同的方式旋转着的星系中得以形成的话, 那么, 星星的分布将类似于所观察到的螺旋形星系 (spiral galaxy) 内的星星分布。这一推理思路构成了一种激动人心的有关螺旋形星系结构的新理论的基础。建立在这一理论基础上的计算机模拟研究再现了许多螺旋形星系的外观, 在此过程中并不假设一基本密度波 (density wave) 的存在, 而所谓的密度波则是那种最广为人们接受的有关大规模螺旋形星系结构理论的标志特征。那种理论坚持认为, 螺旋形状的密度波贯穿星系的中央层面, 将气体和尘埃的云层压缩, 这些云层则坍缩为一颗颗星星, 形成一螺旋状结构。

Q7: 文章 main idea?

解析: 第二段首句 **This line of reasoning underlies an exciting new theory of spiral-galaxy structure.** 可知, 正确答案选 D:

Q8: 有第一段最后一句话可知: **If many such chains were created in a differentially rotating galaxy, the distribution of**

stars would resemble the observed distribute in a spiral galaxy. 选 E;

Q9: 如果下面哪个正确, 则原文的 **new theory** 会被否定?

解析: **new theory** 是基于什么的假设之上呢? 看文章首句, **if... if...** 如果这些假设都不成立, 那么这个 **new theory** 肯定也站不住脚。看到 **if the most massive star to be formed from the cloud evolved into a supernova** 没, 所以正确答案 C;

The fact that Black people in the English colonies of North America were never treated as the equals of White people has important ramifications. If from the outset Black people were discriminated against, then 5 legal slavery in the 1660's should be viewed as a reflection and an extension of racial prejudice rather than, as many historians including Oscar and Mary Handlin have argued, the cause of prejudice. In addition, the existence of discrimination before the 10 advent of legal slavery offers a further explanation for the harsher treatment of Black slaves in North than in South America. Freyre and Tannenbaum have rightly argued that the lack of certain traditions in North America—such as a Roman conception of slavery and 15 a Roman Catholic emphasis on equality—explains why the treatment of Black slaves was more severe there than in the Spanish and Portuguese colonies of South America. But this cannot be the whole explanation since it is merely negative, based only on a lack of 20 something. A more compelling explanation is that the early and sometimes extreme racial discrimination in the English colonies helped determine the particular nature of the slavery that followed.

(192 words)

For the following question, consider each of the choices separately and select all that apply

10. According to the passage, the Handlins have NOT argued which of the following about the relationship between racial prejudice and the institution of legal slavery in the English colonies of North America?

- ☐ A Racial prejudice and the institution of slavery arose simultaneously.
- ☐ B The source of racial prejudice was the institution of slavery.
- ☐ C Although existing in a lesser form before the 1660's, racial prejudice increased sharply after slavery was legalized.

11. The passage suggests that the existence of a Roman conception of slavery in Spanish and Portuguese colonies had the effect of

- (A) extending rather than causing racial prejudice in these colonies
- (B) hastening the legalization of slavery in these colonies
- (C) mitigating some of the conditions of slavery for Black people in these colonies
- (D) delaying the introduction of slavery into the English colonies
- (E) bringing about an improvement in the treatment of Black slaves in the English colonies

12. The author considers the explanation put forward by Freyre and Tannenbaum for the treatment accorded Black slaves in the English colonies of North America to be

- (A) ambitious but misguided
- (B) valid but limited
- (C) popular but suspect
- (D) anachronistic and controversial
- (E) premature and illogical

Q10: 由 Haudlins 定位到 line 7: as many historians including Oscar and Mary Handlin have argued, the cause of prejudice. 所以正确选项 AC;

Q11: 由 Spanish and Portuguese 定位到 line 17: explains why the treatment of Black slaves was more severe there than in the Spanish and Portuguese colonies of South America. 正确答案 C;

Q12: 由 F & T 定位到 line 12 Freyre and Tannenbaum have rightly argued, 然后看到 line 18: But this cannot be the whole explanation 正确答案 B