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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2018/2019**

**COURSE NAME : CONTENT MANAGEMENT  
SYSTEM**  
**COURSE CODE : BIW 33003**  
**PROGRAMME CODE : BIW**  
**EXAMINATION DATE : DECEMBER 2018 / JANUARY 2019**  
**DURATION : 3 HOURS**  
**INSTRUCTION : ANSWER ALL QUESTIONS**

**THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES**

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**TERBUKA**

- Q1** (a) A big web site such as e-commerce and news portal need frequent updates and changes of their content and structure.
- (i) Describe **THREE (3)** Content Management System (CMS) guidelines to solve the complexity of content problem for big web site. (9 marks)
  - (ii) Discuss **THREE (3)** criteria to be considered in selecting a suitable open source CMS for an e-commerce solution for education business. (9 marks)
- (b) Explain **FOUR (4)** benefits of implementing e-commerce by using CMS in Malaysia. (8 marks)

- Q2** (a) What is the functionality of metadata in CMS. (2 marks)
- (b) Discuss **FIVE (5)** types of metadata field, based on example in **Figure Q2(b)**. (10 marks)

\* Items marked with an asterisk are required

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Figure Q2(b)



- (c) Creating a perfect Information Architecture (IA) for a website is difficult, especially when it comes to balancing precision and clarity. When an item fits in more than one category, the IA structure can include polyhierarchy access structures. Describe **TWO (2)** problems in polyhierarchy access structures.

(2 marks)

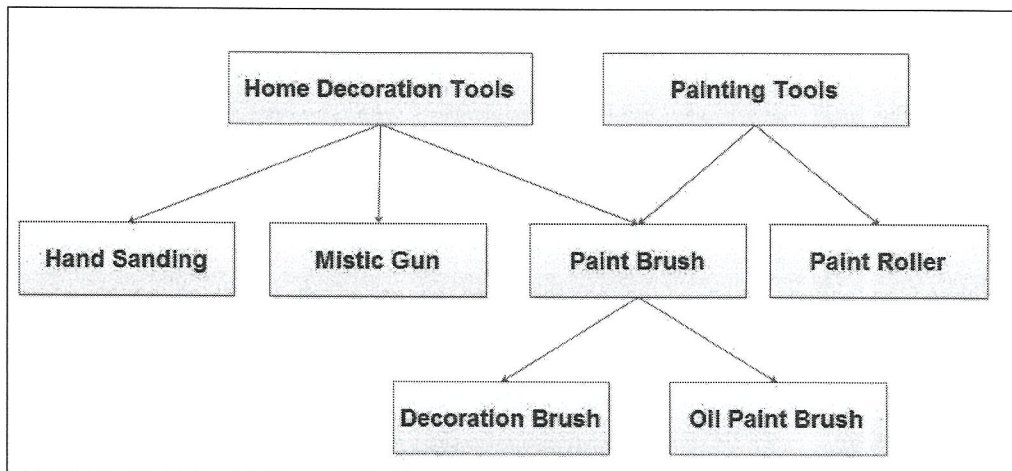
- (d) **Figure Q2(d)** shows the content access structures that use polyhierarchy style.

- (i) Analyze the structure and suggest **TWO (2)** improvements to make it better.

(2 marks)

- (ii) Redraw the new structure of **Figure Q2(d)** based on your suggestions in **Q2(d)(i)**.

(3 marks)



**Figure Q2(d)**

- Q3** (a) Suggest **THREE (3)** examples in implementing personalization for e-commerce website.

(3 marks)

- (b) Draw an example of wireframe and describe on how to design facet in an e-commerce website that sell clothes.

(4 marks)



(c) Differentiate job tasks between project manager and content manager in CMS.

(4 marks)

(d) Discuss **THREE (3)** types of users and their roles for an e-learning solution in a university.

(9 marks)

**Q4** (a) Given the following information:

BajuRaya Men's Wear (BajuRaya.com.my) is a retail store specializing in selling men's clothing and accessories. The business was originally started in 1990 and focuses on selling big and tall clothing to men. Until 1996 when they moved to an online strategy, they operated out of their storefront. The primary customer base before their online operations existed in and around an area within 80 km of the store. The primary reason for moving the business online was to attract a different customer base.

Currently BajuRaya performing the following tasks in their business:

- It handles about 100 clothing of 10 types.
- Each month, at least 25 new design will be added to the fashion line up in various types.
- In addition to its Web site, which it wants to redesign 2 times per year, the company plans to produce a printed catalog and a set of data sheets.
- The Company wants to personalize at least to the level of broad user segments by promoting the cloth and extras that it predicts each of 4 audiences will be interested in.
- It has 15 authors and 14 complex sources of information

BajuRaya wanted to continue their market thrust and decided they needed a strategy that would broaden their customer base. Their strategy consisted of moving the business online to attract more customers from a broader geographic region.

Propose **THREE (3)** areas where CMS administration should be implemented.

(10 marks)

**(b) Given the following case study:**

Pewaja Steel is one of Malaysia's largest companies with significant international interests in steel, minerals, copper and petroleum. It also has major associated interests in services companies such as engineering, transport, and Information Technology. Established in 1980 at Kemaman Terengganu, Pewaja is a public company, employing over 60,000 people and operating in more than 60 countries, Pewaja Steel is one of Pewaja's major businesses. It is a steel manufacturer which produces a wide variety of steel products such as steel slabs, steel plate, rolled steel and pre-painted steel. It has annual sales amounting to RM7.6 billion and depends on trading relationship with more than 2500 suppliers as well as more than 8000 customers, which vary from small to large companies.

The use of information technology in Pewaja is not new, computers and their applications have been important to BHP Steel since the early 1980s in a number of departments. In general, however, these computer applications were being used within departments such as marketing, which only shared the information with key customers.

The use of computers for business transactions or e-commerce with appropriate standardised documents, known as Electronic Data Interchange (EDI), began for Pewaja Steel at the end of the 1980s when the company realised that electronic trading could provide it with a more efficient and productive way of trading.

Online e-commerce system that provided by Pewaja Steel should support variations in load without human intervention. As more and more supplier or user join the internet, more users attempt to access the website and request information simultaneously and they must be serviced without fail.

**(i) Identify and explain FIVE (5) areas in the system that need to be highly secured.**

**(10 marks)**

**(ii) Propose FIVE (5) activities to increase the scalability of the system.**

**(15 marks)**

**- END OF QUESTION -**

