NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Faculty of Computing & Informatics

Department of Informatics

QUALIFICATION : Bachelor of Informatics	
QUALIFICATION CODE: 07BAIF	**LEVEL:** 6
COURSE: Business Analysis & Process Management	**COURSE CODE:** BAP620S
DATE: January 2019	**SESSION:** 2
DURATION: 2 Hours	**MARKS:** 100

SECOND OPPORTUNITY/ SUPPLEMENTARY QUESTION PAPER	
EXAMINER(S)	Mr Munyaradzi Maravanyika Mr Admire Kachepa
MODERATOR:	Ms Helena Nahum

THIS QUESTION PAPER CONSISTS OF 7 PAGES

(Excluding this front page)

Instructions for the candidate

17. Answer **ALL** questions.
18. When writing take the following into account: The style should inform than impress, it should be formal, in third person, paragraphs set out according to ideas or issues and the paragraphs flowing in a logical order.
19. Information should be brief and accurate.
20. Please ensure that your writing is **legible**, **neat** and **presentable**.

SECTION A: MULTIPLE CHOICE [20 Marks]

Choose the correct answer. Only one answer per question is correct.

1. A representation of a business process should properly describe.
   A. The organisation weaknesses
   B. The organisation competitive advantage
   C. How the organisation performs its business
   D. How participants are measured and rewarded based on their performance.

2. Process Models are descriptions or abstractions of the work performed. However which test should they be subject to?
   A. A model must be complete
   B. A model must identify all process roles and participants
   C. A model must mean only one something
   D. A model must be restricted to one organisation

3. JAD sessions are used to
   A. Solicit information through one on one interviews
   B. Solicit process relevant information through interviews
   C. Solicit process relevant information through workshops-based group sessions
   D. Solicit process relevant information through questionnaires

4. To achieve the desired level of process performance and deliver customer value, process metrics must:
   A. Be monitored and controlled.
   B. Be continually changed by executive management
   C. Be easily benchmarked
   D. Be automated

5. In which two ways can BPMN processes use rules?
   A. Rules are used to define process flow; Rules are used to describe human task assignments
   B. Rules are used to modify past actions; Rules are used to describe human task assignments
   C. Rules are used to describe human task assignments; Rules are used to modify past actions
   D. Rules are used to change completed task activities; Rules are used to describe human task assignments

6. Business Process Management is a(n):
   A. Process Framework
   B. Management Discipline
   C. Academic Program
   D. Technology Architecture

7. What is a key objective of Process Discovery?
   A. Transforming an existing process into an executable format
   B. Identifying Business Stakeholders and Subject Matter Experts
   C. Optimising a business process through simulation alternatives
   D. Making explicit the current business performed

8. Process Models are descriptions or abstractions of the work performed. However which test should they be subject to?
   A. A model must be complete
   B. A model must identify all process roles and participants
   C. A model must mean only one something
   D. A model must be restricted to one organisation

9. Process Design is about?
   A. Understanding the actual process
   B. Replacing the actual process
   C. Creating a new or improved process
   D. Ignoring the actual way of doing things

10. An oil Company is drilling exploratory oil wells in Namibia to replenish their reserves. Modelled in BMM, What is the role of the strategy "Drill for oil in Namibia" with respect to the Goal "Replenish reserves"?
    A. It is part of the goal
    B. It implements the goal
    C. It channels efforts toward the Goal
    D. It is a component of the plan for the goal

11. The manager of "Delivery Management" has some concerns with its actual "Pizza delivery process". He just performed a Process Discovery initiative. What is a recognised output of such initiative?
    A. Detailed design of the actual (as – is) process
    B. Raw material to define this as – is process
    C. Design of the to – be process
    D. Plan to transform the as – is process to a to – be process

12. Process Analysis is performed to identify process inefficiencies. Which activity is also true about Process Analysis?
    A. It is performed exclusively on an "as – is" process
    B. It involves the process analysis experts without the participation of the process participants
    C. It identifies the root cause of the inefficiencies
    D. It is done following process development

13. Pizza Company hired Adok Investments to design a new "Customer Order Taking" process. The first activity of the BPM consultant should be to …..
    A. Understand the objectives of the sponsor
    B. Collect the performance data of the actual process
    C. Ensure that IT will not influence the initiative
    D. Build and submit a project plan.

14. The chief economist of an airline predicts increase costs for jet fuel and believes these costs will hurt the airline's business. This belief is modelled as which BMM concept?
    A. Risk
    B. Goal
    C. An influencer
    D. An assessment

15. Which is NOT part of the most common initiatives behind business process design projects
    A. Customer and supply chain management
    B. Operational performance improvement
    C. Cost reduction
    D. None of the above

16. Organisation's process improvement activities are sponsored by executive management. What is the role of this "sponsor"?
    A. Providing the long-term commitment, funding, resources, and direction for an effort
    B. Ensuring that the strategic orientation are aligned with the operational plan
    C. Providing the knowledge and the expertise to apply BPMM concept
    D. Collecting all the needed data to define a performance trend

17. Process Analysis is performed to identify process inefficiencies.Which activity is also true about Process Analysis?
    A. It is performed exclusively on an "as – is" process.
    B. It involves the process analysis experts without the participation of the process participants.
    C. It identifies the root cause of the inefficiencies
    D. It is done following process deployment

18. At least 3 elements can be distinguished to express the aims of an organisation. What are they?
    A. End, Means, and Assessment
    B. Plan, Execute, and Control
    C. Mission, Vision, and Goals
    D. Vision, Goals, and Objectives

19. Through the Value Reference Model (VRM), the Strategic level is categorised into 3 processes. What are they?
    A. Operating processes and Management & Support processes
    B. Define, Measure, Analyse, Improve, and Control
    C. Plan, Source, Make, Deliver, and Return
    D. Plan, Govern, and Execute

20. The Value Reference Model is composed of three key elements. Which are they?
    A. Strategy, KPI, and Action Plan
    B. Suppliers, Processes, and Customers
    C. Inputs/Outputs, Metrics, and Best practices
    D. Mission, Strategy, and Plan

SECTION B: STRUCTURED QUESTIONS [30 Marks]

Answer all questions in this section. Marks will be deducted for unclear hand writing, bad grammar and wrong spellings.

Question 1 [5 Marks]

Briefly discuss what you understand by the term business rule.

Question 2 [25 Marks]

To successfully model a business process, the analyst should obtain knowledge about the process. This knowledge includes all the aspects and details of the process, such as the stakeholders, the linkages between processes, the IGOEs, the scope, the goal etc. In a well-presented essay, analyse any **FIVE** techniques that can be used to obtain process information.

SECTION C [50 Marks]

Business process Redesign at Ford

One of the breakthrough events for the development of BPM was Ford's acquisition of a big financial stake in Mazda during the 1980s. When visiting Mazda's plants, one of the things that observant Ford executives noticed was that units within Mazda seemed considerably understaffed in comparison with comparable units within Ford yet operated normally. A famous case study illustrating this phenomenon, first narrated by Michael Hammer [26] and subsequently analysed by many others, deals with Ford's purchasing process. Figure 1.3 depicts the way purchasing was done within Ford at the time.

Every purchase that Ford would make needed to go through the purchasing department. On deciding that a particular quantity of products indeed had to be purchased, this department sent out an order to the vendor in question. It would also send a copy of that order to accounts payable. When the vendor followed up, the ordered goods would be delivered at Ford's receiving warehouse. Along with the goods came a shipping notice, which was passed on to accounts payable. The vendor would also send out an invoice to accounts payable directly. Against this background, it becomes clear that the main task of accounts payable was to check the consistency between three different documents (purchase order copy, shipping notice, invoice), where each document consists of roughly 14 data items (type of product, quantity, price, etc.).

Purchasing process at Ford after redesign
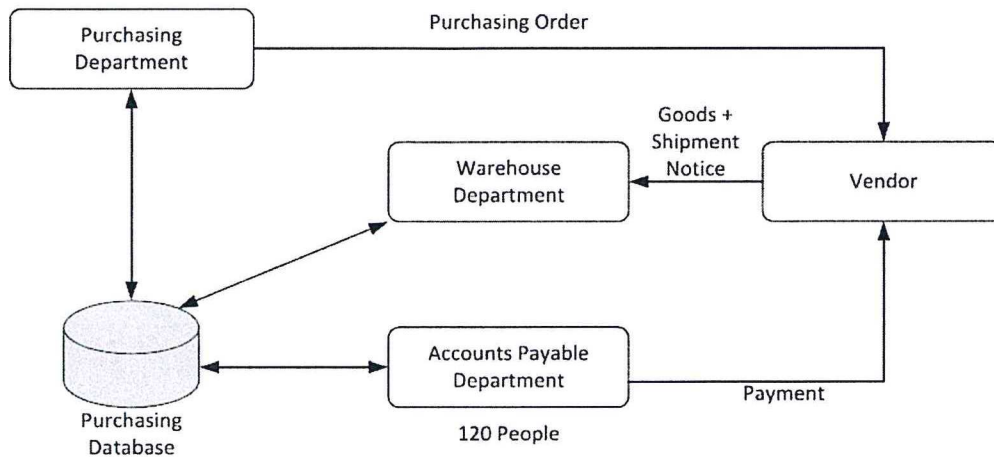
 Not surprisingly, several types of discrepancy were discovered every day and sorting out these discrepancies occupied several hundred people within Ford. In contrast, at Mazda only five people worked at this department, while Mazda was not 100 times smaller than Ford in any relevant measure. Fundamentally, the problem is that Ford was detecting and resolving with problems (in this case discrepancies) one by one, while Mazda instead was avoiding the discrepancies in the first place. After a more detailed comparison with Mazda, Ford carried out several changes in its own purchasing process, leading to the redesigned process depicted in the diagram above.

First, a central database was developed to store information on purchases. This database was used by the purchasing department to store all the information on purchase orders. This database replaced one of the original paper streams. Secondly, new computer terminals were installed at the warehouse department which gave direct access to that database. When goods arrived, the warehouse personnel could immediately check whether the delivery actually matched what was originally purchased. If this was not the case, the goods were simply not accepted: this put the onus on the vendor to ensure that what was delivered was what was requested and nothing else. In cases where a match was found between the delivered goods and the recorded purchase order, the acceptance of the goods was registered. So, the only thing left to do for accounts payable was to pay what was agreed upon in the original purchase order. Following this new set-up, Ford managed to bring down their workforce in accounts payable from roughly 500 people down to 120 people (a 76 % reduction).

Question 1   **[20 marks]**

Consider the purchasing process at Ford:

1. Who are the actors in this process?   [5 marks]
2. Which actors can be considered to be the customer (or customers) in this process? [1 mark]
3. What value does the process deliver to its customer(s)?   [10 marks]
4. What are the possible outcomes of this process?   [4 marks]

Question 2   **[15 marks]**

Draw the swim lane diagram for Ford   [15 marks]

Question 3   **[15 marks]**

Every organization—be it a governmental body, a non-profit organization, or an enterprise— has to manage a number of processes. Typical examples of processes that can be found in most organizations include: Order-to-cash; Quote-to-order; Procure-to-pay; Issue-to- resolution; Application-to-approval. Briefly describe these processes.

TOTAL MARKS: 100