



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

SCHOOL OF ENGINEERING

EXAMINATIONS: JUNE 2019

COURSE AND CODE: ENGINEERING MANAGEMENT & LABOUR RELATIONS
ENCH4ML

DURATION: 2 HOURS

TOTAL MARKS: 100

INTERNAL EXAMINER(S): MR N. BRIJMOHAN

INTERNAL MODERATOR(S): DR K. OSMAN

EXTERNAL MODERATOR: PROF P. MUSONGE

INSTRUCTIONS:

1. Students may request an English dictionary from the invigilator.
2. **Section A must be answered in the booklet provided.**
3. **Section B is multiple choice.** Use only the computer answer sheet provided, filling in the answers with an HB pencil.
4. In answering these questions, choose the MOST APPROPRIATE ANSWER. The answers will be marked by computer. **It is essential to fully shade in the spaces representing the correct solution.** If a space is partially shaded in, it is possible that the computer will not read that answer correctly!
5. It is also important to fill in your SURNAME and Initials as well as your STUDENT NUMBER clearly, both at the top, as well as on the multiple choice grid, so that the marks are correctly allocated to you.

Marking scheme for Section B – multiple choice: 1.5 marks for correct answer, 0 for incorrect answer and 0 for blank.

SECTION A

This section must be answered in the booklet provided

QUESTION 1

Former public protector, Advocate Thuli Madonsela, once remarked that, “*lack of accountability and lapses in leadership are some of the causes of governance failure*”.

Accountability in any organization means being answerable to your commitments, as a leader and as an employee. Discuss the value of accountability to a leader (i), and the possible consequences to an organization resulting from lack of accountability (ii).

Each valid statement counts for two marks.

TOTAL /24/

QUESTION 2

The roles of management and leadership are sometimes interchangeable, however more often than not most people fulfill these roles separately or find themselves alternating between these functions.

By way of a comparison, using a table or bullet statements, describe briefly key differences between management and leadership.

Each clear, relevant comparison carries 2 marks.

TOTAL /16/

QUESTION 3

Conflict, arguments, and change are natural parts of our lives, as well as the lives of every agency, organization, and nation.

Conflict resolution is a way for two or more parties to find a peaceful solution to a disagreement amongst them. The disagreement may be personal, financial, political, or emotional.

Suppose you are in a conflict situation with another engineer. What guidelines will you follow to resolve the conflict effectively?

Each clear, relevant statement carries 2 marks.

TOTAL /18/

SECTION B

This section must be answered on the MCQ (Multiple Choice Question) answer sheet provided

No	Question	Options
1	In setting the quality objective, the factor given foremost consideration is:	A. Company policy on process control limits B. Customer requirements and specifications C. Alignment to ISO standards D. Supplier calibration certificates E. All of the above
2	Under the OHS Act, employers are responsible for providing:	A. A safe workplace B. Medical aid C. Specialized protective equipment even when perceived as not necessary D. Employee attitude towards safety E. All of the above
3	A powerful safety vision organizations are striving for is:	A. A percentage reduction in number of accidents and injuries from the previous year B. A rigorous safety system with many procedures C. Cash rewards for number of hours the company is injury-free D. Increasing the priority and focus towards a generally safe culture E. Zero harm
4	Risk assessments add value in maintaining a safety culture because:	A. It tells you how to report accidents B. The number of working hours of the organization become apparent C. It provides the insight on what steps to take towards mitigating potential accidents before they occur D. You get an idea of where the first-aid box is and who the first aider is E. All of the above
5	Applying statistical quality control means that:	A. The measured variable should be within 3 standard deviations of the set-point B. The PLC will automatically control the system to always output at the desired set-point C. The measured variable can be accepted between the UCL and LCL with the trend nevertheless monitored for data spikes D. It is of high priority to hire statisticians E. Statistical models must have a coefficient of variance of less than 7%
6	In achieving the quality objective it is not critical to:	A. Have access to the services of top class designers B. Have the ability to develop effective administrative systems C. Give operators the authority to make adjustments in the production process D. Have highly experienced engineers on your staff E. Be familiar with what your customers values

7	The power leadership style has the following characteristic:	A. Taking the view that rewards and punishment motivate staff B. Ensuring staff understand issues facing the organization C. Seeking to involve staff in the decision making process D. Picking up the mood of the audience E. Believing success arises from leaders and staff working together
8	The following is an example of matching people to jobs:	A. Job enlargement B. Job rotation C. Increasing autonomy D. Giving more feedback E. Adding skill variety
9	Authority of knowledge is indicated when:	A. People query a decision B. A decision is made by one who has university education C. A decision results in an improvement D. People trust a decision made by a competent person E. Someone with more qualifications is given a promotion
10	The following is not normally recognized as part of your work habits:	A. Commuting to work B. Organizing C. Setting critical milestones D. Priority setting E. Sending e-mails
11	Regulations regarding hazardous substances in the OHS Act (1993) do not include:	A. Training on their use B. Physical data like boiling point C. Storage procedures D. Selling price E. Labelling and transport
12	As far as labour relations in SA are concerned, everyone has the right to:	A. Import goods from a foreign country B. Be employed C. Join a trade union D. Be paid a living wage E. Negotiate his/her salary with the CEO
13	The role of government in labour relations is to:	A. Perform a legislative and regulatory role B. Guarantee the rights of individuals C. Prosecute CEOs that do not treat their employees fairly D. Ensure that companies do not cause extensive damage to the environment E. Guarantee employment for all employable people
14	A labour union's objectives includes:	A. Ensuring that qualified artisans are employed B. Helping their members keep their jobs C. Drawing up job descriptions for its members D. To maximize its income from member fees E. To organize annual strikes
15	Affirmative action:	A. Is not a part of any South African legislation B. Is specifically legislated in the Occupational Health and Safety Act C. Has the purpose of creating a black elite group D. Never works E. Is designed to reverse the effects of discriminatory national policies

16	Conflict:	A. Always signals that the relationship is on the rocks B. Does not only occur because of misunderstandings C. Can always be avoided D. Is always bad E. All of the above
17	Conflict is constructive when:	A. All parties get what they want B. It helps to build new insights and establishes new patterns in a relationship C. There is a clear winner and a clear loser D. It prevents all new conflicts E. None of the above
18	The set of forces that energizes, directs, and sustains behavior is called:	A. Motivation B. Expectancy C. Empowerment D. Socialization E. Incentivization
19	A plant manager in a small factory wishes to raise morale in his/her workforce. Working conditions are clean and safe and job security is high. He/she can create a sense of belonging by:	A. Paying bonuses to workers who achieve specified goals B. Publicly praising those workers who have been most productive C. Setting up after work clubs, such as a soccer team, to allow more social interaction D. Fostering the development of skills in workers who show talent in a particular area E. All of the above
20	Strategic decisions are normally associated with:	A. Increasing short-term profits B. The detailed planning of a department's work over the next month C. The organization's political affiliations and intentions D. Updating the operator training manual with new HS&E policies E. The organization's long-term direction
21	Creating an ethical and socially responsible workplace is likely to be effective when:	A. You pass out leaflets weekly with the statement "Say No to Bad Ethics" B. Posters are placed about ethics throughout the organization C. Top management act as models of the right behavior D. A statement about ethics and social responsibility is included in job descriptions E. Training on the ethics policy is included during induction
22	An internal and external environment assessment includes:	A. Economic trends B. Political trends C. Competitive trends D. Technological advancements E. All of above

23	The motive behind a decision:	A. Is the basis on which one judges the legitimacy of the decision B. Is irrelevant C. Justifies the decision D. Is impossible to prove right or wrong E. Rarely affects the outcome of the decision
24	Climate change can be addressed in organizations by:	A. Advocating the view that it is a conspiracy B. Recognizing that short term profits are not threatened by global carbon dioxide emissions C. Rejecting renewable projects that do not meet certain priority criterion D. Implementing sustainable design of processes and operations E. Using solar technologies to show good social responsibility
25	Good time management means:	A. You always have time for other people B. You are busy the whole day when you are at work C. You manage to do the things that have to be done, and still have time for relaxation D. You are able to account for every minute of the day E. You can point out to others when they are wasting time
26	People play power games in order to:	A. Weaken the resistance of others B. Enjoy interaction with others C. Make decisions D. Feel fulfilled E. Increase a company's market share
27	Having authority means:	A. One is the CEO in the company B. One is given the use of a company car C. One has the power to make or influence decisions D. One is a departmental manager E. One has to determine peoples' salaries
28	The fourth industrial revolution:	A. Is a myth B. Will be ready to be used in production lines by 2030 C. Will always cause people to lose jobs D. Can be responsibly utilized to create highly efficient systems E. Has no bearing on the leadership or management function

TOTAL /42/

SOLUTIONS

SECTION A**QUESTION 1** **24 marks**

- A leader should use accountability to ensure that employees are keeping to their agreements (job tasks) on time – this is key to creating an effective work environment
- Employees should hold leaders accountable to keep them honest with their commitments and promises – this ensures that leaders have credibility and are trustworthy
- Accountability can be a medium to set high standards for transparency and openness, thus providing an opportunity to keep leaders and employees responsible and ethical
- Employees are able to grow professionally and personally when there is a culture of accountability by improving skills such as time management and project ownership
- People are made more conscientious and reliable because they develop self-awareness about their strengths and weaknesses allowing them to be careful not to over-promise or under-promise
- When leaders value accountability, professional relationships are not taken for granted and are better managed, due to increased trust and confidence between different parties
- Organizations without a culture of accountability could have a strong inclination towards corruption and unethical behaviour
- Lack of accountability breeds low morale in an organization because good performance might not be recognized due to nepotism, favouritism, or discrimination
- Without accountability, peoples' goals and priorities might be continually changing because of lack of focus and resilience in pursuing set objectives
- Relationships are poorly managed and damaged due to broken commitments thus providing a mechanism for constant conflict and discord
- Organizations without accountability would have high employee turnovers, due to disenchanted people leaving the organization which decreases overall effectiveness
- Lack of accountability can result in low profitability and even losses for an organization due to corruption, inefficient operations, and lack of productivity being the norm (most SOEs)

2 marks for each clear, relevant statement.

24 marks

QUESTION 2 **16 marks**

Leader	Manager
Innovates	Administers
Develops	Maintains
Focuses on people	Focuses on systems and structures
Inspires trust	Relies on control
Long-range perspective	Short-range view
Challenges the status quo	Accepts the status quo
Does the right thing	Does things right
Own person	Classic good soldier

2 marks for each clear, relevant comparison.**16 marks****QUESTION 3** **18 marks**

- Both parties have to focus on the root cause of the problem, not the symptoms or results. When the problem is defined properly, the real causes emerge
- Gather the necessary facts and information needed to clarify the situation
- Do not let your emotions get the better of you (anger, resentment etc) – personal attacks and blame should be avoided
- Keep two-way lines of communication open throughout the situation – communicating your thoughts and feelings is important
- Listen carefully to other party and make a concerted effort to understand his/her point of view
- Don't jump to a solution, consider all available options and the implications of each, and jointly come to a solution that satisfies both parties
- Once all options have been considered, it is important that both parties formally agree and commit to the joint solution
- Discuss how the solution can be implemented and the responsibilities of each party to honour and maintain the agreement
- It is important to follow up to ensure that all parties are complying to the agreed solution. Set up follow-up engagements to review the implementation of the solution and to check if further actions are necessary.

2 marks for each clear, relevant statement.**18 marks**

SECTION B

1. B
2. A
3. E
4. C
5. C
6. B
7. A
8. B
9. D
10. A
11. D
12. C
13. A
14. B
15. E
16. B
17. B
18. A
19. C
20. E
21. C
22. E
23. A
24. D
25. C
26. A
27. C
28. D