Reg. No. : | E | N | G | G | T | R | E | E | . | C | O | M |

Question Paper Code : 41547

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2024

Seventh Semester

Civil Engineering

OHS 352 – PROJECT REPORT WRITING

(Common to : Aeronautical Engineering/Aerospace Engineering/
Automobile Engineering/Biomedical Engineering/
Computer Science and Design/Computer Science and Engineering/
Computer Science and Engineering (Artificial Intelligence and Machine
Learning)/Computer Science and Engineering (Cyber Security)/
Computer and Communication Engineering/Electrical and Electronics
Engineering/Electronics and Communication Engineering/Electronics and
Instrumentation Engineering/Electronics and Telecommunication
Engineering/Environmental Engineering/Geoinformatics Engineering/Industrial
Engineering/Industrial Engineering and Management/Instrumentation and
Control Engineering/Manufacturing Engineering/Marine Engineering/ Materials
Science and Engineering/Mechanical Engineering/Mechanical and Automation
Engineering/Mechatronics Engineering/Medical Electronics/Petrochemical
Engineering/Production Engineering/Robotics and Automation/Safety and Fire
Engineering/Agricultural Engineering/ Artificial Intelligence and Data Science/
Bio Technology/ Biotechnology and Biochemical Engineering/
Chemical Engineering/Chemical and Electrochemical Engineering/Computer Science
and Business Systems/ Fashion Technology/Food Technology/Handloom and Textile
Technology/ Information Technology/Petrochemical Technology/
Petroleum Engineering/Pharmaceutical Technology/Plastic Technology/
Textile Chemistry/Textile Technology)

(Regulations 2021)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Convert the following into reported speech :   (2 × 1 = 2)

    (a) Jan : "I hadn't travelled by underground before I came to London".

    (b) Tim : "I was sleeping when Julie called".

2. Fill in the blanks with a suitable word for the following. (4 × ½ = 2)

(a) One day, I want to climb Mt. Everest. That's a goal I want to ——————

   (i) achieve

   (ii) respect

   (iii) invent

   (iv) acquire

(b) Jack ——————— did a thing at work today day. He spent most of his time chatting with his friends.

   (i) seldom

   (ii) rarely

   (iii) hardly

   (iv) slightly

(c) Weather experts have ——————— that next summer will be extremely hot.

   (i) reflected

   (ii) included

   (iii) predicted

   (iv) prescribed

(d) Lisa is ——————— buying a pet but she's not sure what kind to get.

   (i) recalling

   (ii) considering

   (iii) regretting

   (iv) counting

3. Define a project report.

4. Give two examples of plagiarized research.

5. List two factors to consider while framing a relevant title for a project report.

6. Briefly write the structure of an Abstract.

7. Mention any four elements of a project report.

8. What should be included in the Bibliography of a research work?

9. Provide four recommendations to submit an error-free project report.

10. List any two techniques for presenting a report orally.

41547

PART B — (5 × 13 = 65 marks)

11. (a) Explain the differences between Technical writing and General writing.

Or

(b) Read the given topic sentence and complete the rest of the paragraph with coherence. Word limit-250 words.

Mobile phones are very important to many people now —————————

12. (a) Analyze the effectiveness of plagiarism tools and strategies.

Or

(b) Elaborate on the types of reports highlighting the salient feature of each.

13. (a) Describe the structure and organization of a project report.

Or

(b) Elucidate the theoretical framework of a project report.

14. (a) Discuss how to demonstrate the significance and relevance of a project.

Or

(b) Explain the Data analysis techniques used for report writing and justify their selection.

15. (a) Present the guidelines for proof reading the project report in detail.

Or

(b) Highlight the techniques of presenting the project report orally in an effective manner.

PART C — (1 × 15 = 15 marks)

16. (a) Read the following case study and answer the questions.

A construction company is developing a new residential complex. The project manager needs to submit a comprehensive project report to stakeholders.

Question :

Develop a detailed project outline for the above scenario. Make sure to include the relevant information under each section of the outline.

Or

(b) Read the following mini-report and answer the questions given below each section.

REPORT

Promoting workplace equality and diversity : A statistical investigation at XYZ Tech Solutions

Introduction

Workplace equality and diversity are essential pillars of a progressive and inclusive company culture. In this case study, we focus on XYZ Tech Solutions (a fictional company), a leading technology firm, to analyze the current state of equality and diversity within the organization. By conducting a statistical investigation, the research team aimed to identify potential disparities and develop data-driven strategies to foster a more inclusive work environment.

Research questions

The study aims to address the following research questions :

1. Is there a gender representation imbalance within different departments at XYZ Tech Solutions?

2. What is the representation of various ethnicities and nationalities across different job roles?

3. Are there any significant differences in pay based on gender or ethnicity after accounting for job role and experience?

Data Collection

To conduct this investigation, data was collected from XYZ Tech Solutions' HR department. The dataset includes information on :

- Employee demographics (gender, ethnicity, nationality)
- Job roles and departments
- Years of experience
- Compensation data (salary and benefits)

Methods

A variety of methods were used to assist with the data collection and subsequent data analysis:

1. Descriptive Statistics were generated, which included the reporting of data to help understand the distribution of gender, ethnicity and nationality across different departments and job roles. This data helped to provide an overview of the current state of workplace diversity at XYZ Tech Solutions.

2. Gender Representation Analysis : To evaluate gender representation, the percentage of male and female employees was calculated in each department and job role. A chi-square test was also used to determine if the gender distribution differs significantly across departments.

4
41547

3. Diversity Index : A diversity index was also used to measure the overall diversity within the organization, incorporating data on gender, ethnicity and nationality.

4. Pay Gap Analysis : To investigate potential pay disparities, a multiple regression analysis was conducted (which is often used to measure the impacts of independent (or explanatory) variables on a dependent variable), considering factors such as job role, years of experience, gender, ethnicity and nationality. This will help identify whether any significant differences in compensation exist after accounting for these variables.

Results

The statistical analyses revealed the following findings:

1. Gender Representation : Certain departments had a significant gender representation imbalance, with more male employees in technical roles and more female employees in administrative roles. The chi-square test confirmed that the gender distribution across departments was significantly different ($p < 0.05$).

2. Diversity Index : The diversity index indicated moderate diversity within the organisation, but certain departments showed more diversity than others.

3. Pay Gap : After controlling for job role and experience, the multiple regression analysis showed a statistically significant gender pay gap ($p < 0.01$). However, there was no significant pay disparity based on ethnicity or nationality.

Discussion

The results demonstrate that while XYZ Tech Solutions has made progress in promoting workplace diversity, there are areas where improvements are needed. The gender representation imbalance in specific departments highlights the importance of implementing diversity initiatives to create more inclusive hiring practices.

The existence of a gender pay gap, even after accounting for job roles and experience, indicates the need for further examination of pay practices and potential biases within the organization.

41547

Recommendations

Based on the findings, we recommend the following strategies for XYZ Tech Solutions :

1. Diverse Hiring Practices : Implement policies that encourage diverse hiring, ensuring equal opportunities for all applicants and promoting gender balance in all departments.

2. Pay Equity Analysis : Conduct a thorough review of compensation practices to identify and rectify any gender-based pay disparities. Implement salary transparency and regular pay audits to maintain pay equity.

3. Inclusive Workplace Programs : Establish employee resource groups, training sessions, and workshops to foster an inclusive and supportive work environment, promoting collaboration among employees from diverse backgrounds.

Conclusion

This case study emphasizes the importance of statistical investigations in promoting workplace equality and diversity. By leveraging data-driven insights, XYZ Tech Solutions can develop targeted strategies to create a more inclusive and equitable work environment, ultimately leading to a stronger, more cohesive, and innovative organization.

I.   After reading the report, answer the questions given below :

$(5 \times 3 = 15)$

(i)   Evaluate the research questions of the report, outlining their strengths as well as areas for improvement.

(ii)   Analyse the dataset collected for the report. Are there any other metrics or variables that could have been used to help answer the research questions more effectively?

(iii) Evaluate the results section of the report. Give two suggestions to improve the presentation of the results.

(iv)   Give three statements that can be added to the discussion section of the report to improve the section.

(v)   Give your professional assessment of the company based on your analysis of the report. What are the worrying aspects of the study based on your overall evaluation of the report?

41547