

TRIBHUVAN UNIVERSITY

2082 (New Course)

Bachelor / Education / 7th Semester

ICT Ed.478 Teaching Method in ICT Education

Full Marks: 60

Time: 3 hrs.

Candidates are required to give answers in their own words as far as practicable. The figures in the margin indicate full marks.
Attempt all questions

Group "B"

6 X 5 marks =30

1. Define pedagogy. How does andragogy differ from pedagogy?
2. List the features of an effective lesson plan and provide an example of an ICT tool that facilitates student collaboration.

OR

Discuss objectives in lesson plan. Why it is important to set clear learning objectives for effective lesson delivery?

3. How can online and face-to-face instruction be combined to create cohesive blended learning experiences?
4. Define e-portfolios and explain their role in student evaluation.
5. What is the purpose of the ASSURE model in instructional design?

OR

How can post-class discussions be held in a secure and productive environment using social media platforms?

6. What are some emerging technologies currently being used in education? Explain.

Group "C"

2 X 10 marks =20

7. Design a student-centered lesson plan showing clear roles of teachers and students for teaching gamification.

OR

Previously drawn lesson plans are more of a hindrance than help in effective teaching. Do you agree or disagree? Give reasons.

8. How new technologies can help with today's educational issues, paying particular attention to scalability, personalization, and accessibility?



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2082 (New Course)

Bachelor / Education / 7th Semester
ICT.Ed.474 Multimedia in Education

Full Marks: 40

Time: 3 hrs.

Candidates are required to give answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all questions

Group "B"

6 X 5 marks =30

1. ✓ What is Multimedia authoring tool? Explain any three commonly used Multimedia authoring tools with its features.
2. ✓ Define digital photography and explain its advantages over traditional film photography.
3. What is track management in audio production? Describe the track management process.

OR

- ✓ Describe various video recording methods in details.
4. Analyze the impact of live streaming on audience engagement compared to on-demand video content. What are the key benefits of live streaming for content creators?
5. ✓ Evaluate the effectiveness of Multimedia in promoting critical thinking and problem-solving skills.

OR

- Discuss the potential challenges and ethical considerations of using multimedia in education.
6. Explain the basic technical setup required for an effective live stream, including hardware and software components.



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2082 (New Course)

Bachelor / Education / 7th Semester

Full Marks: 40

ICT.Ed.477 Python Programming

Time: 3 hrs.

Candidates are required to give answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all questions

Group "B"

6 X 5 marks =30

1. Write a Python program that takes user input, performs a calculation, and displays the output using f-strings.
2. Explain the purpose of the if, match, break, and continue statements in Python with suitable examples.

OR

Compare and contrast the for and while loops in Python. Provide examples to illustrate their use.

3. Write a Python program to demonstrate the use of set operations (union, intersection, and difference).
4. Write a Python program to create a class, initialize it using the `__init__` method, and demonstrate the use of the self keyword.

OR

Define object-oriented programming. How does Python implement OOP concepts like encapsulation, inheritance, and polymorphism?

5. Discuss exception handling in Python. How do try, except, and finally blocks work? Provide an example.
6. Discuss the importance of the Canvas widget in tkinter. Write a program to draw shapes using the Canvas widget.



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2082 (New Course)

Bachelor / Education / 7th Semester

Full Marks: 40

Ed. 472 Research Project

Time: 3 hrs.

Candidates are required to give answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all questions

Group "B"

6 X 5 marks = 30

1. A local school board wants to identify why students' test scores have been declining. Apply your knowledge of research approaches to suggest two distinct ways that they could investigate this problem.

OR

A non-profit organization wants to understand the impact of its after-school tutoring program on students' math scores.

Formulate a research question and a corresponding hypothesis for this project. Justify your choices by explaining how your hypothesis is testable and how your research question is specific enough to be answered through a study.

2. In a proposal for a study on classroom technology, explain the relationship between a research question and a hypothesis.

3. For a study on the effectiveness of online learning, identify and apply three different search terms you would use to find relevant articles.

4. A researcher wants to study the reading habits of all students at your university. Apply your knowledge of sampling to describe an appropriate sampling procedure.

5. Using the APA 7th Edition guidelines for referencing and citations, create a sample reference entry for a book you might use as a source. Then, briefly explain the purpose of

referencing in academic writing as it relates to the research process.

OR

Imagine you've completed a research project on the impact of collaborative learning on student engagement in a university course. You have collected data through student surveys, teacher interviews, and classroom observations. The results show a positive correlation, but the professor argues that your findings may be skewed because your participants were volunteers who were already highly engaged. How would you structure the discussion section of your research report to address this specific criticism? Explain how you would interpret your findings, discuss the limitations of your study, and propose future research to address these issues.

6. Differentiate quantitative research from qualitative in terms of their concept and characteristics.

