

KATHMANDU UNIVERSITY  
End Semester Examination  
January 2024

Marks Scored:

Level : B.E./B.Sc.  
Year : IV

26 JAN 2024

Course : COMP 480  
Semester : I

Exam Roll No. :

Time: 30 mins.

F. M. : 10

Registration No.:

Date :

SECTION "A"

[20Q. × 0.5 = 10 marks]

Choose and mark [X] in the most appropriate option from each set of choices.

1. What is the E-Government Development Index (EGDI)?  
 A measure of a country's economic development  
 A measure of a country's e-governance development  
 A measure of a country's population growth  
 A measure of a country's environmental sustainability
2. Which of the following is **NOT** a stage in the e-governance maturity model?  
 To increase government revenue  
 To improve the delivery of public services  
 To increase the number of government employees  
 To decrease the use of technology in government
3. What role does *Business Process Reengineering* play in e-governance?  
 It helps to streamline government processes  
 It helps to increase government revenue  
 It helps to decrease the use of technology in government  
 It has no role in e-governance
4. Which of the following is **NOT** a challenge in implementing e-governance?  
 Technological infrastructure  
 Privacy concerns  
 Digital divide  
 Decreased public participation
5. What is the 'transactional' stage in the e-governance maturity model?  
 It is the stage where basic information is provided through an online platform  
 It is the stage where users can download forms and interact with the government  
 It is the stage where full online transactions are possible  
 It is the stage where integration occurs across different government agencies
6. What is the 'emergent' stage in the e-governance maturity model?  
 It is the stage where basic information is provided through an online platform  
 It is the stage where users can download forms and interact with the government  
 It is the stage where full online transactions are possible  
 It is the stage where integration occurs across different government agencies
7. What does e-Governance *primarily* aim to achieve?  
 Increased paperwork  
 Improved public service delivery  
 Centralized decision-making  
 Limited citizen engagement

8. In e-Governance, what does the term 'interoperability' refer to?
- Restricting data sharing
  - Promoting collaboration between government agencies
  - Limiting accessibility
  - Hiding information from citizens
9. What is the primary focus of the *user-centric* e-Governance business model?
- Cost reduction
  - Citizen satisfaction
  - Limited accessibility
  - Centralized decision-making
10. Which of the following revenue model involves charging users based on the volume of services utilized?
- Subscription model
  - Transactional model
  - Freemium model
  - Advertising model
11. In the context of e-Governance, what does 'e-Readiness' assess?
- Government expenditure
  - Citizen satisfaction
  - The level of preparedness of a community to participate in e-Government initiatives
  - Government size
12. What role does education play in enhancing e-Readiness?
- It has no impact on e-Readiness
  - It promotes digital literacy
  - It limits access to information
  - It discourages citizen participation
13. What are the primary challenges in implementing *cross-agency interoperability* in e-Governance, and how can they be addressed?
- Lack of funding; increase government expenditure
  - Resistance to change; enforce regulations
  - Technological disparities; develop standardized protocols
  - Limited citizen engagement; reduce public services
14. Compare and contrast the user-centric and data-centric e-Governance business models, highlighting their strengths and weaknesses.
- User-centric focuses on citizens; data-centric prioritizes data security
  - User-centric prioritizes data security; data-centric focuses on citizens
  - Both models are similar in their approach
  - User-centric and data-centric are terms used interchangeably
15. What is the role of 'Public-Private Partnerships (PPPs)' in the successful implementation of e-Government initiatives?
- PPPs hinder e-Government initiatives
  - PPPs are irrelevant in e-Governance
  - PPPs foster innovation and efficiency in service delivery
  - PPPs are limited to the initial stages of e-Government

16. What is the role of 'Big Data Analytics' in enhancing decision-making processes within e-Government, considering both opportunities and challenges?
- Big Data analytics have no impact on e-Government decision-making
  - Big Data analytics hinder decision-making due to data overload
  - Big Data analytics improve decision-making through data-driven insights
  - Big Data analytics are limited to basic data processing
17. What is the impact of 'social media' on citizen engagement in e-Government initiatives?
- Social media has no impact on citizen engagement
  - Social media enhances citizen engagement but poses privacy risks
  - Social media hinders e-Government initiatives
  - Risks associated with social media are negligible
18. What is the potential 'socio-economic' impacts of e-Government initiatives on marginalized communities?
- E-Government initiatives have no impact on marginalized communities
  - E-Government initiatives may widen socio-economic gaps
  - E-Government initiatives always benefit marginalized communities
  - E-Government initiatives are limited to urban areas
19. What is the 'ethical implications' of using Artificial Intelligence (AI) in e-Governance decision-making processes.
- AI in e-Governance is ethically neutral
  - Ethical concerns arise from bias in AI algorithms and lack of transparency
  - AI has no impact on ethical considerations
  - Ethical considerations are limited to human decision-making
20. Which of the following is a *key goal* of e-Governance?
- |  |   |
|--|---|
| <input type="checkbox"/> Increased bureaucracy         | <input type="checkbox"/> Centralized decision-making      |
| <input type="checkbox"/> Limited access to information | <input type="checkbox"/> Improved public service delivery |



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SECTION "B"

[6 Q. × 4 = 24 marks]

Attempt *ANY SIX* questions.

1. What are the challenges and opportunities associated with implementing G2G eGovernance solutions for improving *inter-agency collaboration, data sharing, and coordination*, between government agencies in Nepal? How can governments overcome these challenges to enhance service delivery? Explain with suitable examples.
2. How can eGovernance platforms be leveraged to promote entrepreneurship and economic growth in developing nations, fostering an environment where small and medium-sized enterprises (SMEs) can thrive and contribute to national development?
3. Describe data and role of data analytics for developing effective eGovernment system.
4. How can e-governance systems be effectively implemented to address the digital divide and ensure equitable access to government services in underserved rural areas of Nepal?
5. How can national ID be utilized to digitize the Government to Citizen (G2C) process and services in Nepal? Briefly explain with examples.
6. In the event of a public health crisis or pandemic, how can eGovernance systems be rapidly adapted to facilitate *real-time data sharing, contact tracing, and efficient vaccine distribution* to protect the population's health and well-being? Explain with suitable examples.
7. At what state is the maturity of e-governance in Nepal? Support your point with strong argument and suggest a few concepts which could strengthen the e-governance in the context of Nepal.

SECTION "C"

[2 Q. × 8 = 16 marks]

Attempt *ANY TWO* questions.

8. Nepal's *E-Government (2022 EGDI: 0.5117) Rank: 125* and *E-Government (2003 EGDI: 0.2684) 2003 Rank: 130*, almost after two decades of time, Nepal couldn't progress in UN ranking of e-governance. What are possible reasons for this? Develop and explain framework to establish the status of Nepal in service delivery through Information Communication and Technology (ICT).

9. Discuss the potential *impact of emerging technologies* like AI, blockchain, and Big Data on future e-governance practices. Identify potential benefits and challenges associated with their implementation.
10. Explain how e-governance initiatives can contribute to achieving the UN *Sustainable Development Goals* (SDGs), particularly addressing goals related to poverty, education, and health. Provide specific examples of successful e-government projects in this context. Relate your points with different theories and approaches of eGovernance.