MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF INFORMATICS OFFICER UNDER INFORMATION & COMMUNICATION TECHNOLOGY DEPARTMENT, GOVERNMENT OF MIZORAM. NOVEMBER, 2024

TECHNICAL PAPER - II

Time Allowed : 2 hours

Full Marks : 200

All questions carry equal marks of 2 each.
Attempt all questions.

1. Which of the following is/are regarded as the properties of good governance?
    - i. Accountability
    - ii. Transparency
    - iii. Consensus
    - (a) i only
    - (b) i and ii only
    - (c) ii and iii only
    - (d) i, ii and iii

2. Government services such as obtaining driving license, property registration etc which are directly utilized by the people are collectively termed as –
    - (a) B2C services
    - (b) Citizen Common Services
    - (c) Citizen Centric Services
    - (d) Citizen Prioritized Services

3. Which of the following could to be a trade-off and challenge when services are to be provided to people?
    - (a) Consensus vs Transparency
    - (b) Accountability vs Moral reform
    - (c) Responsiveness and inclusiveness
    - (d) Ease of getting service vs Security

4. In good governance, what does the term "responsiveness" refer to?
    - (a) The ability of government to respond to the needs and preferences of the public in a timely and effective manner.
    - (b) The speed at which laws are enacted and enforced.
    - (c) The level of government control over private enterprises.
    - (d) The degree of government surveillance and regulation.

5. Which of the following is a key principle of a Citizen Charter?
    - (a) Secrecy
    - (b) Exclusivity
    - (c) Centralization
    - (d) Accountability

6. Which factor contributes most to the digital divide, posing a challenge for e-Governance projects in rural areas?
    - (a) Lack of interest in digital services
    - (b) Inadequate internet connectivity and limited access to digital devices
    - (c) Over-saturation of digital literacy programs
    - (d) Too many competing e-Governance platforms

7. Which issue can cause delays in the implementation of e-Governance projects?
    - (a) Streamlined decision-making processes
    - (b) Complex procurement procedures and lengthy government approval processes
    - (c) Lack of digital literacy training programs
    - (d) Overwhelming public demand for quick implementation

8. Which of the following is not a key activity in Phase 1: e-Governance Strategy Development?
   (a) Define clear vision & objectives
   (b) Incorporate domestic and global learning
   (c) Define funding requirements
   (d) Stakeholder needs and expectations

9. Which challenge is commonly faced during the implementation of IT systems in e-Governance projects?
   (a) Lack of stakeholder involvement
   (b) Overabundance of technical resources
   (c) Too much user engagement
   (d) Integration issues with legacy systems, which may not be compatible with the newly developed IT infrastructure

10. Current-state study and desired-state study is likely to produce _____ immediately, then other processes.
    (a) Gap assessment
    (b) Process reengineering
    (c) Resource requirement
    (d) Automation

11. When deciding whether inhouse or outsourcing development, which of the following could be the least deciding factor?
    (a) Competency of IT staff of government
    (b) Trust between government officer and private partner
    (c) Sensitivity of data and information
    (d) Trust system between government and private partners

12. As per Gartner e-Governance Maturity Model, following is the correct order of phases –
    (a) Information, interaction, transaction and transformation
    (b) Interaction, information, transaction and transformation
    (c) Transaction, information, interaction and transformation
    (d) Transaction, interaction, information and transformation

13. E-Gov vision and e-Gov objectives differ mainly in –
    (a) The domain where they are to be implemented
    (b) The level of authority where the responsibility lies
    (c) The kind of technology to be used
    (d) The group of people who will actually benefit

14. Which of the following is one of the biggest challenges involving people's mind regarding transformation from existing system to the e-enabled system?
    (a) Financial concern
    (b) Security concern
    (c) E-Fear
    (d) Change resistance

15. How does "capacity building" contribute to the success of an e-Governance strategy?
    (a) By reducing the need for skilled professionals
    (b) By ensuring that government staff and citizens are trained and capable of utilizing new e-Governance systems effectively
    (c) By outsourcing all e-Governance initiatives
    (d) By focusing only on physical infrastructure development

16. What is a fundamental objective of e-Governance?
    (a) To enhance the efficiency, accessibility, and transparency of public services through the use of technology
    (b) To increase bureaucracy and paperwork in government services
    (c) To reduce the use of technology in public administration
    (d) To centralize all government services in one physical location

17. Which of the following is an example of a G2B (Government to Business) service?
    (a) Issuance of business licenses and permits
    (b) Government's internal communication network
    (c) Delivery of healthcare services to citizens
    (d) Voting systems for citizens

18. Which of the following most probably fall under G2G service?
    (a) Application of new electricity connection by Transport department
    (b) Revenue disbursement to government by electricity department
    (c) Payment of electricity bills by consumers to the department
    (d) Complaints made by Transport department regarding their electricity connection

19. The primary purpose(s) of GPR is/are –
    i. To review and re-make government processes
    ii. To analyze the existing process and to make documentation
    iii. To make the system more efficient
    (a) i only   (b) i and ii only
    (c) i and iii only   (d) i, ii and iii

20. Process Reengineering is not –
    (a) Translation of processes
    (b) Transformation of processes
    (c) Finding more efficient and more effective process
    (d) Bridging As-Is and To-Be

21. Which of the following is the least immediate result of poor governance?
    (a) Declining morality   (b) People not getting their rights
    (c) Poor access to government services (d) Poor service provided to citizens

22. Which of the following is an advantage of prioritizing services based on risk in GPR?
    (a) High-risk services are ignored to focus on low-risk ones
    (b) High-risk services are addressed first, reducing the likelihood of system failures and service disruptions
    (c) Risky services are left unchanged to avoid complexity
    (d) The focus is only on aesthetics rather than functionality

23. Which of the following is a common symptom of poor governance in Government Process Re-engineering (GPR)?
    (a) Frequent delays and inefficiencies in service delivery
    (b) Increased transparency and accountability
    (c) Successful implementation of process improvements
    (d) Effective stakeholder engagement

24. Which of the following best describes the traditional approach to government service delivery?
    (a) Emphasis on digital interactions and automated processes
    (b) Use of advanced IT systems to streamline operations
    (c) Implementation of online self-service portals
    (d) Reliance on manual, paper-based processes and face-to-face interactions

25. Which of the following is the principle for Process Reengineering?
    (a) Arrange
    (b) Plan
    (c) Devise
    (d) Orchestrate

26. In order to streamline procurement by government entities, the following has been devised and implemented –
    (a) GeM
    (b) E-Market
    (c) E-GovMarket
    (d) Digilocker

27. Request for Proposal (RFP) is basically –
    (a) Tender document
    (b) Detailed Project Report (DPR)
    (c) Employment notice
    (d) Job application

28. In a three-bid format for implementing e-governance, the bids are evaluated in the order –
    (a) Technical, Financial and Final Selection Criteria
    (b) DPR, Tender and Selection
    (c) Pre-qualification, Technical and Financial
    (d) Tender, Selection and Award

29. Which of the following is false regarding commercial bid?
    (a) It contains details for software license cost etc.
    (b) It contains the detailed plan for the proposed implementation steps
    (c) It contains financial quote from the potential service provider
    (d) It is a practice to be opened last

30. Which of the following is not considered as the strength of using PPP?
    (a) Ability to deliver value for money service
    (b) Utilizing one's skill on agreement basis rather than recruitment
    (c) Possibility of keeping government's confidential files
    (d) Simplifying offering of services from the viewpoint of government

31. PPP must satisfy the following(s) –
    i. Win-win situation for both public and private
    ii. It should save troubles for public
    iii. Cost of service should remain same
    iv. Private should have monetary benefits
    (a) i and ii only
    (b) ii and iii only
    (c) i, ii and iv only
    (d) i, ii, iii and iv

32. Which of the following is considered incorrect when risk concern is addressed in PPP?
    (a) Public sector may lose managerial control over its services
    (b) Confidential matters may be leaked to public
    (c) Procurements in PPP may be time consuming and complicate
    (d) Proper agreement may not be signed between the parties

33. Name of web application for Government's online tendering that allows downloading of tender document and to submit it online is –
    (a) e-Procurement
    (b) e-Tendering
    (c) Government e-Tendering
    (d) Government e-Marketplace

34. This is a one-time cost associated with costs related to the software design, development and maintenance projects.
    (a) Application cost for ERPs solution
    (b) AMC for software licenses
    (c) Training and Capacity Building
    (d) Software maintenance and support

35. Which of the following is a potential revenue stream for e-Governance initiatives?
    (a) Fees for accessing public records at physical locations
    (b) Costs associated with physical infrastructure maintenance
    (c) Advertising revenue from government service centres
    (d) Tax deductions for digital service providers

36. In the Project Finance model, how is the project typically funded?
    (a) Through the project's assets and potential future earnings
    (b) By issuing government bonds
    (c) Through government taxes and tariffs
    (d) Through public-private partnerships without debt financing

37. What is the role of a "Concessionaire" in the Private Finance model?
    (a) A government agency responsible for financing the project
    (b) The private partner who enters into a concession agreement with the government
    (c) The entity responsible for overseeing the bidding process
    (d) The legal advisor for the project

38. An e-governance business model in which public sector hired private partner to build the service model, take care as its own, operate and after running smoothly, transfer the working model to the government is –
    (a) BOO   (b) PPP
    (c) BOOT   (d) TOT

39. What is a key feature of the Public-Private Partnership (PPP) model?
    (a) The private sector owns the infrastructure permanently
    (b) The government funds the entire project alone
    (c) The government does not retain any responsibility for service delivery
    (d) The private sector delivers services and finances or part-finances the project

40. Which mobile payment system, launched under Digital India, enables users to make payments using their smartphones by scanning QR codes?
    (a) UPI (Unified Payments Interface)   (b) Paytm
    (c) BHIM (Bharat Interface for Money)   (d) Google Pay

41. Net investment of private entity on equipment is best described by –
    (a) Gross investment minus unexpected damage of capital
    (b) Gross investment minus damage of capital due to natural calamity
    (c) Gross investment minus loss of value over time
    (d) Gross investment only

42. Which platform was developed by Ministry of Education for open access to academic resources?
    (a) Indian Open Access Library   (b) e-Library
    (c) National Digital Library of India   (d) e-PG Pathshala

43. Platform through which documents such as educational, insurance, vehicle documents, driving license etc were made available digitally and accepted by government is –
    (a) mParivahan   (b) Digilocker
    (c) E-Digits   (d) National Document Library

44. Signing and authenticating documents over online system by means of e-KYC can be done with the provision called –

    (a) eSign
    (b) eSignature
    (c) Verisign
    (d) SureSign

45. Which of the following is an initiative under NEP 2020 in which a centralized bank of students' academic records that allows students to carry their credits over different universities and institutions?

    (a) Swayam
    (b) MOOCS
    (c) E-Panchshala
    (d) ABC

46. Which of the following is a key vision area under the Digital India program?

    (a) Manufacturing excellence
    (b) Digital infrastructure as a core utility for every citizen
    (c) Promoting international trade
    (d) Strengthening foreign relations

47. Which program under Digital India focuses on providing universal access to banking facilities, particularly through mobile banking and financial services?

    (a) Pradhan Mantri Jan Dhan Yojana (PMJDY)
    (b) Digital Literacy Mission
    (c) Make in India
    (d) Startup India

48. How do Common Service Centers (CSCs) contribute to the Digital India vision?

    (a) By centralizing urban internet services
    (b) By offering free mobile phones to every citizen
    (c) By providing government jobs to local citizens
    (d) By bridging the digital divide through access to e-governance services, banking, and other digital services in rural areas

49. Which of the following is NOT one of the nine pillars of the Digital India program?

    (a) Digital Infrastructure as a Utility to Every Citizen
    (b) Governance and Services on Demand
    (c) Promotion of Industrial Manufacturing
    (d) Digital Empowerment of Citizens

50. Which platform under Digital India provides free and accessible educational resources for students across the country?

    (a) SWAYAM
    (b) Digi Locker
    (c) UMANG
    (d) MyGov

51. A 12-digit unique number which is designed for identification of each student in India and is supposed to be linked with institutions' roll number so that students' records may be centralized in a platform is called –

    (a) Automated Permanent Academic Account Registry
    (b) Unique Identification of Students
    (c) National Identification Number for Academicians
    (d) Students' Identification Number

52. Which of the following may not be included in the components of enterprise architecture?

    (a) Business architecture
    (b) Information architecture
    (c) Technology architecture
    (d) Application architecture

53. Which type of architectural platform makes use of existing reusable services available in the internet/ network to build applications?

    (a) Service Oriented Architecture
    (b) Software Operating Procedure
    (c) Standard Application Package
    (d) Standard Layered Architecture

54. Which of the following is not true?
- (a) Public Key Infrastructure uses only public key
- (b) Digital Signature system requires public and private keys
- (c) Digital certificate requires digital signature
- (d) The digital certificate is valid only approved by CA

55. What is the primary goal of Enterprise Architecture (EA) in an organization?
- (a) To define the physical layout of the office buildings
- (b) To develop mobile applications for the organization
- (c) To enhance the organization's social media presence
- (d) To align the organization's IT strategy with its business goals and improve overall efficiency

56. What is a common challenge faced during the data digitization process?
- (a) Lack of physical storage space
- (b) Difficulty in maintaining electronic records
- (c) High costs of digitization and ensuring data accuracy during conversion
- (d) Limited access to paper documents

57. Which of the following is an example of an attack that scans a network to gather information or find vulnerabilities?
- (a) Probing
- (b) Packet Sniffing
- (c) Denial of Service (DOS)
- (d) Malware

58. Which of the following is an example of a security best practice?
- (a) Using tools like MD5 checksums to ensure system integrity
- (b) Avoiding the use of encryption for sensitive data
- (c) Disabling audit systems to reduce data storage requirements
- (d) Avoiding system upgrades to prevent disruptions

59. What is the function of a firewall in network security?
- (a) To encrypt network data
- (b) To block unauthorized access to private network resources
- (c) To monitor network activity for suspicious behaviour
- (d) To detect and respond to intrusions

60. What is a digital signature primarily used for in cryptographic communications?
- (a) Encrypting the entire message
- (b) Verifying the sender's identity and ensuring non-repudiation
- (c) Monitoring network traffic
- (d) Blocking unauthorized access to the network

61. Which of the following technique(s) uses same key for encryption and decryption?
- i. PKI
- ii. AES
- iii. DES

- (a) i and ii only
- (b) i and iii only
- (c) ii and iii only
- (d) i, ii and iii

62. Main role of public key and private key pair can be visualized respectively as –
    (a) Guest and Authenticated user
    (b) Encryption and authentication
    (c) Username and password
    (d) Internet and LAN

63. To check whether organizational network and systems are secure or not, whether software serve their purpose or not, the organization may conduct –
    (a) Fault search
    (b) Physical audit
    (c) IT audit of e-Governance
    (d) Financial checking

64. Policy makers and people's representatives should maintain one of the following deceasing lists of priorities when reviewing status of e-Governance is concerned –
    (a) Department, Resources, Recruitment
    (b) Financial, Manpower, Infrastructures
    (c) Technical position, financial position, current status
    (d) Citizen, Services, Implementation

65. Which of the following is the most critical risk to assess during an IT audit of an e-Governance project?
    (a) Financial instability of the vendor
    (b) Lack of user adoption
    (c) Data privacy and confidentiality breaches
    (d) Vendor contract fulfillment

66. To ensure the sustainability of e-Governance projects, which of the following is crucial?
    (a) Revenue model
    (b) Technical model
    (c) Data flow diagram
    (d) Use case diagram

67. The initial investment in implementing e-Governance is largest from –
    (a) Corporations
    (b) State Bank of India
    (c) PPP
    (d) Government

68. What is the predominant software development approach used for e-Governance applications?
    (a) Off-the-shelf COTS/ERP applications
    (b) Outsourcing development to third parties
    (c) Predominantly custom software development
    (d) Open-source software only

69. Which factor primarily influences the cost of COTS/ERP applications for e-Governance?
    (a) The functionality of the custom code
    (b) The vendor, the product, and the number of users
    (c) The local regulations and policies
    (d) The quality of in-house development teams

70. What does the Copyright Act state about the ownership of source code?
    (a) The government automatically owns the source code
    (b) The source code ownership automatically rests with the developer or private partner
    (c) The source code is owned jointly by the government and the vendor
    (d) The government must purchase the source code separately

71. Why has open-source software gained significant popularity and influence in recent years?
    (a) It is solely used by large IT corporations.
    (b) It is more expensive than proprietary software.
    (c) It is primarily used for hardware development.
    (d) It offers independence from software producers and supports the 'free-of-charge principle.'

72. In the context of open-source licensing, what is required if modifications are made to the source code?
    (a) The modified software must be distributed under a different license
    (b) The modifications must be kept confidential
    (c) The modifications must be distributed under the same terms as the original license
    (d) The modified software cannot be distributed

73. What distinguishes the Proprietary Model from the Open Source Model in software licensing?
    (a) Proprietary licenses allow sublicensing and modifications
    (b) Open Source licenses restrict modifications and upgrades
    (c) Proprietary licenses prohibit modifications and generally do not allow sublicensing
    (d) Open Source licenses charge fees for the source code

74. What is a key component of the people dimension of change that significantly impacts project success?
    (a) The number of new technologies introduced
    (b) Effective management of the people dimension
    (c) The cost of the new system
    (d) The duration of the project

75. Software which is modified and tailor made from existing reusable platforms and functions and is for specific application is called –
    (a) MOTS   (b) COTS
    (c) GOTS   (d) NOTS

76. Software whose source code is available publicly and could provide freedom for developers and users to modify for their needs is termed as –
    (a) FOSS   (b) PHP
    (c) FOPS   (d) XAMPP

77. What could be the main concern in using Open Source software for e-Governance implementation?
    (a) Reliability   (b) Support
    (c) Cost   (d) Ease of use

78. As far as knowledge is concerned, it has to be managed in the following series of steps – emerged, stored and _____ .
    (a) Processed   (b) Translated
    (c) Transcripted   (d) Transferred

79. Which principle of effective communication emphasizes that communication must be fully integrated with the change process?
    (a) Communication is a one-time event.
    (b) Communication should be done only at the beginning and end of the process.
    (c) Communication should be handled by external consultants only.
    (d) Communication must occur in parallel with the change process.

80. Which of the following is a key reason for failure in a change initiative due to poor prioritization?
    (a) All activities are given equal importance and taken up simultaneously.
    (b) Customers' needs are thoroughly understood and incorporated.
    (c) Employees are actively involved in the project.
    (d) Clear benefits at the individual level are demonstrated.

81. Many of the large organizations fade in time primarily due to –
    (a) Insufficient revenue generation
    (b) Insufficient capital
    (c) Lack in management
    (d) Non-adaptability to change

82. One of the primary challenges in management of change in transition to e-Governance is –
    (a) Technological change
    (b) Financial change
    (c) Manpower change
    (d) Leadership change

83. When trying to classify change management into two types, what could be the most probable types?
    (a) Real change and superficial change
    (b) Incremental change and circular change
    (c) Radical change and transformational change
    (d) Incremental change and transformational change

84. Which framework is necessary to take care of change of laws, codes, regulations when implementing e-Governance?
    (a) Law framework
    (b) Legal framework
    (c) Court regulations
    (d) Justice framework

85. Information Technology Act _____ is mainly responsible for incorporation of IT related laws, rules and regulations such as e-Commerce, cybercrime etc.
    (a) 1998
    (b) 2000
    (c) 2005
    (d) 2015

86. Which section of the Information Technology Act criminalizes sending offensive messages through computer or other communication devices but has been struct down by the Supreme Court in 2015?
    (a) Section 66A
    (b) Section 56B
    (c) Section 66C
    (d) Section 55A

87. The digital signature accepted by Section 5 of Information Technology Act is –
    (a) Scanned signature which can be verified in the public database
    (b) Digital form of signature that is based on private-public key pair
    (c) Fingerprint stored in the UID database
    (d) Combination of facial, fingerprint and iris scan in personal social media account

88. The IT Act, 2000 was modelled on which international framework?
    (a) WTO Law
    (b) European Union Directives
    (c) UNCITRAL Model Law
    (d) OECD Guidelines

89. What exception is extended to the applicability of the IT Act, 2000?
    (a) Power-of-attorney documents
    (b) Electronic filing of government documents
    (c) e-Payments
    (d) Admissibility of digital signatures

90. When a document is digitally signed, it authenticates the person who signed and it also closely mean-
    (a) The document hash is encrypted with signatory's private key
    (b) The document hash is encrypted with signatory's public key
    (c) The scanned physical signature is pasted in the document
    (d) The physically signed document is scanned

91. In a DPR, what section would cover "Means of sustaining the project benefits" and "Means of replicating the project success"?
    (a) Sustainability
    (b) Financials
    (c) Impact Assessment
    (d) Technology Options

92. The document which is prepared to get funding and support by the funding agency justifying all technical and financial matters is called –

(a) Expression of Interest   (b) Detailed Project Report

(c) Tender document   (d) Request for Proposal

93. In the context of e-Governance contracts, what is a 'Force Majeure' clause designed to address?

(a) Compensation for project delays

(b) Extraordinary events that release both parties from liability or obligation

(c) Confidentiality of project data

(d) Quality assurance for deliverables

94. Clause(s) in contract agreement that deals with the procedure when natural catastrophe or unforeseen situation arises is usually put under the head –

(a) Force Majeure   (b) Terms and Conditions

(c) Background   (d) Arbitration

95. What does Service Level Management (SLM) ensure in the context of SLAs?

(a) The drafting of legal contracts and agreements

(b) Selection and evaluation of service providers

(c) Financial management and cost control of the project

(d) Effective implementation of service levels and enforcement of SLAs

96. Which type of evaluation assesses whether changes are a result of the interventions?

(a) Impact Evaluation   (b) Process Evaluation

(c) Outcome Evaluation   (d) Financial Evaluation

97. _____ tries to ensure meeting of specification time to time, whereas _____ rather measures the meeting of intended purpose.

(a) Evaluation, monitoring   (b) Quality assurance, monitoring

(c) Monitoring, evaluation   (d) Contractor, site engineer

98. Following is the correct order of execution of project –

(a) Detailed Project Report, Contract Agreement, Request for Proposal

(b) Selection procedure, Contract Agreement, Detailed Project Report

(c) Detailed Project Report, Request for Proposal, Contractor Selection, Contract Agreement

(d) Detailed Project Report, Contractor Selection, Contract Agreement

99. An abbreviated form for the specific agreement that is signed by the client (Government) and the third party contractor for services to be provided in terms of quality, delivery mode, time etc is –

(a) SLA   (b) EOI

(c) RFP   (d) CA

100. Which section of the Information Technology Act recognize digital records be legally equivalent to paper records as long as they are accessible for future reference?

(a) Section 4   (b) Section 8

(c) Section 10   (d) Section 12

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