

BHAVNAGAR MUNICIPAL CORPORATION

Syllabus of Written Exam for the recruitment of “Assistant Programmer & System Analyst” Advertisement No: BMC/201718/1

No	Subject / Topic	Marks
1	General knowledge, geography, history, reasoning, mental ability, current affairs.	25
2	Fundamentals of Computers (Operating System, Data Structures, DBMS, Algorithms, Flow charts, Computer Networks etc.). Information Systems and Software Engineering: information gathering, requirement and feasibility analysis, data flow diagrams, process specifications, input/output design, process life cycle, planning and managing the project, design, coding, testing, implementation, maintenance, project documentation, Software process and SDLCs. Middleware Stack, ERP Fundamentals, Payment Gateway, SMS Gateway Interface.	10
3	Web Programming .Net Technology - Introduction to .NET framework, .Net web technology programming with C#.Net, VB.Net, ASP. Net 2.0& above, Crystal Reports, WCF, 3-tire Architecture etc. PHP Programming - PHP programming, zoomla, word press etc JAVA Programming - Java programming, servlet, JSP, hibernate, strut, MVCetc LINQ& web services UI Design - Angular JS, bootstrap, iframe, Ajax, JavaScript, JQuery,HTML5, CSS3, XML, JSON etc. Web servers – Microsoft IIS, Apache, Wamp, samba, Web services and applications, management, publishing and configuration Deployment of Application on various platform, Build and Release on various platforms, Version Control Fundamental (VSS, TFS, SVN, Tortoise SVN).	35
4	Mobile Application Development: Mobile platforms, Phones, PDAs; Cellular technology-2G, 3G, 4G, GSM, CDMA networks; App development; UI design, development, Browsers; Java ME, IOS SDK, Android SDK; Virtual Machines, SOA; Mobile enterprise application platforms, IDEs; Mobile app servers ; Emulator and tools for testing mobile and web apps	10
5	Basics of SQL, SQL Database Configuration & Scripts (MSSQL Server - 2008 & above, MySQL, Oracle etc), server management & programming, Fine tuning	10
6	Data Centre: Data storage, Data availability, Data management; Cloud Infrastructure, Virtualization, Pipelining; Public cloud, private cloud, hybrid cloud; Business data/ service scalability, reliability, analytics; Data mining, Data warehouse; Distributed computing – Hadoop, Map Reduce; Business intelligence; Business continuity planning.	5
7	Cyber Security: Threats, Vulnerabilities and attacks for organizations; Data security, Data privacy, Data protection; Privacy implications in social network; Hackers and Crackers; Ethical Hacking, Denial of Service attacks, WIFI Hotspot, Botnet, Cybercrimes and the Indian IT Act 2000 (amended from time to time), IT security risk management, ISO/IEC 27000, Indian Computer Emergency Response Team (CERT-In) Roles and Functions, Gujarat IT/ITeS Policy (2016-21)	5

- **The above bifurcation of marks is approximate. It may differ slightly in actual.**
- **Medium (language) of Exam = English**
- **Type of Questions = Multiple Choice Questions-MCQ**
- **No. of Questions = 100**
- **Duration of Exam = 90 Minutes**
- **Marking System:- One (1) mark will be awarded for every RIGHT answer AND 0.25 mark will be deducted for every WRONG answer. However, there will be no penalty for unattempted questions.**

NOTE = EXAM WILL PROBABLY BE HELD ON Date:- 3rd September 2017