Syllabus and sample questions for Assistant Accounts Officer

The topics to be covered in the recruitment examination are listed below. Please note that the level fo the questions will be commensurate to the M.Com. level syllabus in each of these topics as per the Bangalore University curriculum.

Topic List:

1. Basic Accounting
2. Monetary System
3. Operations Research and Quantitative Techniques
4. International Business
5. Macroeconomics
6. Information Systems and Computers
7. Financial Management
8. Banking Scenario in India
9. Risk Management
10. Micro Finance
11. International Business
12. Business Ethics and Corporate Governance
13. Strategic Cost Management
14. Accounting Standard
15. Direct Taxes
16. Indirect Taxes
17. Financial Markets
18. Securities Analysis and Portfolio Management
19. Commodities Markets
20. Life Insurance
21. General Insurance
22. Management of Insurance Companies
23. Marketing of Bank Products
24. E - Commerce

Sample Questions

1. FIFO stands for
   A. First In First Out$
   B. Flow In Flow Out
   C. First In Flow Out
   D. Flow In First Out

2. Any expense that gives benefit for a period less than twelve months is called
   A. Capital Expense
   B. Revenue Expense$
   C. Revenue Receipt
   D. Deferred Expense

3. What will be debited, if Mohsin commenced business with cash?
   A. Capital Account
   B. Cash Account$
   C. Drawings Account
   D. Proprietor's Account

4. Which of the following statements best describes a limited liability company?
   A. It is normally a non-profit making organization
   B. It is normally owned and managed by the same persons
   C. In law it is regarded as having a separate existence from its owners $
   D. It is normally owned by just one person

5. Which is the oldest branch of accounting?
   A. Financial Accounting$
   B. Cost Accounting
   C. Management Accounting
   D. None of these

Syllabus and sample questions for AE – Civil

The topics to be covered in the recruitment examination are listed below. Please note that the level of the questions will be commensurate to the B.Tech. level syllabus in each of these topics as per the Visvesvaraya Technological University (VTU) curriculum.

Lit of Topics:

1. Engineering Mathematics
2. Engineering Physics
3. Engineering Chemistry
4. Building Materials and Construction Technology
5. Strength of Materials
6. Surveying
7. Fluid Mechanics
8. Engineering Geology
9. Concrete Technology
10. Structural Analysis
11. Hydraulics and Hydraulic Machines
12. Building Planning and Drawing
13. Design of RCC Structural Elements
14. Geotechnical Engineering
15. Hydrology and Irrigation Engineering
16. Transportation Engineering
17. Computer Aided Design
18. Environmental Engineering
19. Design and Drawing of RC structures
20. Hydraulic Structures and Irrigation Design – Drawing
21. Alternative Building Materials and Technologies
22. Ground Improvement Techniques
23. Ground Water Hydrology
24. Rural Water Supply and Sanitation
25. Traffic Engineering
26. Design and Drawing of Steel Structures
27. Estimation and Valuation
28. Design of Pre – Stressed Concrete Structures
29. Highway Geometric design
30. Open Channel Hydraulics
31. Solid Waste Management
32. Rock Mechanics
33. Pavement Materials and Construction
34. Air Pollution and Control
35. Structural Dynamics
36. Design and Drawing of Bridges
37. Earthquake Resistant Design of Structures
38. Industrial Waste Water Treatment
39. Construction Management & Engineering Economics
40. Urban Transport Planning
41. Geographic Information System
42. Water Resources Engineering
43. Environmental Impact Assessment
44. Reinforced Earth Structures

Sample Questions

1. Which one of the following represents an activity
   A. Digging Foundation
   B. Curing concrete
   C. Ordering material
   D. All the above$

2. The final authority of technical aspects of a project
   A. Assistant Engineer
   B. Executive Engineer
   C. Superintending Engineer
   D. Chief Engineer$

3. Which of the following is a polymineralic rock?
   A. Magnesite
   B. Quartz
   C. Granite$
   D. Pure gypsum

4. The ratio of the volume of voids to the volume of soil solids in a given soil mass, is known as
   A. Void Ratio$
   B. Porosity of the Soil
   C. Specific Gravity
   D. None of these

5. What is the advantage of a concrete pile over a timber pile?
   A. Termite resistant
   B. Can go to any length
   C. Higher bearing capacity
   D. All the above$

Syllabus and sample questions for AE – Computer Science and Information Systems

The topics to be covered in the recruitment examination are listed below. Please note that the level of the questions will be commensurate to the B.Tech. level syllabus in each of these topics as per the Visvesvaraya Technological University (VTU) curriculum.

List of topics:

1. Engineering Mathematics
2. Engineering Physics
3. Engineering Chemistry
4. Introduction to Computer Programming
5. Basic Electronics
6. Electronic Circuits
7. Data Structures
8. Computer Programming and Programming Languages
9. Graph Theory and Combinatorics
10. Microprocessors
11. Algorithms
12. Computer Organization
13. Logic Design
14. Electronic Circuits
15. Statistical Methods
16. Software Engineering
17. Operating Systems
18. Database Management Systems
19. Computer Networks
20. Compiler Design
21. Signals and Systems
22. Computer Graphics
23. Object Oriented Modeling and Design
24. Embedded Computing Systems
25. Computer Architecture
26. Web programming
27. Digital Signal Processing
28. Multimedia Computing
29. Data Warehousing and Data Mining
30. Neural Network
31. Artificial Intelligence
32. Storage Area Networks
33. Fuzzy Logic
34. Wireless Networks and Mobile Computing
35. VLSI Design
36. Network Management Systems
37. Information and Network Security
38. Software testing
39. Cloud, Grids and Clusters

Sample Questions

1. An on-line commercial site such as Flipcart is an example of
   A. e-commerce database application$
   B. single-user database application
   C. multiuser database application
   D. data mining database application

2. What is the correct expansion of the acronym "SQL"?
   A. Structured Quantification Language
   B. Sequential Query Language
   C. Structured Query Language$
   D. none of these

3. Which of the following protocols can be used to find the hardware address of a local device?
   A. TCP
   B. ARP$
   C. IP
   D. None of these

4. Which of the following sequences of operations correctly depicts the hierarchy of arithmetic operations in C?
   A. / - * +
   B. * + / -
   C. + - / *
   D. / * + - $

5. Which of the following combines separately compiled modules of a program into a form suitable for execution?
   A. assembler
   B. linking loader$
   C. cross compiler
   D. None of the above

Syllabus and sample questions for AE - Electrical and Electronics

The topics to be covered in the recruitment examination are listed below. Please note that the level of the questions will be commensurate to the B.Tech. level syllabus in each of these topics as per the Visvesvaraya Technological University (VTU) curriculum.

List of topics:

1. Engineering Mathematics
2. Engineering Physics
3. Engineering Chemistry
4. Introduction to Computer Programming
5. Basic Electronics
6. Electronic Circuits
7. Electric Power Generation
8. Electrical and Electronic Measurements and Instrumentation
9. Network Analysis
10. Logic Design
11. Microcontrollers
12. Control Systems
13. Field Theory
14. Power Electronics
15. Transformers and Induction Machines
16. Signals and Systems
17. Transmission and Distribution
18. DC machines and Synchronous Machines
19. Linear IC's and Applications
20. Control Theory
21. Power System Analysis and Stability
22. Switchgear and Protection
23. Electrical Machine Design
24. Digital Signal Processing
25. Computer Aided Electrical Drawing
26. Computer Techniques in Power System Analysis
27. Electrical Power Utilization
28. High Voltage Engineering
29. Industrial Drives and Applications
30. Electrical Design, Estimation and Costing
31. Power System Operation and Control
32. Reactive Power Management
33. Data Base Management Systems
34. Renewable Energy Sources
35. Energy Auditing & Demand Side Management
36. Electrical Power Quality
37. Electrical Distribution Systems
38. HVDC Transmission
39. Artificial Neural Networks
40. Digital System Design with VHDL
41. Power System Planning
42. Computer Control of Electrical Drives
43. VLSI Circuits and Design
44. Electromagnetic Compatibility

Sample Questions

1. Which of the following is used to measure resistance?
   A. Volts
   B. Watts
   C. Ohms$
   D. Hertz

2. The number of kilowatts in 135 milliwatts is
   A. 0.135 kW
   B. 0.0135 kW
   C. 0.00135 kW
   D. None of these$

3. If a pulse waveform has a high time of 8 ms and a pulse width of 32 ms, what is the value of duty cycle?
   A. 2.5%
   B. 25%$
   C. 50%
   D. 75%

4. When a fourth resistor is connected in series with three resistors, the total resistance will
   A. Increase$
   B. Decrease
   C. Remains the same
   D. Cannot say unless we know the exact parameters of the 4 resistors

5. Which of the following is true when one of three series resistors is removed from a circuit and the circuit is reconnected,
   A. The current increases$
   B. The current decreases
   C. The current remains the same
   D. Cannot say unless we know the exact parameters of the resistors

Syllabus and sample questions for AE – Electronics and Telecommunications

The topics to be covered in the recruitment examination are listed below. Please note that the level of the questions will be commensurate to the B.Tech. level syllabus in each of these topics as per the Visvesvaraya Technological University (VTU) curriculum.

List of topics:

1. Engineering Mathematics
2. Engineering Physics
3. Engineering Chemistry
4. Introduction to Computer Programming
5. Basic Electronics
6. Electronic Circuits
7. Electrical and Electronic Measurements and Instrumentation
8. Network Analysis
9. Logic Design
10. Microcontrollers
11. Control Systems
12. Field Theory
13. Power Electronics
14. Transformers and Induction Machines
15. Signals and Systems
16. Transmission and Distribution
17. Linear IC's and Applications
18. Control Theory
19. Power System Analysis and Stability
20. Switchgear and Protection
21. Electrical Machine Design
22. Digital Signal Processing
23. Computer Techniques in Power System Analysis
24. Electrical Power Utilization
25. Electrical Design, Estimation and Costing
26. Power System Operation and Control
27. Reactive Power Management
28. Data Base Management Systems
29. Renewable Energy Sources
30. Artificial Neural Networks
31. Digital System Design with VHDL
32. Power System Planning
33. Computer Control of Electrical Drives
34. VLSI Circuits and Design
35. Electromagnetic Compatibility
36. Wireless Networks and Mobile Computing
37. Network Management Systems
38. Information and Network Security

Sample Questions

1. Which of the following capacitors store higher amount of energy?
   A. Plastic film capacitor
   B. Paper capacitor
   C. Mica capacitor$
   D. Lead capacitor

2. The core of a coil has a length of 20 cm. The self-inductance is 16 mH. What is the self-inductance if the core length is doubled, while all other quantities remain the same?
   A. 8 mH$
   B. 12 mH
   C. 32 mH
   D. None of these

3. the current in an intrinsic semiconductor kept at room temperature is because of
   A. Holes
   B. Electrons
   C. Both holes and electrons$
   D. Neither holes nor electrons

4. Which of the following is the most commonly used material for semiconductors?
   A. Germanium
   B. Silicon$
   C. Uranium
   D. Radium

5. Which of the following functions is carried out by the transponder of a communication satellite?
   A. Receives the signal from earth station
   B. Amplifies the signal and changes the frequency
   C. Retransmits the signal
   D. All the above$

Syllabus and sample questions for JE – Electrical

The topics to be covered in the recruitment examination are listed below. Please note that the level of the questions will be commensurate to the Diploma level syllabus in each of these topics.

List of topics:

1. Engineering Mathematics
2. Engineering Physics
3. Engineering Chemistry
4. Introduction to Computer Programming
5. Basic Electronics
6. Electronic Circuits
7. Electric Power Generation
8. Electrical and Electronic Measurements and Instrumentation
9. Network Analysis
10. Logic Design
11. Microcontrollers
12. Control Systems
13. Field Theory
14. Power Electronics
15. Transformers and Induction Machines
16. Signals and Systems
17. Transmission and Distribution
18. DC machines and Synchronous Machines
19. Linear IC's and Applications
20. Control Theory
21. Power System Analysis and Stability
22. Switchgear and Protection
23. Electrical Machine Design
24. Digital Signal Processing
25. Computer Aided Electrical Drawing
26. Computer Techniques in Power System Analysis
27. Electrical Power Utilization
28. High Voltage Engineering
29. Industrial Drives and Applications
30. Electrical Design, Estimation and Costing
31. Power System Operation and Control
32. Reactive Power Management
33. Data Base Management Systems
34. Renewable Energy Sources
35. Energy Auditing & Demand Side Management
36. Electrical Power Quality
37. Electrical Distribution Systems
38. HVDC Transmission
39. Artificial Neural Networks

40. Digital System Design with VHDL
41. Power System Planning
42. Computer Control of Electrical Drives
43. VLSI Circuits and Design
44. Electromagnetic Compatibility

Sample Questions

1. 20,000 watts is same as
   A. 20 kW$
   B. 20 mW
   C. 20 µW
   D. None of these

2. Which of the following is not connected with electricity?
   A. Voltage
   B. Resistance
   C. Length$
   D. Power

3. What happens to the current drawn from the source when a load resistance is removed from the output of a voltage divider circuit?
   A. Increases
   B. Decreases$
   C. Remains the same
   D. Cannot say unless we know the exact parameters of all the items involved

4. What happens to the induced voltage when the speed at which a conductor is moved through a magnetic field is increased?
   A. Increases$
   B. Decreases
   C. Remains the same
   D. Follows an inverted "U" shape

5. Which of the following is true when we reverse the current going through the coil of an electromagnet?
   A. Direction of the magnetic field reverses$
   B. Direction of the magnetic field remains as it was before
   C. The magnetic field gets cancelled
   D. The entire coil burns