

1. Which equation describes the dynamics of flow along a streamline?

- a) Bernoulli's equation
- b) Reynolds equation
- c) Euler's equation of motion
- d) Poiseuille's equation

Answer: c) Euler's equation of motion

Explanation: Euler's equation of motion governs the dynamics of fluid flow along a streamline, considering the balance of forces acting on an infinitesimal fluid element.

2. What is the derivation of Bernoulli's equation based on?

- a) Conservation of mass
- b) Conservation of energy
- c) Conservation of linear momentum
- d) Conservation of angular momentum

Answer: b) Conservation of energy

Explanation: Bernoulli's equation is derived from Euler's equation of motion by considering the conservation of energy along a streamline.

3. Which factor corrects the energy losses in real fluid flow when applying Bernoulli's equation?

- a) Friction factor
- b) Reynolds number
- c) Mach number
- d) Energy correction factor

Answer: d) Energy correction factor

Explanation: The energy correction factor accounts for energy losses due to factors like friction, turbulence, and viscosity in real fluid flow, which are not considered in idealized Bernoulli's equation.

4. Which equation describes the conservation of linear momentum for steady flow?

- a) Navier-Stokes equation
- b) Bernoulli's equation
- c) Euler's equation of motion
- d) Linear momentum equation

Answer: d) Linear momentum equation

Explanation: The linear momentum equation for steady flow describes the conservation of linear momentum along a streamline, considering the forces acting on the fluid element.

5. What is the momentum correction factor used for in fluid dynamics?

- a) Correcting for losses in kinetic energy
- b) Correcting for losses in linear momentum
- c) Correcting for losses in angular momentum
- d) Correcting for losses in potential energy

Answer: b) Correcting for losses in linear momentum

Explanation: The momentum correction factor is used to adjust for losses in linear momentum due to factors like viscosity and turbulence in real fluid flow.

6. Which equation describes the moment of momentum for fluid flow?

- a) Torricelli's equation
- b) Euler's equation of motion
- c) Navier-Stokes equation
- d) Moment of momentum equation

Answer: d) Moment of momentum equation

Explanation: The moment of momentum equation describes the conservation of angular momentum for fluid flow, which is useful for analyzing the rotation of fluid elements.

7. What type of flow requires the application of the moment of momentum equation?

- a) Steady flow
- b) Turbulent flow
- c) Laminar flow
- d) Compressible flow

Answer: a) Steady flow

Explanation: The moment of momentum equation is typically applied to analyze steady flow situations where the fluid motion is consistent over time.

8. Which device is used for measuring fluid velocity based on pressure differences?

- a) Pitot tube
- b) Prandtl tube
- c) Venturi meter

d) Orifice meter

Answer: a) Pitot tube

Explanation: A Pitot tube measures fluid velocity by comparing stagnation pressure (total pressure) and static pressure.

9. What type of flow measurement device utilizes the principle of fluid acceleration and deceleration?

- a) Orifice meter
- b) Nozzle meter
- c) Pitot tube
- d) Venturi meter

Answer: d) Venturi meter

Explanation: A Venturi meter measures fluid flow rate based on the pressure difference created by fluid acceleration and deceleration in a constricted flow passage.

10. How does a Prandtl tube measure fluid velocity?

- a) By comparing total pressure and static pressure
- b) By measuring the flow's rate of acceleration
- c) By measuring the flow's rate of deceleration
- d) By measuring the flow's temperature

Answer: a) By comparing total pressure and static pressure

Explanation: Similar to a Pitot tube, a Prandtl tube measures fluid velocity by comparing stagnation pressure (total pressure) and static pressure.

11. Which flow measurement device relies on the principle of fluid passing through a small hole?

- a) Nozzle meter
- b) Venturi meter
- c) Orifice meter
- d) Mouthpiece

Answer: c) Orifice meter

Explanation: An orifice meter measures fluid flow rate by determining the pressure difference across a small hole or orifice.

12. What is the primary function of a current meter in fluid dynamics?

- a) Measure fluid pressure
- b) Measure fluid velocity
- c) Measure fluid temperature
- d) Measure fluid density

Answer: b) Measure fluid velocity

Explanation: Current meters are used to directly measure fluid velocity in various water bodies, such as rivers, streams, and oceans.

13. Which type of flow measurement device is commonly used in open-channel flow, such as rivers and canals?

- a) Nozzle meter
- b) Weir
- c) Pitot tube
- d) Orifice meter

Answer: b) Weir

Explanation: Weirs are commonly used in open-channel flow to measure the rate of flow over a rectangular or V-shaped notch.

14. How does a nozzle meter measure fluid flow rate?

- a) By creating a pressure drop across a nozzle
- b) By measuring fluid temperature changes
- c) By measuring fluid density changes
- d) By measuring fluid viscosity

Answer: a) By creating a pressure drop across a nozzle

Explanation: A nozzle meter measures fluid flow rate by creating a pressure drop across a nozzle, which is related to the flow rate.

15. Which principle is utilized by a mouthpiece for flow measurement?

- a) Bernoulli's principle
- b) Archimedes' principle
- c) Pascal's principle
- d) Newton's second law

Answer: a) Bernoulli's principle

Explanation: A mouthpiece utilizes Bernoulli's principle to measure fluid flow rate by considering the pressure difference between the throat and the entrance of the mouthpiece.

16. What is the purpose of a Pitot-static tube in fluid dynamics?

- a) Measure fluid density
- b) Measure fluid temperature
- c) Measure fluid velocity
- d) Measure fluid pressure

Answer: c) Measure fluid velocity

Explanation: A Pitot-static tube is designed to measure fluid velocity by comparing stagnation pressure (total pressure) and static pressure.

17. Which type of flow measurement device is commonly used for precise control of fluid flow in pipelines?

- a) Nozzle meter
- b) Venturi meter

- c) Orifice meter
- d) Prandtl tube

Answer: c) Orifice meter

Explanation: Orifice meters are commonly used in pipelines for precise control of fluid flow rates and are relatively simple and cost-effective.

18. What does a current meter primarily measure in fluid dynamics?

- a) Fluid density
- b) Fluid pressure
- c) Fluid velocity
- d) Fluid viscosity

Answer: c) Fluid velocity

Explanation: Current meters are specifically designed to measure fluid velocity in various water bodies.

19. In fluid dynamics, what is the purpose of a Pitot tube?

- a) Measure fluid density
- b) Measure fluid velocity
- c) Measure fluid temperature
- d) Measure fluid pressure

Answer: b) Measure fluid velocity

Explanation: A Pitot tube is primarily used to measure fluid velocity by comparing stagnation pressure (total pressure) and static pressure.

20. Which principle is utilized by a Venturi meter for flow measurement?

- a) Archimedes' principle
- b) Pascal's principle
- c) Bernoulli's principle
- d) Newton's second law

Answer: c) Bernoulli's principle

Explanation: A Venturi meter utilizes Bernoulli's principle to measure fluid flow rate by creating a pressure difference across a constricted flow passage.

Related Posts:

1. Stones, Brick, Mortar and Concrete MCQs
2. Timber ,Glass , Steel and Aluminium MCQS

3. Flooring , Roofing ,Plumbing and Sanitary Material MCQS
4. Paints, Enamels and Varnishes MCQs
5. Miscellaneous ConstructionMaterials MCQs
6. Surveying & Levelling MCQS
7. Theodolite Traversing MCQs
8. Tacheometry MCQS
9. Curves MCQS
10. Hydrographic Survey MCQs
11. Drawing of Building Elements MCQS
12. Building Planning MCQS
13. Building Services MCQs
14. Architectural Principles MCQs
15. Town Planning & Perspective Drawing MCQs
16. Simple Stress and Strains MCQs
17. Bending and Shearing Stresses MCQs
18. Beam Deflection Methods MCQs
19. Columns and Struts MCQs
20. Torsion of Shafts MCQs
21. Review of Fluid Properties MCQs
22. Kinematics of Flow MCQs
23. Laminar Flow MCQs
24. Fluid Mechanics MCQs
25. Highway Engineering MCQs
26. Bituminous & Cement Concrete Payments MCQS
27. Transportation Engineering MCQs
28. Airport Planning and Geometrical Elements MCQs
29. Airport, Obstructions, Lightning & Traffic control MCQs

30. Preliminary and detailed investigation methods MCQs
31. Construction equipments MCQs
32. Contracts MCQs
33. Specifications & Public Works Accounts MCQs
34. Site Organization & Systems Approach to Planning MCQs
35. Construction Estimation MCQs
36. Rate Analysis MCQs
37. Detailed Estimates MCQs
38. Cost of Works MCQS
39. Valuation MCQS
40. Marine Construction MCQs
41. Harbour Planning MCQs
42. Natural Phenomena MCQS
43. Marine Structures MCQs
44. Docks and Locks MCQS
45. Urban Planning MCQs
46. Urban Planning MCQs: Sustainability, Finance, and Emerging Concepts
47. Urban Planning MCQs
48. Traffic transportation systems MCQs
49. Development plans MCQS
50. Remote Sensing MCQs
51. Remote Sensing Platforms and Sensors MCQS
52. Geographic Information System MCQS
53. Data Models mCQs
54. Integrated Applications of Remote sensing and GIS MCQs
55. Renewable Energy MCQs
56. Renewable Energy Systems Overview MCQ

- 57. Renewable Energy MCQs
- 58. Alternative Energy Sources MCQs
- 59. Electric Energy Conservation MCQs
- 60. Entrepreneurship MCQs
- 61. Motivation MCQS
- 62. Small Business Setup MCQs
- 63. Finance and Accounting MCQs
- 64. Entrepreneurial Sickness and Small Business Growth MCQs
- 65. Design features and construction of Foundations MCQs
- 66. Formwork and Temporary structures MCQs
- 67. Masonry and walls MCQS
- 68. Floor and Roof Construction MCQs
- 69. Earthquake-Resistant Building MCQs
- 70. Virtual work and Energy Principles MCQS
- 71. Indeterminate Structures-I MCQS
- 72. Indeterminate Structures - II MCQs
- 73. V Arches and Suspension Cables MCQS
- 74. Rolling loads and Influence Lines MCQS
- 75. Railway Track Construction MCQs
- 76. Railway Track Design and Signaling MCQs
- 77. Bridge Construction Essentials MCQs
- 78. Bridge Construction MCQs
- 79. Tunnels MCQS
- 80. Geology Earth's Processes and Phenomena MCQs
- 81. Mineralogy and crystallography MCQs
- 82. Petrology MCQs
- 83. Structural geology MCQs

84. Geology, Remote Sensing, and GIS MCQs
85. Waste water Treatment Operations MCQs
86. Biological Treatment of waste-water MCQS
87. Advanced Waste-water treatment MCQS
88. Introduction of Air pollution MCQS
89. Air pollution chemistry MCQs
90. Undamped Single Degree of Freedom System MCQS
91. Damped Single Degree of Freedom System MCQ
92. Response to harmonic and periodic vibrations MCQS
93. Response to Arbitrary, Step, and Pulse Excitation MCQS
94. Multi Degree of Freedom System MCQS
95. Structural Engineering MCQs
96. Building Services MCQs
97. Lift & Escalator MCQS
98. Fire-Fighting MCQs
99. Acoustics and sound insulation and HVAC system MCQS
100. Miscellaneous Services MCQS
101. Basic Principles of Structural Design MCQs
102. Design of Beams MCQs
103. Design of Slabs MCQS
104. Columns & Footings MCQs
105. Staircases MCQs
106. Water Resources MCQs
107. Water Supply Systems MCQs
108. Water Treatment methods MCQs
109. Sewerage Systems MCQS
110. Wastewater Analysis & Disposal MCQs

- 111. Irrigation water requirement and Soil-Water-Crop relationship MCQS
- 112. Ground Water and Well irrigation MCQs
- 113. Hydrology MCQs
- 114. Canals and Structures MCQs
- 115. Floods MCQS
- 116. Prefabrication in Construction MCQs
- 117. Prefabricated Construction MCQs
- 118. Design Principles MCQs
- 119. Structural Joint MCQs
- 120. Design of abnormal load MCQS
- 121. Advance Pavement Design MCQs
- 122. Flexible Pavements MCQS
- 123. Rigid Pavements MCQS
- 124. Rigid pavement design MCQs
- 125. Evaluation and Strengthening of Existing Pavements MCQS
- 126. Cost Effective & ECO-Friendly Structures MCQs
- 127. Cost effective construction techniques and equipments MCQs
- 128. Cost effective sanitation MCQS
- 129. Low Cost Road Construction MCQs
- 130. Cost analysis and comparison MCQ
- 131. Turbulent flow MCQS
- 132. Uniform flow in open channels MCQs
- 133. Non uniform flow in open channels MCQs
- 134. Forces on immersed bodies MCQs
- 135. Fluid Machines MCQs
- 136. Intellectual Property Rights MCQs
- 137. Copyright MCQs

- 138. Patents MCQs
- 139. Trade Marks, Designs & GI MCQs
- 140. Contemporary Issues & Enforcement of IPR MCQs
- 141. Concept of EIA MCQs
- 142. Methods of Impact Identification MCQs
- 143. Impact analysis MCQs
- 144. Preparation of written documentation MCQs
- 145. Public Participation in Environmental Decision making MCQs
- 146. Linear Models MCQs
- 147. Transportation Models And Network Models MCQs
- 148. Inventory Models MCQs
- 149. Queueing Models MCQS
- 150. Decision Models MCQs
- 151. Basis of Structural Design and Connection Design MCQS
- 152. Design of Compression and Tension Members MCQs
- 153. Design of Flexural Members MCQs
- 154. Design of Columns and Column Bases MCQs
- 155. Design of Industrial Buildings MCQS
- 156. Hydrological Cycle mCQs
- 157. Hydrological Measurement MCQs
- 158. Groundwater and Well Dynamics MCQs
- 159. Hydrology MCQs
- 160. Hydrology MCQs
- 161. Selection of foundation and Sub-soil exploration/investigation MCQs
- 162. Shallow Foundation MCQs
- 163. Pile foundations MCqs
- 164. Foundations on problematic soil & Introduction to Geosynthetics MCQs

- 165. Retaining Walls and Earth Pressure MCQs
- 166. Types of Bridge Super Structures MCQs
- 167. Design of R.C. Bridge MCQs
- 168. Design of Steel Bridges MCQs
- 169. Pier, Abutment and Wing Walls MCQs
- 170. Foundations and Bearings MCQs
- 171. Engineering Seismology MCQS
- 172. Response Spectrum MCQs
- 173. Aseismic Structural Modelling MCQS
- 174. Design of structure for earthquake resistance MCQS
- 175. Seismic control of structures MCQs
- 176. Introduction to Artificial Intelligence MCQs
- 177. Various types of production systems and search techniques MCQs
- 178. Knowledge Representation and Probabilistic Reasoning MCQS
- 179. Game playing techniques MCQs
- 180. Introduction to learning ,ANN MCQs
- 181. Concrete Structure MCQs
- 182. Damage Assessment MCQs
- 183. Influence on Serviceability and Durability MCQs
- 184. Maintenance and Retrofitting Techniques MCQs
- 185. Materials for Repair and Retrofitting MCQs
- 186. Paradigm Shift in Water Management MCQS
- 187. Sustainable Water Resources Management MCQs
- 188. Integrated Water Resources Management (IWRM) Approach MCQs
- 189. Surface and Subsurface Water Systems MCQS
- 190. Conventional and Non-conventional Techniques for Water Security MCQs
- 191. Field work mcq

- 192. TREE MCQ
- 193. Introduction to Object Oriented Thinking & Object Oriented Programming MCQ
- 194. Concept of Probability MCQ
- 195. Software Analysis and Testing MCQ
- 196. Introduction to Operating Systems MCQ
- 197. Software architecture implementation technologies MCQ
- 198. Neural Network History and Architectures MCQ
- 199. Mobile transport layer MCQ
- 200. Cryptographic MCQs