GPCET
Pioneering Innovative Education

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)
II B.Tech Objective Paper – I MID EXAM
Branch: CIVIL ENGINEERING

1

Sub: HYDRAULICS AND HYDRAULIC MACHINERY **Date: 11/03/2017**
Time: 20 min **Max.Marks:10**
Roll No: **Invigilator signature:**

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I.MULTIPLE CHOICE QUESTIONS

1. An open channel is defined as a passage through which water flows under ( )

(a) Atmospheric Pressure (b) Gauge Pressure (c) Static Pressure (d) None of the above.

2. Flow in a channel is said to be steady if the flow characteristics at any point do not change with respect to ( )

a) Time (b) Pressure (c) Velocity (d) All the above.

3. A flow is said to be laminar when the Reynolds number lies between ( )

(a) 500 to 600 (b) greater than 2000 (c) Lesser than 2000 (d) greater than 600.

4. The conditions to be most economical for the following shapes will be considered

(a) Hexagonal channel (b) Square channel ( )

(c) Triangular channel (d) Rectangular channel

5. If Froude number is less than 1.0, the flow is set to be: ( )

(a) Critical (b) Super critical (c) Sub-critical (d) Shooting

6. Condition for maximum velocity through a circular channel is ( )

(a) m=0.5d (b) m=0.6d (c) m=0.4d (d) m=0.3d

7. Condition for maximum discharge through a circular channel is ( )

(a) d=0.1d (b) d=0.9d (c) d=0.2d (d) d=0.8d

8. If the depth of flow in a channel is greater than a critical depth the flow is said to be

(a) Sub-critical (b) Critical (c) Super critical (d) Streaming ( )

9. The velocity of flow at critical depth is known as ( )

(a) Critical Velocity (b) velocity (c) super velocity (d) low velocity

10. If the depth of flow changes abruptly over a small length ( )

(a) Uniform flow(b) Rapidly varied flow (c) Gradually varied flow (d) Steady flow

II.FILL IN THE BLANKS

11. Open Channel flow is defined as the flow of a liquid with a _____surface
12. For a circular channel, the wetted perimeter is given by_____.
13. Critical depth is defined as that depth of flow of water at which the _____ is minimum.
14. Velocity of Chezy's formula is given as_____
15. Energy lost due to Hydraulic jump per kg of liquid_____
16. Specific energy of a flowing fluid is_____
17. Manning's formula C=_____
18. Length of the Back water curve is given as_____
19. Froude Number is given as_____
20. Formula for Critical depth_____

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