Code. No: 2603/CBCS

FACULTY OF ENGINEERING

B.E (Civil) V-Semester (CBCS) (Main & Backlog Examination, December 2019

Subject : Water Resources Engineering-I

Time: 3 Hours **Max. Marks: 70**

Note : Answer all questions from part – A and any five questions from Part-B

PART– A (10 x 2 = 20 Marks)

1. Briefly explain riparian rights 2
2. Explain zones of storage of reservoir with help of a neat sketch 2
3. Find the wave height if fetch of reservoir is 120 km and wind velocity is 150 kmph. 2
4. What is the limiting height of gravity dam if concrete strength is 3200 kN/m^2 and specific weight of concrete is 10 kN/m^2 2
5. The xs, y co-ordinates of phreatic line are 100, 30 m respectively, for an homogenous embankment dam. Find the distance between focus and directrix 2
6. What is relief well? What purpose it serves in earth dam 2
7. Explain failure of weir due to piping 2
8. Determine the crest level of a surplus weir if flood discharge is 200 cumec and head is 1.2, length is 15m. Assume C = 1.7. 2
9. In a stilling basin V1=15m/s and D1 is 4m, what is the sequent depth? 2
10. Briefly explain energy dissipation with ski-jump type dissipater 2

PART– B (50 Marks)

11. Analyze the stability of given gravity dam for the following conditions: Friction coefficient between concrete-foundation is 0.70; allowable compressive and shear stresses in concrete are 2700 kN/m^2. Take specific weights of concrete and water are 24kN/m^3 and 10 kN/m^3 respectively.
    The height of dam is 60m, free board is 5m, top width is 6m, D/s face of the dam is vertical from top up to 6m, D/S face slope is 0.8H: 1V. 10

12. a) Am homogenous embankment dam has u/s and d/s slopes 3.5h: iv ad 3h:1v respectiyely. The free board is 2m and height of dam is 20m. A horizontal blanket extends 30m from toe towards p stream. The permeability of soil is 3 x 10^{-5} m/s. Determine seepage per m width of dam. 5
    b) Explain Failure of earth dams 5

13 a) 1. Determine the length of a vertical surplus weir with the following data. Combined catchment=40km2 Intercepted catchment = 18 km2. Maximum water level is 7.5 m RL, Full tank level is 6.7 m RL. Ground level is 5.8m RL. Ryve's coefficient for combined catchment is 9.0 and Ryve's coefficient intercepted catchment is 2.0 7
    b) What are the factors that affect selection site for irrigation tank? 3

14. a) Draw the d/s profile of ogee spill way if the head is 2.1m and d/s slope of dam is 0.7 H;1V 6
    b) Explain in detail any two spillway crest gates 4

15. Derive the expression for principal and shear stress at toe of gravity dam. 10

16. a) What are principles of fixing irrigating water rates? 5
    b) Explain seepage control measures in earth dam 5

17. a) List the different types of stilling basis as per ISBR guide lies. 5
    b) List the seepage control measures through embankments and foundations of earth dams further, explain any one of them under each category. 5

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Code No. 2613 / CBCS

FACULTY OF ENGINEERING

B.E. V - Semester (CBCS) (Main & Backlog) Examination, December 2019

Subject : Gender Sensitization (Except Civil)

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any Five questions from Part-B.

PART – A (2 x 10 = 20 Marks)

1 Domestic violence
2 What are the milestones in the history of gender equality?
3 Gender Imbalance
4 Transgenders
5 Gender discrimination in the case of sports
6 Mother's work is invisible
7 Sexual Harassment of women at workplace act, 2013
8 Gender and Media
9 Chindu Bhagotham
10 Reservation for women

PART – B (5 x 10 = 50 Marks)

11 What are different roles played by Gender? Elaborate.

12 Describe the political and economical issues related to Gender Sense.

13 Write about Gender Spectrum and Gender Continuum.

14 Analyse the practical gender needs and strategic interests.

15 What are the psychological bases for Gender differences?

16 Define Gender. Trace out the significance of Gender sense.

17 Describe the social construction of Gender. Why does a woman need to be protected by a man?

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