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USN | | | | | | | | | | **10AL51**

Fifth Semester B.E. Degree Examination, December 2012
Management and Entrepreneurship

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions, selecting atleast TWO question from each part.*

PART – A

1   a. Explain different levels of management.   **(10 Marks)**
      b. What is scientific management? Explain   **(10 Marks)**

2   a. What are the different steps involved in planning?   **(10 Marks)**
      b. What are single use and standing plans? Explain them with examples.   **(10 Marks)**

3   a. Briefly explain the principles of organization.   **(10 Marks)**
      b. Discuss centralization v/s decentralization.   **(10 Marks)**

4   a. Briefly explain comparison of Maslow's and Herzberg theories of Human motivation.   **(10 Marks)**
      b. What are different steps involved in controlling process?   **(10 Marks)**

PART – B

5   a. Who are Intrapreuners? Explain the difference between Entrepreneurs and Intrapreuners.   **(10 Marks)**
      b. Explain the barriers involved in entrepreunership.   **(10 Marks)**

6   a. What are the steps involved in starting a small scale industry?   **(10 Marks)**
      b. Explain the effect of WTO/GATT on Indian SSI.   **(10 Marks)**

7   a. Explain the objectives and functions of KSFC and NSIC.   **(10 Marks)**
      b. Discuss various types of assistance provided by TECSOK and KSSIDC.   **(10 Marks)**

8   a. Explain in detail the contents of "Project Report".   **(10 Marks)**
      b. What are network analysis techniques? Explain PERT and CPM.   **(10 Marks)**

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Fifth Semester B.E. Degree Examination, December 2012
Design of RCC Structural Elements

Time: 3 hrs.   Max. Marks:100

Note: *1. Answer FIVE full questions, selecting*
at least TWO questions from each part.
2. Use of code IS456-2000 and SP16 is permitted.
3. Assume missing data, if any, suitably.

PART – A

1 a. Explain : Characteristic values and design values for loads and materials. **(05 Marks)**
b. Explain the limit state method of design of RCC members. **(05 Marks)**
c. A rectangular section of effective size 230mm × 500mm is used as a simply supported beam for an effective span of 6.3m what maximum total uniformly distributed load can be allowed on the beam if maximum percentage of steel is provided only on the tension side? Use M25 concrete and Fe415 steel. **(10 Marks)**

2 a. What is a stress block? Derive from fundamentals the expressions for area of stress block $0.36 f_{ck} x_u$ and depth of centre of compressive force from the extreme fibre in compression $0.42x_u$. **(08 Marks)**
b. A rectangular RC beam section is 230×450mm overall size. It is reinforced with 4 numbers of 20mm in compression at an effective cover of 40mm. Determine the area of tension reinforcement needed to make the beam section fully effective. Calculate the maximum udl the beam can carry over an effective span of 5m. **(12 Marks)**

3 a. Why cover to reinforcement is provided? **(03 Marks)**
b. Explain slenderness limits for beams to ensure lateral stability. **(06 Marks)**
c. What is development length? Obtain the expression for development length in tension.
                                                            (06 Marks)
d. Write a note on factors influencing the crack width. **(05 Marks)**

4 A cantilever beam of 4m span carries a load of 40 kN/m (factored load). The width of the beam is 230mm. Design the beam for flexure and shear. Sketch the details of reinforcement use M20 concrete and Fe415 steel. **(20 Marks)**

PART – B

5 Design a two way slab of size 5m × 7.5m (clear) with all four sides discontinuous and corners held down. The slab is supported on all four sides over 300mm thick walls. The live load on the slab is 3 kN/m^2, floor finish is 0.6 kN/m^2. Use M25 concrete and Fe415 steel. Sketch the details of reinforcement. **(20 Marks)**

6 a. Design a short column (rectangular) subjected to an axial load of 3000 kN (factored). Take effective length = 3.0m. Use M25 concrete and Fe415 steel. Check for minimum eccentricity in the directions. **(10 Marks)**

b. Determine the reinforcement required for a rectangular column 300mm × 500mm subjected to a uniaxial bending moment about major axis. Factored bending moment is 100 kNm and factored axial load is 2000 kN. Use M30 concrete and Fe415 steel. Sketch the details. **(10 Marks)**

7 Design an isolated rectangular footing of uniform thickness for column of size 300mm × 600mm. The column is carrying a service load of 1200 kN. The bearing capacity of soil is 200 kN/m². Use M20 concrete and Fe415 steel sketch the reinforcement details. **(20 Marks)**

8 The clear dimensions of a stair case hall is 2.4m × 4.75m. The floor to floor height is 3.52m. Design an intermediate flight of dog legged stair using M20 concrete and Fe415 steel. Take live load as 3 kN/m². Assume that the landings span in the same direction as the stair and are supported on the walls at the ends. Sketch the reinforcement details. **(20 Marks)**

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Fifth Semester B.E. Degree Examination, December 2012
Structural Analysis – II

Time: 3 hrs.   Max. Marks:100

**Note:1. *Answer FIVE full questions, selecting
at least TWO questions from each part.*
2. *Assume any missing data suitably.***

PART – A

1. For a simply supported beam of span 25 m, compute by influence line principle,
   i) Maximum bending moment at 8 m from left support,
   ii) Absolute maximum bending moment and
   iii) Maximum reaction.
   The series of concentrated loads to be taken as rolling load system as shown in Fig. Q1.
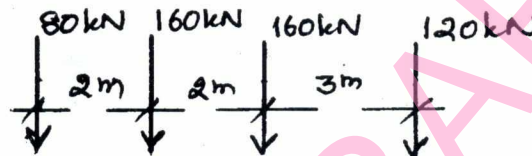   **(20 Marks)**

Fig. Q1

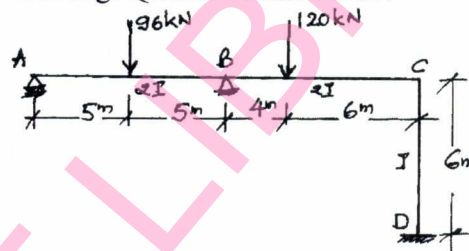2. Analyse the portal frame shown in Fig. Q2 and sketch BMD. **(20 Marks)**

Fig. Q2

3. Analyse a continuous beam shown in Fig. Q3 using moment distribution method. Sketch, SFD and BMD. **(20 Marks)**
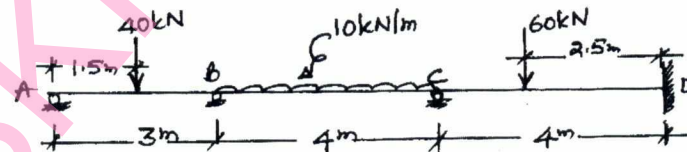

Fig. Q3

4. Analyse the portal frame using slope deflection method or using moment distribution method. Sketch BMD and elastic curve. **(20 Marks)**
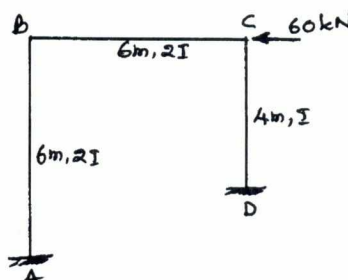

Fig. Q4

PART – B

5 Analyse the continuous beam shown in Fig. Q5 by Kani's method and sketch BMD. **(20 Marks)**
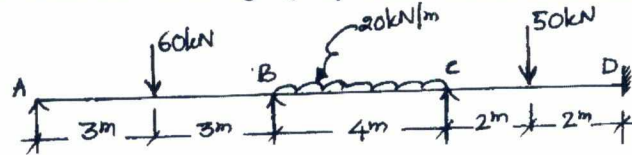
Fig. Q5

6 Analyse the frame shown in Fig. Q6 by flexibility method. Draw BMD. **(20 Marks)**

Fig. Q6

7 Analyse the portal frame loaded as shown in Fig. Q7 by stiffness method. Sketch BMD.

(20 Marks)

Fig. Q7

8 a. Explain degrees of freedom, free vibration, natural frequency and damping. **(08 Marks)**

b. Determine natural frequency and period of the system as shown in Fig. Q8. Take $E = 2.1 \times 10^5$ N/mm^2 and $I = 13 \times 10^6$ mm^4. **(12 Marks)**

Fig. Q8 (b)

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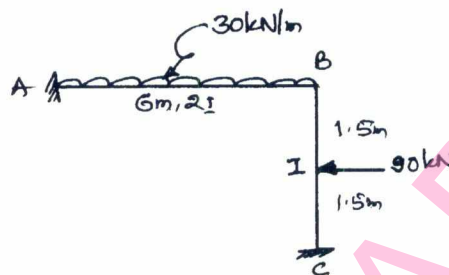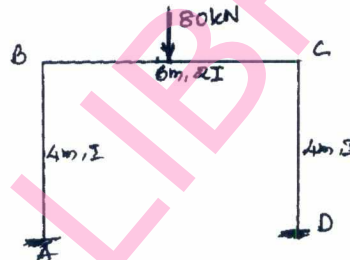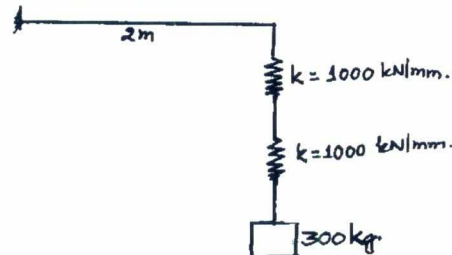
Fifth Semester B.E. Degree Examination, December 2012
Geotechnical Engineering – I

Time: 3 hrs. Max. Marks:100

Note:1. *Answer FIVE full questions, selecting*
at least TWO questions from each part.
2. *Assume suitably if any missing data.*

PART – A

1 a. Define the terms void ratio, porosity, air voids air content, water content, specific gravity unit weight and dry density. **(08 Marks)**

   b. Prove that, $S^r = \left[\dfrac{\omega}{\left\{ \dfrac{\gamma_\omega}{\gamma_b} * (1+\omega) - \dfrac{1}{G} \right\}} \right]$. **(06 Marks)**

   c. The bulk unit weight of soil is 19.10 kN/m^3 the water content is 12.5% and specific gravity of solids is 2.67. Determine dry unit weight, void ratio, porosity and degree of saturation. **(06 Marks)**

2 a. Explain with the help of particle size distribution curves of the following types of soils:
   i) well graded soil   ii) poorly graded soil   iii) gap graded soil   **(06 Marks)**
   b. Define Stoke's law. What are its assumptions and limitations? **(06 Marks)**
   c. The liquid limit test on the clayey sample gave the following results. The plastic limit of the soil is 20%.

Number of blows	12	18	22	34
Water content, %	56	52	50	45

   Plot flow curve and obtain i) Liquid limit   ii) Flow index   iii) Plasticity index
   iv) Toughness index. **(08 Marks)**

3 a. Explain IS classification system. **(06 Marks)**
   b. Explain plasticity chart with a neat sketch and its use in classification of fine grained soil. **(08 Marks)**
   c. List and explain common clay minerals in soil. **(06 Marks)**

4 a. What are the assumptions and limitations of Darcy's law? **(06 Marks)**
   b. Define seepage velocity, superficial velocity and coefficient of percolation. **(06 Marks)**
   c. A sand sample of 0.25 m length was subjected to a constant head permeability in a permeameter having an area of 30×10^{-4} m^2. A discharge of 100 CC was obtained in a period of 60 seconds under a head of 0.39 m height of dry sand in the sample was 1350 grams and the specific gravity of sand particles was 2.67. Determine
   i) Coefficient of permeability.
   ii) Superficial velocity.
   iii) Seepage velocity. **(08 Marks)**

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06CS/IS841

Eighth Semester B.E. Degree Examination, June/July 2011

Adhoc Networks

Time: 3 hrs.   Max. Marks:100

**Note: Answer FIVE full questions selecting
at least TWO questions from each part.**

PART – A

1 a. Explain any five differences between cellular network and adhoc network. (10 Marks)
   b. Explain the wireless sensor network with its issues compared to adhoc networks. (10 Marks)

2 a. Discuss the major issues to be considered for a successful adhoc wireless internet. (10 Marks)
   b. Explain the classification of MAC protocols. (10 Marks)

3 a. With the frame format explain HOP reservation multiple access protocol. (10 Marks)
   b. With the scheduling table updates, explain the distributed priority scheduling. (10 Marks)

4 a. With an example, explain the process of route establishment in wireless routing protocol. (10 Marks)
   b. Explain the temporary ordered routing algorithm. Also, mention its advantages and disadvantages. (10 Marks)

PART – B

5 a. Explain the flow-oriented routing protocol. (10 Marks)
   b. Explain the various routing metrics. (10 Marks)

6 a. Discuss the issues in designing a transport layer protocol for adhoc wireless network. (10 Marks)
   b. Explain the multilayer attacks. (10 Marks)

7 a. Explain the cluster TDMA. (10 Marks)
   b. Explain the ticket based QOS routing protocol. (10 Marks)

8 a. Briefly explain at least 5 issues and challenges faced in providing QOS in Adhoc wireless networks. (10 Marks)
   b. Explain QOS-enabled adhoc on-demand distance vector routing protocol. (10 Marks)

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PART – B

5 a. Distinguish between:
   i) Drained and undrained tests.
   ii) Unconfined and triaxial shear tests.
   iii) Total and effective shear parameters. **(06 Marks)**
   b. Explain Mohr's-coulomb failure theory of soils. **(06 Marks)**
   c. The results of shear bor test are as follows:

Normal stress, kN/m^2	100	150	200
Shear stress, kN/m^2	50	70	90

   Draw Mohr's envelope and obtain shear parameters. Determine principal stresses and locate principal planes for any one failure point. **(08 Marks)**

6 a. List and explain factors affing compaction. **(06 Marks)**
   b. List and explain various types of field compaction equipment. **(06 Marks)**
   c. During a compaction test, a soil attains a maximum dry density of 18 kN/m^3 at a water content of 12%. Determine the degree of saturation and percent air voids at maximum dry density. Also find the theoretical maximum dry density corresponding to zero air voids at optimum moisture content. The specific gravity of soil solids is 2.67. **(08 Marks)**

7 a. Explain mass-spring analogy of consolidation of soils. **(08 Marks)**
   b. Explain normally consolidated, under consolidated and over consolidated soils. **(07 Marks)**
   c. In a consolidation test the void ratio of soil sample decreases from 1.20 to 1.10. When the pressure is increased from 160 to 320 kN/m^2. Determine coefficient of consolidation if the coefficient of permeability is 8.0×10^{-7} mm/s. **(05 Marks)**

8 a. Explain vane shear test with a neat sketch. **(04 Marks)**
   b. List the limitations of direct shear test. **(05 Marks)**
   c. Explain square root of time fitting method of determination of coefficient of consolidation. **(05 Marks)**
   d. The triaxial shear test was carried out on soil samples gave following results:

Confining pressure, kN/m^2	50	100	150
Deviator stress, kN/m^2	76	132	186
Pore water pressure, kN/m^2	35	59	83

   Plot Mohr's circle and obtain effective shear parameters. **(06 Marks)**

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Eighth Semester B.E. Degree Examination, June/July 2011
Data Communication and Networking

Time: 3 hrs.   Max. Marks:100

Note: *Answer FIVE full questions selecting*
at least TWO questions from each part.

PART – A

1   a. With diagram explain physical topology of a network.   **(08 Marks)**
    b. With diagram, explain five components of data communication system.   **(08 Marks)**
    c. Explain protocols and standards.   **(04 Marks)**

2   a. With diagram, explain the Open System Interconnection model.   **(08 Marks)**
    b. Encode the data 01001100011 in the following formats i) NRZ-L ii) NRZI iii) Bipolar-AMI
       iv) Pseudo ternary v) Manchester vi) Differential Manchester   **(08 Marks)**
    c. If a periodic signal is decomposed into five sine waves with frequencies of 100, 300, 500,
       700 and 900 Hz what is the bandwidth? Draw the spectrum assuming all components have
       maximum amplitude of 10V.   **(04 Marks)**

3   a. With diagram, explain i) serial transmission ii) parallel transmission   **(08 Marks)**
    b. Explain the steps involved in block coding.   **(08 Marks)**
    c. A signal has four data levels with a pulse duration of 1msec. Calculate the pulse rate and its
       bit rate.   **(04 Marks)**

4   a. Give the comparison of Bit and Baud rate.   **(08 Marks)**
    b. Explain i) TDM ii) WDM   **(08 Marks)**
    c. Explain bit padding   **(04 Marks)**

PART – B

5   a. Explain omni directional and unidirectional antennas.   **(08 Marks)**
    b. Explain CSMA|CD operation.   **(08 Marks)**
    c. Explain wireless LAN configuration.   **(04 Marks)**

6   a. Find CRC for a frame (message) 1010001101 and $G(x) = x^5 + x^4 + x^2 + 1$.   **(08 Marks)**
    b. Explain the operation of Sliding window protocol with relevant diagrams. **(08 Marks)**
    c. Discuss the various issues that are to be considered while designing data link layer.
                                                                                (04 Marks)

7   a. Explain i) Leaky Bucket Algorithm.
              ii) Token Bucket Algorithm.   **(08 Marks)**
    b. Explain the principle of Internetworking.   **(08 Marks)**
    c. Give $1P_{v6}$ Header format.   **(04 Marks)**

8   a. Explain TCP Services and features.   **(08 Marks)**
    b. Explain Connectionless versus connection oriented service in transport layer. **(08 Marks)**
    c. Explain UDP operation.   **(04 Marks)**

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Fifth Semester B.E. Degree Examination, December 2012
Hydrology and Irrigation Engineering

Time: 3 hrs.   Max. Marks:100

Note: 1. *Answer any FIVE full questions, selecting atleast TWO question from each part.*
2. *Any missing data may suitably assumed.*

PART – A

1   a. Define precipitation. Explain different forms of precipitation. **(07 Marks)**
    b. Explain the method of checking the adequacy of existing raingauge stations in a catchments. **(07 Marks)**
    c. Thiessen weights for a network of 10 raingauges in a river basin of area 6000 sq.km are 0.10, 0.16, 0.12, 0.11, 0.09, 0.08, 0.07, 0.11, 0.06 and 0.11. The rainfall records at these rainguages during a storm are 132, 114, 162, 138, 207, 156, 135, 158, 168 and 150mm respectively. Determine the average depth of rainfall by Thiessen method and arithmetic mean method. **(06 Marks)**

2   a. Explain with a neat sketch, working of ISI evaporation pan. **(08 Marks)**
    b. For the data given in table below, determine the evapotranspiration. The crop factor may be taken as 0.8 **(06 Marks)**

Month	Nov	Dec	Jan	Feb
Mean monthly Temp (^{0}C)	18	15	13.5	14.5
Mean monthly % of day time hour of the year	7.20	7.15	7.30	7.10

    c. Total observed runoff volume during of 6hr storm with a uniform intensity of 1.5cm/hr is 21.6×10^6 m^3. If the area of the basin is 300sq.km, find the average infiltration rate for the basin. **(06 Marks)**

3   a. Define unit hydrograph. Explain the assumptions made in deriving the unit hydrograph. **(08 Marks)**
    b. The ordinates of 4h – UH are given below. Obtain the ordinates of 2h – UH. Hence obtain the ordinates 2h – storm hydraph if rainfall excess of 25mm results from a storm. **(12 Marks)**

Time (h)	0	2	4	6	8	10	12	14	16	18	20	22
4h – UH ordinates (cumec)	0	12.5	62.5	130	175	180	140	90	50	25	13	0

4   a. Explain the rational method of estimation of peak flood for catchments. **(08 Marks)**
    b. Route the following flood hydrograph through a river reach for which K = 12hr and x = 0.20. At the start of the inflow flood, the outflow discharge is 10m^3/s. **(12 Marks)**

Time (h)	0	6	12	18	24	30	36	42	48	54
Inflow (m^3/s)	10	20	50	60	55	45	35	27	20	15

PART - B

5   a. Define irrigation. What is the necessity of irrigation?   **(06 Marks)**
     b. Explain the surface irrigation methods of water application to the crops.   **(10 Marks)**
     c. Write short notes on supplemental irrigation.   **(04 Marks)**

6   a. Give the list of common Indian soils.   **(06 Marks)**
     b. Explain the soil moisture presence in different zones, with neat sketch.   **(06 Marks)**
     c. Calculate the depth of available soil moisture in the root zone of clay 10amy soil using the following data :
        Field capacity = 27% ; Permanent wilting point = 13% ; Dry density of soil = 1.5gm/cm^3 ; Root zone depth = 1.25m ; Daily consumptive use of water for the given crop = 20mm. Also find after how many days will you supply water to the soil in order to ensure efficient irrigation of the given crop.   **(08 Marks)**

7   a. Define : Duty , Delta and Base period. Derive the relationship between them.   **(06 Marks)**
     b. Define various irrigation efficiencies used in the irrigation system.   **(06 Marks)**
     c. In the flow irrigation system, the canal is delivering water to the crops as detailed in table below. Determine the total volume of water required.   **(08 Marks)**

Crop	Crop period (days)	Area to be irrigated (hectares)	Duty (hectares / cumec)
Sugarcane	365	1250	850
Paddy	120	1500	850
Wheat	120	2500	1700

8   a. Explain the classification of canals.   **(12 Marks)**
     b. Design an irrigation canal in alluvial soil according to Lacey's silt theory for the following data :
        Full supply discharge = 10 cumec.
        Silt factor = 0.9.
        Channel side slope = 0.5H : 1V.   **(08 Marks)**

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Fifth Semester B.E. Degree Examination, December 2012
Transportation Engineering – I

Time: 3 hrs.   Max. Marks:100

Note: *1. Answer FIVE full questions, selecting
at least TWO questions from each part.
2. Assume IRC standard as applicable.
3. Use of log-log graph permitted.*

PART – A

1. a. Explain the role of transportation in the development of the country and write the different modes of transport. **(06 Marks)**
   b. Explain the recommendations of Jayakan committee and how they were implemented. **(06 Marks)**
   c. Explain the objectives of the following:
   i) IRC; ii) CRF; iii) HRB; iv) CRRI. **(08 Marks)**

2. a. List and explain the different planning surveys required for highways. **(06 Marks)**
   b. Calculate the length of roads required as per III road development plan. Area of the district is 4500 sq. km and the number of towns 20. **(07 Marks)**
   c. Fix the priority for the following alternate three proposals. Population and productivity units are given:

Proposal	Road length, km	Population range			Productivity, 1000t	
		< 2000	2000 – 5000	> 5000	Agriculture	Industrial
A	200	40	30	10	100	150
B	250	50	35	15	200	250
C	300	55	40	10	300	175
Population and productivity units		1	2	4	1.5	2.0

(07 Marks)

3. a. What are the ideal requirements of highway alignment, list and explain briefly. **(06 Marks)**
   b. Explain the meaning of right of way and indicate the factors on which it depends. **(06 Marks)**
   c. Calculate the sight distance required for a design speed of 100 kmph, if the road is sloping – 2.5% and breaking efficiency of vehicle is 50%. Also calculate intermediate sight distance. **(08 Marks)**

4. a. Explain with sketches how restrictions to sight distance occurs on highways. **(06 Marks)**
   b. Calculate the OSD for a design speed of 80 kmph, if A = 1.8 kmph/sec. Also calculate the length of overtaking zone required and draw the sketch for the same. **(10 Marks)**
   c. Explain briefly the different types of gradients used for highways. **(04 Marks)**

Eighth Semester B.E. Degree Examination, June/July 2011
Data Communication and Networking

Time: 3 hrs.   Max. Marks:100

Note: *Answer FIVE full questions selecting*
at least TWO questions from each part.

PART – A

1 a. With diagram explain physical topology of a network.   (08 Marks)
   b. With diagram, explain five components of data communication system.   (08 Marks)
   c. Explain protocols and standards.   (04 Marks)

2 a. With diagram, explain the Open System Interconnection model.   (08 Marks)
   b. Encode the data 01001100011 in the following formats i) NRZ-L ii) NRZI iii) Bipolar-AMI
      iv) Pseudo ternary v) Manchester vi) Differential Manchester   (08 Marks)
   c. If a periodic signal is decomposed into five sine waves with frequencies of 100, 300, 500,
      700 and 900 Hz what is the bandwidth? Draw the spectrum assuming all components have
      maximum amplitude of 10V.   (04 Marks)

3 a. With diagram, explain i) serial transmission ii) parallel transmission   (08 Marks)
   b. Explain the steps involved in block coding.   (08 Marks)
   c. A signal has four data levels with a pulse duration of 1msec. Calculate the pulse rate and its
      bit rate.   (04 Marks)

4 a. Give the comparison of Bit and Baud rate.   (08 Marks)
   b. Explain i) TDM ii) WDM   (08 Marks)
   c. Explain bit padding   (04 Marks)

PART – B

5 a. Explain omni directional and unidirectional antennas.   (08 Marks)
   b. Explain CSMA|CD operation.   (08 Marks)
   c. Explain wireless LAN configuration.   (04 Marks)

6 a. Find CRC for a frame (message) 1010001101 and $G(x) = x^5 + x^4 + x^2 + 1$.   (08 Marks)
   b. Explain the operation of Sliding window protocol with relevant diagrams.   (08 Marks)
   c. Discuss the various issues that are to be considered while designing data link layer.
                                                                                    (04 Marks)

7 a. Explain i) Leaky Bucket Algorithm.
             ii) Token Bucket Algorithm.   (08 Marks)
   b. Explain the principle of Internetworking.   (08 Marks)
   c. Give $1P_{v6}$ Header format.   (04 Marks)

8 a. Explain TCP Services and features.   (08 Marks)
   b. Explain Connectionless versus connection oriented service in transport layer. (08 Marks)
   c. Explain UDP operation.   (04 Marks)

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PART – B

5 a. List and explain the desirable properties of sub grade soil. (06 Marks)
   b. Following data refers to CBn experiment on subgrade soil. Calculate the CBn value of soil and indicate its importance:

Penetration mm	0	0.5	1.0	1.5	2.0	2.5	3.0	4.0	5.0	7.5	10	12.5
Load, kg	0	5	16	28	40	48	57	68	75	89	100	107

(07 Marks)

   c. List the various tests on bituminous materials and mixes, indicating their applications. (07 Marks)

6 a. Explain the meaning and application of ESWL. (06 Marks)
   b. Calculate the ESWL for the following data P = 4100 kg on each wheel centre to centre spacing of tyres 30cm, distance between walls 12cm. Calculate ESWL at 20, 25 and 30cm depth of pavement. (07 Marks)
   c. List and explain the various design factors to be considered for pavements. (07 Marks)

7 a. Explain the compaction process of subgrade soil indicating the various specifications. (06 Marks)
   b. Design an road side drain for an design discharge of 0.75 m^3/sec, if velocity is 1.2 m/sec and Manning's roughness coefficient is 0.025. Assume bottom width of 0.6m and side slope of the drain as 1:1.5 (1 = vertical, 1.5 horizontal). (08 Marks)
   c. Explain the significance of highway drainage. (06 Marks)

8 a. Explain the various road user benefits of highway improvements. (06 Marks)
   b. Compare the following two types of road pavements and recommend the best one:

	Particular	WBM	BM
i)	Surfacing cost, Rs.	2.2 lakhs/km	4.2 lakhs/km
ii)	Pavement life, years	5	15
iii)	Salvage value, Rs.	0.9 lakhs/km	2.0 lakhs/km
iv)	Maintenance cost, Rs.	0.35 lakhs/km	0.25 lakhs/km
v)	Rate of interest, %	9	8

(08 Marks)

   c. Explain the concept of BOT and BOOT method of highway financing. (06 Marks)

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7	Santhosh Kumar Das	M	Diploma	SBTE	Bihar	NK	67%	Hindu	GM		1,00,000	
8	Sudhir Thakur	M	Diploma	JRNRVU	Rajasthan	NK	70%	Hindu	GM		1,00,000	
9	Jintu Sarma	M	Diploma	SCTE	Assam	NK	70%	Hindu	GM		1,00,000	