

ENGLISH ASSIGNMENT:

LONG QUESTIONS:

Q-1 What does one feel 'a sudden strangeness' on counting to twelve and keeping quiet?

Q-2 What does the poet mean when he says that a chemical war will result in a 'victory with no survivors'?

Q3. How is the poem a forceful expression of the evil of patriarchy?

SHORT QUESTIONS:

Q4. Why does Pablo Neruda urge us to keep still?

Q5. What is the theme of the poem 'An Elementary School Classroom in a Slum' ? How has it been presented?

LONG QUESTIONS:

Q1. What images and symbols has the poet used to describe the pathetic condition of the slum children?

Q2. How is 'Shakespeare wicked' and the 'map a bad example' for the children of a school in a slum?

SHORT QUESTIONS:

Q3. How does the poet distinguish 'stillness' from 'total inactivity'? Why does Neruda say I want no truck with death?

Q4. In spite of despair and disease pervading the lives of the slum children, they are not devoid of hope. Give an example of their hope or dream.

Q5. How might a huge silence interrupt the sadness of men?

Q6. Under the apparent stillness there is life. Justify this statement giving an example from the poem 'Keeping Quiet'.

SHORT QUESTIONS:

Q1. In the opening stanza the imagery is that of despair and disease. Read the poem and underline the words /phrases that bring out these images.

Q2. Why does Stephen Spender use the images of despair and disease in the first stanza of the poem and with what effect?

Q3. Which images of the slums in the third stanza present the picture of social disparity, injustice and class inequalities?

Q4. Under the apparent stillness there is life. Justify this statement giving an example from the poem 'Keeping Quiet'.

Q5. Justify the title 'Keeping Quiet'.

Q6. Which is the exotic moment that the poet refers to in 'Keeping Quiet'.

CBSE TEST PAPER-03
CLASS - XII MATHEMATICS (Calculus: Integrals)

Topic: - Integrals

1. $\int \frac{10x^9 + 10^x \cdot \log e10}{x^{10} + 10^x} dx$ [1]
 2. $\int \frac{\cos 2x + 2 \sin^2 x}{\cos^2 x} dx$ [1]
 3. $\int_{-\frac{\pi}{4}}^{\frac{\pi}{4}} \sin^2 x dx$ [1]
 4. $\int \frac{e^{5 \log x} - e^{4 \log x}}{e^{3 \log x} - e^{2 \log x}} dx$ [1]
 5. $\int \frac{e^{2x} - 1}{e^{2x} + 1} dx$ [1]
 6. $\int_{\pi/6}^{\pi/3} \frac{dx}{1 + \sqrt{\tan x}}$ [4]
 7. $\int_a^{\pi/4} \frac{\sin x \cos x}{\cos^4 x + \sin^4 x} dx$ [4]
 8. $\int \frac{dx}{\cos(x+a) \cos(x+b)}$ [4]
 9. $\int_a^{\pi/2} \frac{\cos^2 x}{\cos^2 x + 4 \sin^2 x} dx$ [6]
 10. $\int_a^{\pi/2} \log \sin x dx$ [6]
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ACCOUNTANCY

1. Journalise the following transactions regarding the settlement of creditors:
 - (i) Creditors worth `10,000 accepted `4,000 as cash and machinery worth `8,000, in full settlement.
 - (ii) Creditors were `4,000. They accepted computer valued at `5,000 in full settlement.
 - (iii) Creditors were `6,000. They accepted furniture valued at `8,000 and paid cash `2,000 to the firm.

2. What journal entries would be passed for the following transactions on the dissolution of a firm. If sundry assets and outside liabilities have already been transferred to Realisation Account?
 - (i) There was an unrecorded asset of `5,000 which was taken over by C at `4,000.
 - (ii) Stock worth `7,000 was taken over by partner B.
 - (iii) Workmen's compensation paid to employees by the firm `8,000.
 - (iv) Sundry creditors amounted to `4,000 were paid off at a discount of 4%.
 - (v) A typewriter completely written off in the books of accounts was sold for `700.
 - (vi) Y, a partner who undertakes to carry out the dissolution proceeding is paid `2,000 for the same.

3. P, Q and R are partners. They decided to dissolve their firm. Pass necessary journal entries for the following after various assets (other than cash and bank) and the third party liabilities have been transferred to Realisation Account.
 - a) There were total book debts of `38,000. A provision of bad and doubtful debts also stood in the books at `3,000. Book debts `6,000 proved bad and rest paid the amount due.
 - b) A agreed to pay off his wife's loan of `3,500 at a discount of 5%.
 - c) A laptop which was not recorded in the books was taken over by B at `1,500, whereas its expected value was `2,500.
 - d) A contingent liability (not provided for) of `2,000 was also discharged.
 - e) The firm had a debit balance of `13,500 in the profit and loss account on the date of dissolution.
 - f) C paid the realization expenses of `7,500 out of his pocket and he was to get a remuneration of `9,000 for completing the dissolution process.
 - g) Realisation expenses will be "borne" by P. For it he will be credited with `4,000. Firm paid actual expenses amounting to `3,500.
 - h) Realisation expenses amounted to `6,000 of which 80% was paid by A and remaining by B. Entire expenses are to be borne by the firm.

4. Show how will you deal with the following at the time of dissolution of the firm:
 - a) Workmen's Compensation Fund stood at `12,000 in balance sheet and there was no liability in this respect.
 - b) Workmen's Compensation Fund stood at `16,000 and liability for it was ascertained at `21,000.

- c) Workmen's Compensation Fund stood at `23,000 and liability in respect of it was ascertained at `13,500.
- d) There was no Workmen's Compensation Fund was firm had to pay `4,500 as compensation to the workers.
- e) General Reserve and Provident Fund stood at `25,000 and `15,000 respectively.
- f) Workmen's Compensation Fund stood at `12,000 in the books and there was no liability in respect of it.

5. AB, BC and CD were partners in a firm. They decided to dissolve their firm. Pass necessary journal entries for the following after various assets (other than cash and bank balance) and the third party liabilities have been transferred to Realisation Account.

- a) There was a stock of `45,000. BC took over 50% of the stock at 10% discount and remaining stock was sold at 40% profit on book value.
- b) P & L Account was showing a debit balance of `12,000 which was distributed among the partners.
- c) A machinery which was not recorded in the books was sold for `1,000.
- d) AB was paid only `2,600 for his loan to the firm which amounted to `2,750.
- e) Realisation expenses amounting to `2,500 paid by CD.
- f) There were 50 shares of `10 each in XYZ Ltd., acquired at a cost of `600 which had been written off completely from the books. These shares are valued @ `9 each and divided among the partners in their profit sharing ratio.

6. Pass necessary Journal entries for the following at the time of dissolution of partnership firm:

- (a) Expenses of realisation Rs. 8,000 were to be borne by A, a partner. A used firm's cash to pay the expenses.
- (b) Dissolution expenses were Rs. 10,000. Out of this, Rs. 4,000 was to be borne by the firm and the balance by Naresh, a partner. Firm has paid Rs. 10,000.
- (c) Dissolution expenses were Rs. 10,000. Out of this, Rs. 4,000 was to be borne by the firm and the balance by Suresh, a partner. The whole expenses were paid by the partner.
- (d) Realisation expenses of Rs.5,000 were to be borne and paid by Ramesh, a partner.
- (e) Brijesh, a partner is paid remuneration of Rs. 3,000 for dissolution of the firm. Realisation expenses of Rs. 5,000 are met by the firm.
- (f) Realisation expenses of Rs. 10,000 were to be borne by P, a partner, but paid by R, another partner.
- (g) Realisation expenses Rs. 8,000 half of which to be borne by firm and half by A, a partner. The whole expenses were paid by B, another partner.
- (h) Realisation expenses were to be borne by Deepak, a partner, for which he was allowed a commission of 2% of net cash realized from dissolution. The net cash realized from dissolution was Rs. 1,00,000 and actual realisation expenses were Rs. 7,400.

ECONOMICS

1. (A) : India was more of a consumer than a supplier of materials for finished goods .
(R) : British economic policies were more directed towards their own economic interests.
 - a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 - b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 - c. Assertion (A) is true but Reason (R) is false.
 - d. Assertion (A) is false but Reason (R) is true.
2. (A) : Zamindars (semi feudal economy) in the colonial era were also responsible for the misery of the cultivators
(R) : The terms of revenue settlement system introduced were harsh on the zamindars
 - a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 - b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 - c. Assertion (A) is true but Reason (R) is false.
 - d. Assertion (A) is false but Reason (R) is true.
3. (A) : Britain had a monopoly over India’s trade and import
(R) : India ‘s foreign trade was limited to a few countries .
 - a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 - b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 - c. Assertion (A) is true but Reason (R) is false.
 - d. Assertion (A) is false but Reason (R) is true.
4. (A): Both maternal mortality and infant mortality were very high in the colonial era.
(R) : Both total population of india and the rate of population were very high in 1921.
 - a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 - b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 - c. Assertion (A) is true but Reason (R) is false.
 - d. Assertion (A) is false but Reason (R) is true.
5. (A) : Railways adversely affected the self – sufficiency of the village economies in India .
(R) : India agriculture was hugely commercialised due to the introduced of railways.
 - a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 - b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 - c. Assertion (A) is true but Reason (R) is false.
 - d. Assertion (A) is false but Reason (R) is true.

6. (A) : Strategically and economically, the suez canal is one of the most important waterways in the world.

(R) : The suez canal provides a direct trade route for ships by doing away the need to sail around Africa .

a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)

c. Assertion (A) is true but Reason (R) is false.

d. Assertion (A) is false but Reason (R) is true.

7. **REPORT – 1**

One of the most common debates one hear about India is whether British colonialism has been good or bad for the country's economic prospects. Defenders of British rule often cite the construction of the railroads, or the spread of the English language, but as time passes the evidence mounts that India would have been much better off on its own.

That's of relevance for the shouting match , but it also bears on how optimistic we should be about India today. If you view the colonial period as a harmful aberration, you will tend to think India can catch up as it leaves these distortions behind. Conversely, if you see British rule as a plus, you may worry that India will eventually lose some of that inherited dynamism.

- By Tyler Cowen (economic Times)

Answer the following questions

1. What were the few positive effects of British rule in India ?

2. Which crop did Britishers asked Indian farmers to grow for them ?

3. What was the purpose of Britishers to colonise India ?

BUSINESS STUDIES

Q1. Which of the following is not an organisational objective of management.

(b) Growth

(a) Survival

(c) Profit

(d) Generating employment opportunities

Q2. High Spirits Ltd. is a travel and tourism company in Mumbai. It is planning to set up an amusement park in Pune. The new prospects of an organisation normally requires higher investment in fixed assets. State the factor affecting the fixed capital requirements of the company in the above context.

(a) Nature of Business

(b) Scale of Operations

(c) Technology Upgradation

(d) Growth Prospects

Q3. One of the steps in the trading procedure necessitates that, the investor has to deliver the shares sold or pay cash for the shares bought. This should be done immediately after receiving the contract note or before the day when the broker shall make payment or delivery of shares to the exchange. This is known as _____

(a) Pay-in day

(b) Pay- out day

- (c) Order confirmation slip
- (d) Unique code number

Q4. Aditya bought a pack of juice from a shop in the local market. He noticed that on the pack it was mentioned that 'once the pack is opened the juice should be consumed within four days'. Identify the consumer right being promoted by the company.

- (a) Right to information
- (b) Right to choose
- (c) Right to be heard
- (d) Right to consumer education

OR

This level of three tier judiciary system consists of a President and at least four other members, one of whom should be a woman who are appointed by the Central Government.

- (a) District Forum
- (b) State Commission
- (c) National Commission
- (d) Supreme Court of India

Q5. Abhijeet is working as the sales head in a company manufacturing music instruments, He decides the Key Result Areas (KRAS) for his team members without consulting them. He believes that people perform the best if they are provided with predetermined objectives. Identify the leadership style adopted by Abhijeet.

- (a) Autocratic leadership
- (b) Democratic leadership
- (c) Laissez faire leadership
- (d) Participative leadership

Q6. It is the path through which encoded message is transmitted to receiver in the process of communication.

- (a) Encoding
- (b) Media
- (c) Sender
- (d) Decoding

Q7. Controlling function is like a postmortem of past activities to find out deviations from the standards. This statement reflects that the controlling function is a _____ function.

- (a) Forward looking
- (b) Backward looking
- (c) Forefront function
- (d) None of the above

Q8. Rupali started an online Tiffin Box service through a website "Mytiffin.com" in Noida two years back. Recently they have started online booking system through their website 'mydabbawala.com'. The Dabbawalas operate in a group of 25-30 people along with a group leader. Each group teams up with other groups in order to deliver the tiffin on time. They are not transferred on frequent basis as they have to remember the addresses of their customers. They follow certain rules while doing trade- No alcohol during working hours; No leave without permission; Wearing of white cap & carrying ID cards during business hours. Recently on the suggestion of a few self-motivated fellow men, the dabbawalas thought out and executed a plan of providing food left in tiffins by customers to slum children. They have instructed their customers to place red sticker if food is left in the tiffin, to be fed to poor children later.

Which of the following principle is not mentioned in the given paragraph

- (a) Stability of personnel
- (b) Discipline
- (c) Initiative
- (d) Equity

Q9. As the financial leverage increases,

- (a) The cost of funds declines
- (b) The financial risk declines
- (c) Both (a) and (b)
- (d) None of the above

OR

When a company use more of _____ it may lead to dilution of management's control over the business.

- (a) Debentures
- (b) Bonds
- (c) Equity
- (d) Retained earnings

Q10. When a trade bill is accepted by a commercial bank it is known as a _____

- (a) Commercial paper
- (b) Treasury bill
- (c) Commercial bill
- (d) Certificate of deposit

BIOLOGY

Q1. Give a reason for the discontinuous synthesis of DNA on one of the parental strands?

Q2. Retroviruses do not follow central dogma. Comment on this statement

Q3. Sometimes, the young ones born have an extremely different set of eyes or limbs. Give a relevant explanation for the abnormality.

Q4. Explain about the dual polymerase present in E.coli.

Q5. What is the function of amino acyl t-RNA synthase?

Q6. Explain the process of DNA fingerprinting.

Q7. The sequence of the coding strand of DNA in a transcription unit is mentioned below.

3' AATGCAGCTATTAGG 5'

Write the sequence for:

1. Its complementary strand
2. Its mRNA

Q8. . Name any three viruses with RNA as the genetic material.

Q9. State the function of histones in DNA packaging.

Q10. What are the functions of the :

1. Methylated guanosine cap
2. Poly-A tail

CHEMISTRY

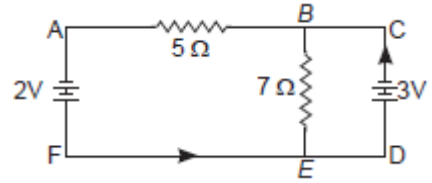
CLASS - XII CHEMISTRY (coordination compounds)

Topic:- Isomerism in coordination compounds

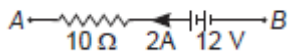
1. Define – isomerism. [1]
2. What is geometric isomerism? When can a compound show. [2]
 - (1) Cis - Trans isomerism
 - (2) Fac and Mer isomerism.
3. How do optical isomer differ from each other? [1]
4. Make the cis and trans forms of the complex [2]
 $[\text{Cr Cl}_2 (\text{en})_2]^+$. Which one of these will be optically active?
5. Which isomerism is shown by a compound having ambidentate ligand? Give example. [2]
6. What is ionization isomerism? Give an example. [1]
7. How do solvate isomers differ from each other? [1]
8. Draw the geometrical isomers of $[\text{Cr} (\text{NH}_3)_2 (\text{CN})_4]^+$? [1]
9. Indicate the types of isomerisms shown by the complex - $\text{K} [\text{Fe} (\text{H}_2\text{O})_2 (\text{en})_2 \text{Cl}_2]$? [1]
10. Give an example of coordination isomerism? [1]

PHYSICS

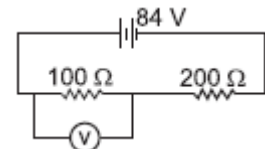
- 1 Two resistances 5Ω and 7Ω are joined as shown to two batteries of emf 2 V and 3 V . If the 3 V battery is short circuited. What will be the current through 5Ω ?



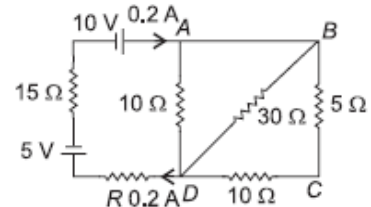
- 2 Estimate the average drift speed of conduction electrons in a copper wire of cross-sectional area $1.0 \times 10^{-7}\text{ m}^2$ carrying a current of 1.5 A . Assume the density of conduction electrons to be $9 \times 10^{28}\text{ m}^{-3}$.
- 3 Current flowing through a wire varies with time t in second as $I = (2t + 4)\text{ A}$. How much charge passes through a cross-section of the wire in 2 s ?
- 4 You are given a 8Ω resistor. What length of constantan wire of resistance $120\Omega\text{ m}^{-1}$ should be joined in parallel with it to get a value of 6Ω ?
- 5 In the figure, what is the potential difference between A and B ?



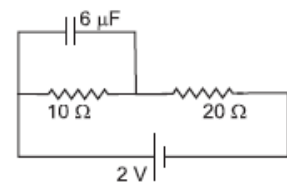
- 6 The current flowing through a conductor is 2 mA at 50 V and 3 mA at 60 V . Is it an ohmic or non-ohmic conductor? Give reason.
- 7 A voltmeter V of resistance 400Ω is used to measure the potential difference across a 100Ω resistor in the circuit shown here.



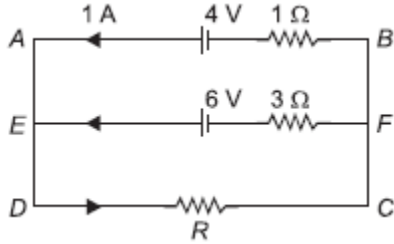
- (a) What will be the reading on the voltmeter?
 (b) Calculate the potential difference across 100Ω resistor before the voltmeter is connected.
- 8 Calculate the value of the resistance R in the circuit shown in the figure so that the current in the circuit is 0.2 A . What would be the potential difference between points A and D ?



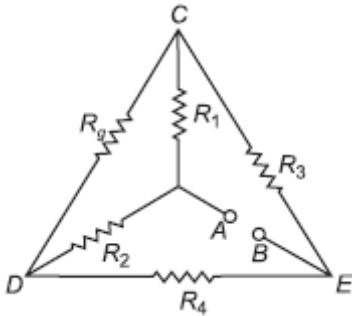
- 9 Find the charge on the capacitor as shown in the circuit.



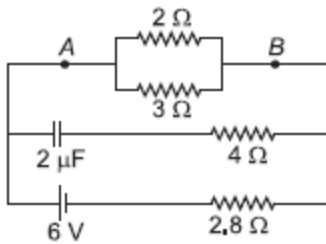
- 10 Using Kirchoff's rules, determine (i) the voltage drop across the unknown resistor R and (ii) the current flowing in the arm EF in the circuit as shown.



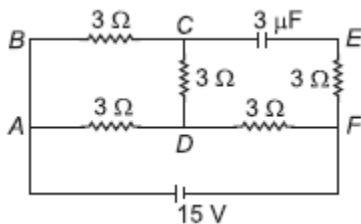
- 11 (i) Calculate the equivalent resistance of the given electrical network between points A and B .
(ii) Also calculate the current through CD and ACB , if a 10 V dc source is connected between A and B , and the value of R is assumed as $2\ \Omega$.



- 12 Calculate the steady current through a $2\ \Omega$ resistor in the circuit shown below.

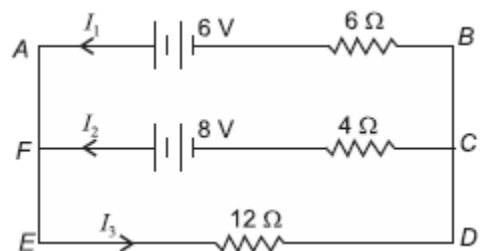


- 13 In the circuit shown in the figure, find the total resistance of the circuit and the current in the arm CD .



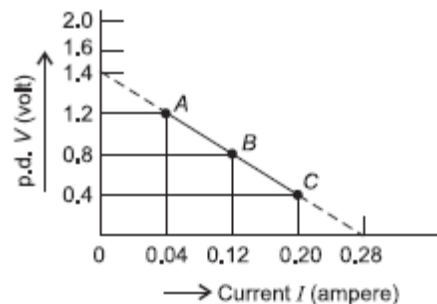
- 14 In the network shown here, find the following:

- (a) Currents I_1 , I_2 and I_3 .
(b) Terminal potential difference of each battery.
Consider $6\ \Omega$ to be the internal resistance of 6 V battery and $4\ \Omega$ to be internal resistance of 8 V battery.

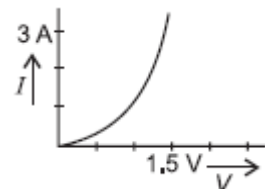


- 15 An emf of a cell is 1.5 V and its internal resistance is 1 Ω . For what current drawn from the cell will its terminal potential difference be half of its emf?
- 16 A storage battery of emf 12.0 V and internal resistance 0.5 Ω is to be charged by a 120 V dc supply of negligible internal resistance. What resistance is required in the circuit for the charging current to be 3 A? What is the terminal voltage of the battery during charging?
- 17 A dc supply of 120 V is connected to a large resistance X . A voltmeter of resistance 10 k Ω placed in series in the circuit reads 4 V. What is the value of X ? What is the purpose behind using a voltmeter instead of an ammeter, to determine the large resistance X ?
- 18 Four identical cells, each of emf 2 V, are joined in parallel providing supply of current to external circuit consisting of two 15 Ω resistors joined in parallel. The terminal voltage of the cells as read by an ideal voltmeter is 1.6 V. Calculate the internal resistance of each cell.
- 19 A heating element is marked 210 V, 630 W. What is the value of the current drawn by the element when connected to a 210 V dc source?

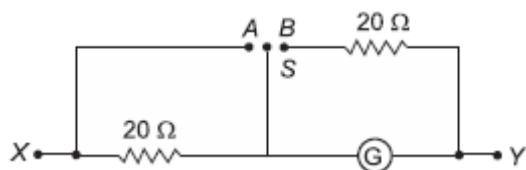
- 20 A straight line plot showing the terminal potential difference (V) of a cell as a function of current (I) drawn from it is shown in the figure. Using this plot, determine (i) the emf, and (ii) internal resistance of the cell.



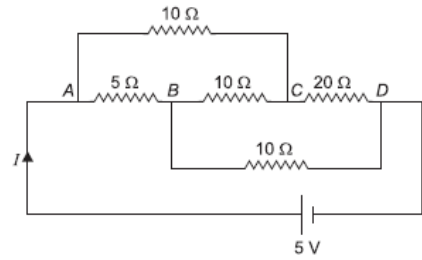
- 21 A cell of emf 1.5 V and internal resistance 0.5 Ω is connected to a (non-linear) conductor whose V - I graph is shown in figure. Obtain graphically the current drawn from the cell and its terminal voltage.



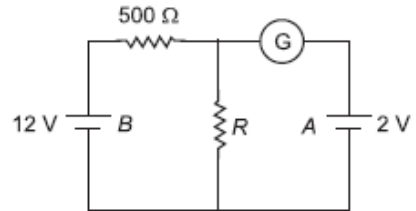
- 22 The galvanometer in the circuit shown here has a resistance of 20 Ω . The terminals X and Y are connected to a cell of emf 1.5 V and internal resistance 10 Ω . Calculate the current flowing in the galvanometer: (i) when the switch S is in position A , and (ii) when the switch S is in position B .



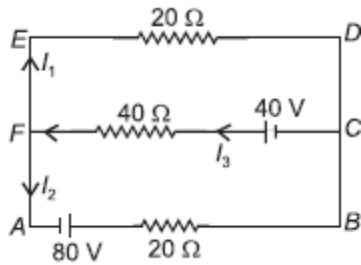
- 23 Calculate the value of the current drawn from a 5 V battery in the circuit as shown.



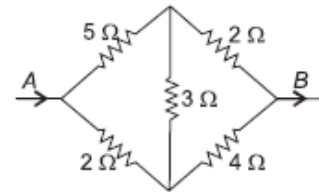
- 24 In the circuit shown in the figure, the galvanometer G gives zero deflection. If the batteries A and B have negligible internal resistance, find the value of the resistor R .



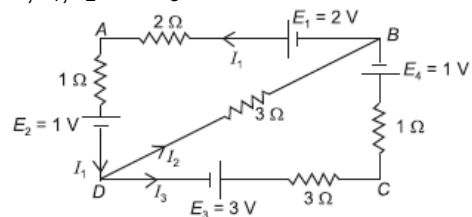
- 25 Using the Kirchhoff's rules determine the value of the current I_1 in the electric circuit given below.



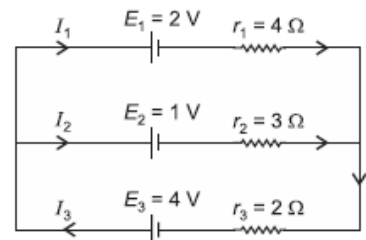
- 26 In the arrangement of conductors, find the equivalent resistance between A and B .



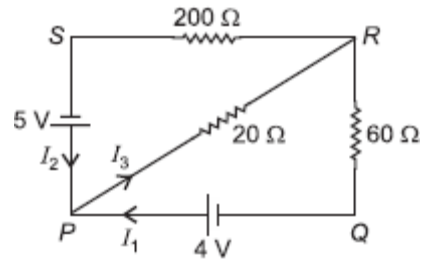
- 27 In the given network, find the values of the currents, I_1 , I_2 and I_3 .



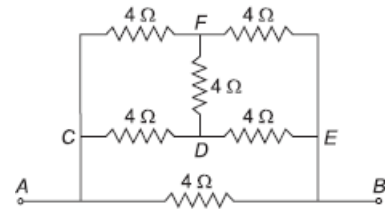
- 28 State Kirchhoff's rules. Use these rules to write the expressions for the currents I_1 , I_2 and I_3 in the circuit diagram shown below.



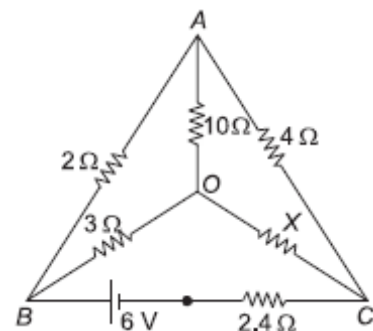
- 29 State Kirchhoff's rules. Apply these rules to the loops $PRSP$ and $PRQP$ to write the expressions for the currents I_1 , I_2 and I_3 in the given circuit.



- 30 Six resistors, each of value 4Ω , are joined together in a circuit as shown in the figure. Calculate equivalent resistance across the points A and B . If a cell of emf 2 V is connected across AB , compute the current through the arms AB and DF of the circuit.

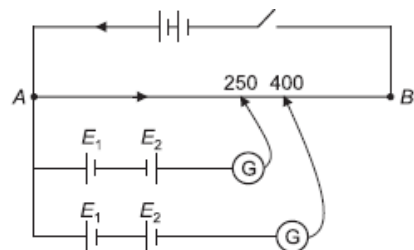


- 31 Find the value of the unknown resistance X , in the following circuit, if no current flows through the section AO . Also calculate the current drawn by the circuit from the battery of emf 6 V and negligible internal resistance.



- 32 With a certain unknown resistance X in the left gap and a resistance of 8Ω in the right gap, null point is obtained on the meter bridge wire. On putting another 8Ω resistor in parallel with the 8Ω resistor in the right gap, the null point is found to shift by 15 cm . Find the value of X from these observations.

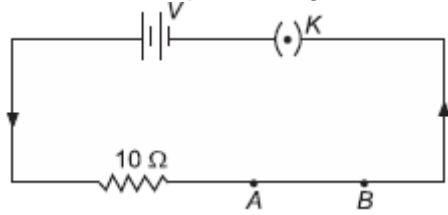
- 33 Two primary cells of emfs E_1 and E_2 ($E_1 > E_2$) are connected to the potentiometer wire AB as shown in the figure. If the balancing lengths for the two combinations of the cells are 250 cm and 400 cm , find the ratio of E_1 and E_2 .



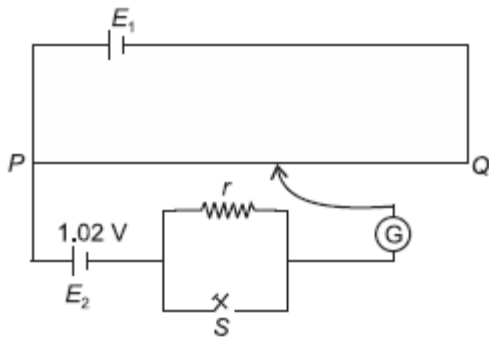
- 34 The emf of a cell measured using a potentiometer is found to be 1.5 V . An accurate voltmeter connected across the terminals of the cells reads 1.4 V . Explain the discrepancy and calculate the ratio of the resistance of the voltmeter to the internal resistance of the cell.

- 35 In the circuit shown here, AB is a 2 m long wire having a resistance of 5Ω . What battery voltage

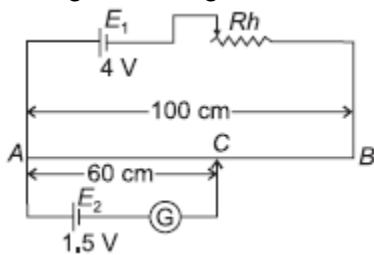
V will cause a potential gradient of 2 V/m along the wire AB?



- 36 Potentiometer wire, PQ of 1 m length is connected to a standard cell E_1 . Another cell, E_2 of emf 1.02 V is connected as shown in the circuit diagram with a resistance r and a switch, S . When switch, S open, null position is obtained at a distance of 51 cm from P . Calculate (i) potential gradient of the potentiometer wire, and (ii) emf of the cell E_1 . (iii) When switch S is closed, will null point move towards P or towards Q ? Give reason for your answer.

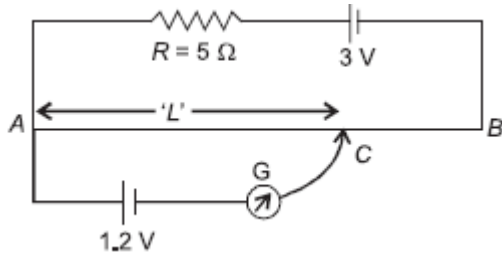


- 37 What is meant by the sensitivity of a potentiometer? A battery E_1 of 4 V and a variable resistance R_h are connected in series with the wire AB of the potentiometer. The length of the wire of the potentiometer is 1 m. When a cell E_2 of emf 1.5 V is connected between points A and C , no current flows through E_2 . Length of $AC = 60$ cm.



- 38 The potentiometer wire of length 100 cm has a resistance of 10Ω . It is connected in series with a resistance 5Ω and an accumulator of emf 3 V having negligible resistance. A source of 1.2 V is balanced against a length L of the potentiometer wire. Find the

value of L .

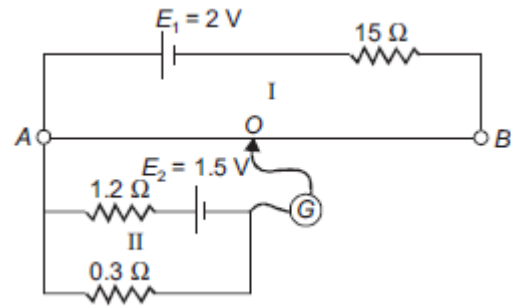


- 39 Two cells of emf E_1 and E_2 ($E_1 > E_2$) are connected as shown below.

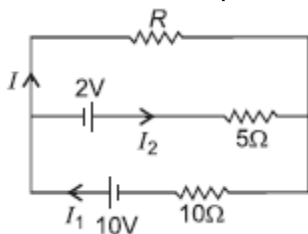


When a potentiometer is connected between A and B, the balancing length of the potentiometer is 300 cm. On connecting the same potentiometer between A and C, the balancing length is 100 cm. Calculate the ratio of E_1 and E_2 .

- 40 AB is 1 m long uniform wire of 10Ω resistance. The other data are shown in the circuit diagram given below:
Calculate (i) Potential gradient along AB , and (ii) length AO of the wire, when the galvanometer shows no deflection.

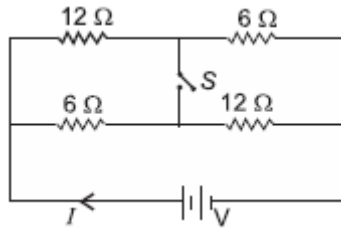


- 41 The length of a potentiometer wire is 600 cm and it carries a current of 40 mA. For a cell of emf 2 V and internal resistance 10Ω , the null point is found to be at 500 cm. If a voltmeter is connected across the cell, the balancing length is decreased by 10 cm. Find (i) the resistance of whole wire, (ii) reading of voltmeter, and (iii) resistance of voltmeter.
- 42 A potentiometer wire of length 1 m has a resistance of 10Ω . It is connected to a 6 V battery in series with a resistance of 5Ω . Determine the emf of the primary cell which gives a balance point at 40 cm.
- 43 Two cells of E.M.F. 10 V and 2 V and internal resistances 10Ω and 5Ω respectively, are connected in parallel as shown. Find the effective voltage across R .

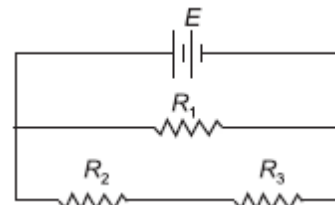


- 44 Two nichrome wires are connected in series with a battery. The lengths of nichrome wires are in the ratio of 1 : 2 whereas their resistances are in the ratio of 2 : 1. Find the (a) ratio of their diameters and (b) ratio of drift velocity of free electrons in them.

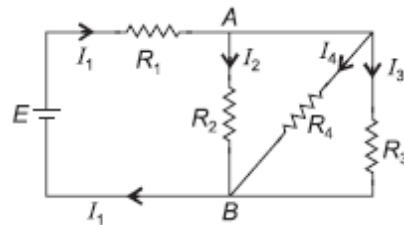
- 45 With switch S open, the network of resistors shown here draws a current from the battery. How many times will this current be on closing the switch S ?



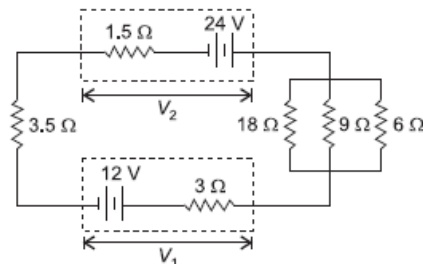
- 46 Three identical resistors R_1 , R_2 and R_3 are connected to a battery as shown in figure. What will be the ratio of voltages across R_1 and R_3 ?



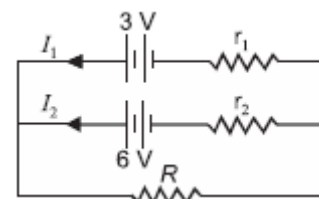
- 47 In the circuit shown, $R_1 = 4 \Omega$, $R_2 = R_3 = 15 \Omega$, $R_4 = 30 \Omega$ and $E = 10 \text{ V}$. Calculate the equivalent resistance of the circuit and the current in each resistor.



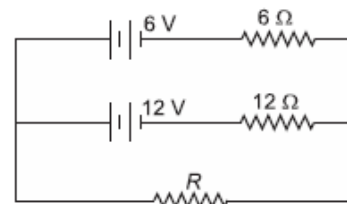
- 48 A 24 V battery of internal resistance 1.5Ω is connected to three coils 18Ω , 9Ω and 6Ω in parallel, a resistor of 3.5Ω and a reversed battery (emf = 12 V and internal resistance = 3Ω) as shown. Calculate (i) the current in the circuit, (ii) current in resistor of 18Ω coil, and (iii) p.d. across each battery.



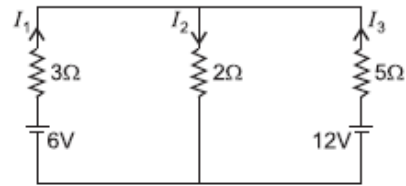
- 49 Under what condition(s) will the current I_1 and I_2 be in the directions as shown in the diagram here?



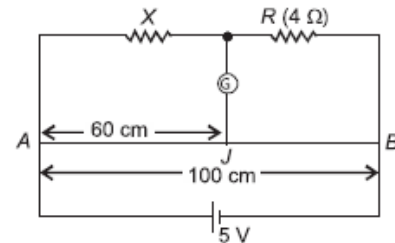
- 50 In the circuit diagram shown here what should be the value of R so that there is no current in the branch containing 6 V battery?



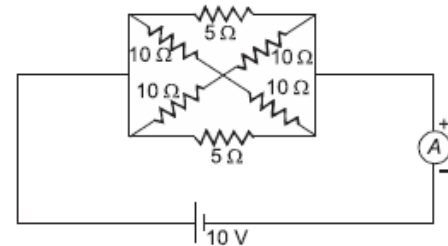
- 51 In the network given below, use Kirchoff 's laws to calculate the values of electric currents I_1 , I_2 and I_3 .



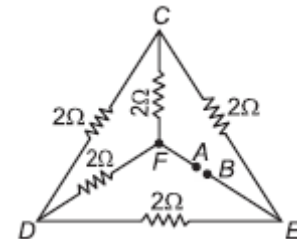
- 52 Calculate the value of unknown resistance X and the current drawn by the circuit, assuming that no current flows through the galvanometer. Assume the resistance per unit length of the wire AB to be $0.01 \Omega/\text{cm}$.



- 53 Calculate the current shown by the ammeter A in the circuit diagram given below.

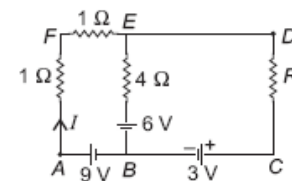


- 54 A potential difference of 2 V is applied between the points A and B as shown in the network drawn in the figure.



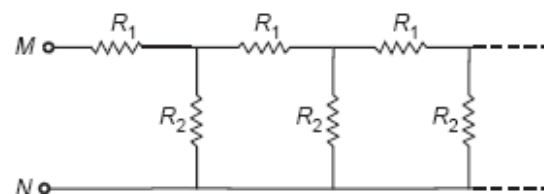
Calculate:

- equivalent resistance of the network across the points A and B, and
 - the magnitudes of currents flowing in the arms AFCEB and AFDEB.
- 55 Using Kirchoff 's rules determine the value of unknown resistance R in the circuit so that no current flows through 4Ω resistance. Also find the potential difference between A and D.



- 56 The potential difference across a potentiometer wire 8 m long is 2.5 V. Calculate the emf of the cell which is balanced by 100 cm long wire.

- 57 The figure shows an infinite circuit which is formed by the repetition of same chain consisting R_1 and R_2 . If $R_1 = 4\Omega$ and $R_2 = 3\Omega$, then calculate the resistance between the points M and N.



HISTORY

Attempt any 15 questions.

1 The ancient history of Indian trade rightly begins from the period.

- a) Vedic
- b) Harappa
- c) Buddhist
- d) Mauryan

2 Who was the chairman of the Drafting Committee of the constitution?

3 Correct the following statement and rewrite it:

According to Jainism, to free oneself from the cycle of Karma, asceticism and the middle path are required.

4 Write the correct order of the Varna system according to Dharmashashtra:

- a) Shudras
- b) Brahmins
- c) Vaishyas
- d) Kshatriyas

5 Look at the given image carefully and state what does the symbol of Dharmachakra stand for?

Question For Visually Impaired candidates only: In lieu of Question number 5.

The symbol used to describe Buddha's first sermon is:

- a) Shalabhanjika
- b) Wheel
- c) Stupa
- d) Tree

6 Which was considered as the most ideal form of marriage out of the eight forms of marriage mentioned in the Dharmashastras in Ancient India?

7 The important principles of 16th century Bhakti movement in India were:

- I. True devotion
 - II. Equality before God
 - III. Love to mankind
 - IV. Rituals
- Correct option is:

- a) I, II, III
- b) I, II, IV
- c) II, III, IV
- d) I, III, IV

8 Who wrote Padmavat ?

9 Select the correct statement regarding the sea trade in Vijaynagar empire:

- a) Sea trade was ignored.
- b) Sea trade was discouraged.
- c) Sea trade was given royal patronage.
- d) Sea trade was left in the care of selected traders.

- 10 Find out the correct one from the following list:
- Nayak : Military Commander
 - Hiriya : Lake
 - Kamalpuram : Canal
 - Mandapam : King
 - Krishan Dev Rai : Temple Campus
- 11 Mention any one of the important steps taken by the Akbar on the basis of which his reign was called Secular? 1
- 12 What is the meaning of Benami?
- 13 The Mughal Emperor was protector of which four aspects of his subjects?
- 14 Given below are two statements, one labelled as Assertion (A) The Other as Reason (R).
Assertion: In rural Bengal, the power of Jotedars was more effective than that of Zamindar.
Reason: Jotedars deliberately delayed payments of revenue to the Zamindars.
- Only Assertion (A) is correct.
 - Only Reason (R) is correct.
 - Both Assertion (A) and reason(R) are correct but reason(R) is not the explanation of the statement.
 - Both Assertion (A) and reason(R) are correct and reason(R) is the correct explanation of the Assertion (A).
- 15 Which newspaper was started by Mahatma Gandhi?
- 16 Who made the painting called Relief of Lucknow?

PSYCHOLOGY

(VERY SHORT QUESTION: 1MARK)

- The _____ self leads to an orientation in which one feels primarily concerned with oneself.
- The _____ self emerges in relation with others and emphasises such aspects of life as cooperation, unity, affiliation, sacrifice, support or sharing.
- The way we perceive ourselves and the ideas we hold about our competencies and attributes is also called _____.
- Eysenck proposed a third dimension, called _____, which is considered to interact with the other two dimensions.
- According to Freud, the _____ is a reservoir of instinctive or animal drives.
- Freud developed a therapeutic procedure, called _____.
- The basic goal of _____ therapy is to bring the repressed unconscious materials to consciousness, thereby helping people to live in a more self-aware and integrated manner.
- During phallic stage, the male child experiences the _____, which involves love for the mother, hostility towards the father, and the consequent fear of punishment or castration by the father.
- During phallic stage, the female child experiences the _____, by attaching her love to the father a girl tries to symbolically marry him and raise a family.
- Children proceed from one stage to another stage of development, they seem to adjust their view of the world. Failure of a child to pass successfully through a stage leads to _____ to that stage.

(SHORT QUESTION TYPE I: 3 MARKS)

11. How is ego different from superego?
12. Differentiate between regression and fixation.
13. Give features of phallic Stage.
14. What do you mean by collective unconsciousness?

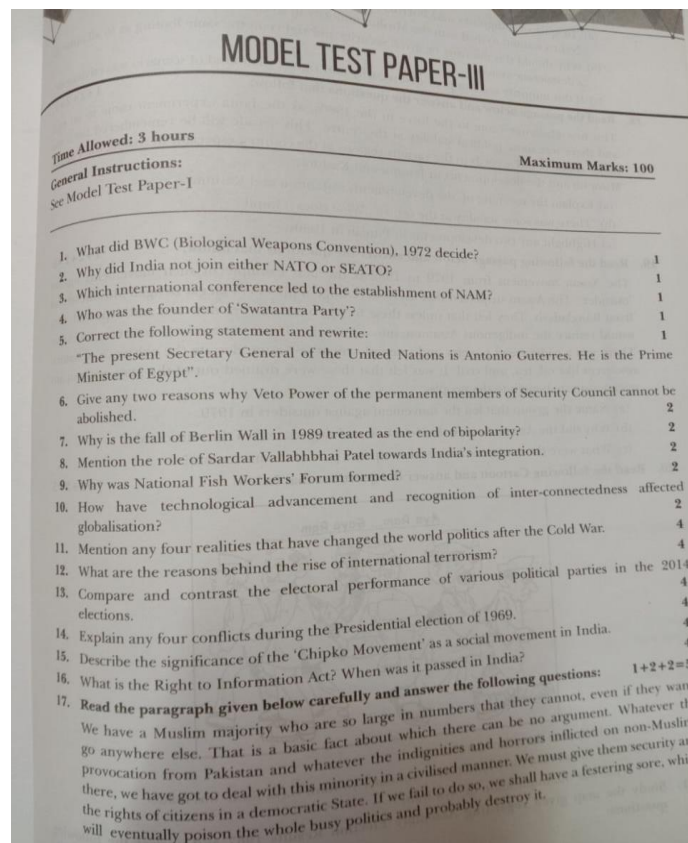
(SHORT QUESTION TYPE II: 4 MARKS)

15. Discuss the role of the pleasure principle, the reality principle, and internalizing in relation to Freud's three personality structure.
16. What are the broad dimensions of Personality proposed by Eysenck?
17. Differentiate between surface and source traits.

(LONG QUESTIONS: 6 MARKS)

18. Explain Karen Horney's personality theory.
19. What is Humanistic Approach to personality? State two assumptions of humanistic approach.
20. "Personality is described as an adaptation of individual or groups to the demands of culture" Discuss.

POLITICAL SCIENCE



IP

UNIT -4(SOCIETY LAW ETHICS) ASSIGNMENT-1

MLL BASED QUESTIONS (Short Answer Type Questions-2 MARKS)

1. In which year the Indian IT Act, 2000 got updated? a)2006 b)2008 c)2010 d)2012 Answer: b

Explanation: In the year 2008, the IT Act, 2000 was updated and came up with a much broader and precise law on different computer-related crimes and cyber offenses.

1. What is identity theft? How can we prevent identity theft? 2. What is a Phishing email and how do you Spot theScam? 3. What is net neutrality and why is it important? List any three benefits of implementing "Internet Neutrality"? 4. Define crowd sourcing. Explain its drawbacks and benefits.

5. What is the difference between threat, vulnerability and risks.

6. Define e- waste. What are the various methods for effective e- waste management.

7 What do you mean by plagiarism? Tell 2 acts which can be termed as plagiarism.

8 What do you mean by Digital property rights?Explain.

9. State any 2 measures of digital property rights protection.

10 Differentiate between shareware and proprietary software.

11 What is cyber crime? Explain "information theft".

12 Give any 2 benefits of ICT on today'ssociety?

13. State 2 benefits of e-waste recycling?

14. Are there any gender issues involved in learning computer related subject? Give solution to overcome theissue.

15. Give examples of software, hardware that may be used for special needs students.

16. How could you find a web is safe or not site when you enter crucial information?

17. What are the biometrics devices?

18. What are gender issues while teaching and using computers?

19. What are gender disability issues while teaching and usingcomputers?

20. What do you mean by internet as an echo chamber?

YOGA

1. What are the steps to give the first aid?

2. Briefly explain

a) Bahiranga

b) Antaranga

HINDI

1. पत्र लेखन

दूरदर्शन के प्रसारित कार्यक्रमों की समीक्षा करते हुए दूरदर्शन के निदेशक को पत्र लिखिए और अपने सुझाव भी लिखिए।

2. टेलीविजन जन संचार का सबसे लोकप्रिय और सशक्त साधन है टेलीविजन पर कोई भी सूचना कितने सोपानों को पार कर दर्शकों तक पहुंचती है स्पष्ट कीजिए।

3. लेखन किस शैली में लिखा जाता है? इस लेखन में किन किन बातों पर अधिक ध्यान देने की आवश्यकता है?

निम्नलिखित प्रश्नों के उत्तर एक वाक्य में दीजिए

1. भारत में नियमित अपडेटेड साइटों के नाम बताइए।

2. विशेष रिपोर्ट के कोई दो प्रकार बताइए।

3. भारत में समाचार पत्रकारिता का प्रारंभ कब एवं किससे हुआ?

4. भारत में प्रथम छापाखाना कब और कहां खुला था?

5. किन्हीं दो समाचार पत्रों के नाम बताइए जिनके वेब संस्करण इंटरनेट पर प्राप्त हैं।

Sample paper on Human geography. Nature and scope

1. Possibilities can be created within the limit, which do not damage the environment and there is no free run without accidents. Analyse the statement ?(2017)
2. How are nature and human inseparable ?(2017)
3. Nature provides opportunities and humans make use of these and slowly nature get humanized and starts bearing the imprint of human endeavour. Justify the statement ?(2017)
4. Explain the concept introduced by Griffith Taylor with the help of explain. (2014)
5. 'The primitive communities lived in complete harmony with their natural environment and as such the humans were naturalized. Support the statement .(2018)