#### EAST POINT SCHOOL

#### **COMMERCE DEPARTMENT**

- ACCOUNTANCY https://youtu.be/cX9EYViEqVQ
- BUSINESS STUDIES <a href="https://www.youtube.com/watch?v=Qh5DikBFfrk">https://www.youtube.com/watch?v=Qh5DikBFfrk</a>
- ECONOMICS <a href="https://youtu.be/pDqQlvEE\_qE">https://youtu.be/pDqQlvEE\_qE</a>

#### SCIENCE DEPARTMENT

- CHEMISTRY

https://www.youtube.com/watch?v=vbt7eb\_i4MQ&list=PLCzaIJYXP5YfbgFInYe3GBqqRpVsrbFNJ&index=13, https://www.youtube.com/watch?v=dd0w8WvbNZ8&list=PLCzaIJYXP5YfbgFInYe3GBqqRpVsrbFNJ&index=14

- PHYSICS https://www.youtube.com/watch?v=iry1Xb6xyzE

#### **HUMANITIES DEPARTMENT**

- LEGAL STUDIES <a href="https://www.youtube.com/watch?v=nmAKp2CHjlM">https://www.youtube.com/watch?v=nmAKp2CHjlM</a>
- PSYCHOLOGY <a href="https://youtu.be/ym7-UCipipU">https://youtu.be/ym7-UCipipU</a>
- GEOGRAPHY https://youtu.be/hx2eXn6bHnk
- HISTORY https://youtu.be/pN6fffTCsr4

ENGLISH https://www.youtube.com/watch?v=OZZkOOjlcgc&t=134s

MATHEMATICS <a href="https://youtu.be/TO7uCBSrvxU">https://youtu.be/TO7uCBSrvxU</a>

#### **OPTIONAL-II**

- HINDI <a href="https://youtu.be/oFkIdROE1YY">https://youtu.be/blMc5Tfgtv0</a>
- PAINTING <a href="https://www.youtube.com/watch?v=UbQ1wK\_QmNU&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=4">https://www.youtube.com/watch?v=UbQ1wK\_QmNU&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=4</a>

https://www.youtube.com/watch?v=iHLIRfNmqL0&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=5
https://www.youtube.com/watch?v=sIPvpLnAmsg&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=6
https://www.youtube.com/watch?v=hwUvln7rEC0&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=7
https://www.youtube.com/watch?v=a6Lwiz3fW2o&list=PLDUcRnuMU-e7tGSvKoiwAQCE-svTG9ko1&index=8

# ASSIGNMENT ENGLISH

#### ADVANCED WRITING SKILLS PRACTICE

- 1. Hypocrisy exists in abundant measure in our society. People do not practise what they preach. They have double standards; are rude and dishonest but expect politeness and honesty from others. There are numerous examples of lack of sincerity in our daily experience. Write an article of 150-200 words showing how such behaviour causes disharmony at home, in the neighbourhood and at the work place. You are Harsha/ Hrishit.
- 2.In a "Pollution-control awareness" drive launched by your school a student Kapil Mathur arrived at the conclusion that Delhi is the most polluted city of the world. He noted down certain causes as well as suggestion in his diary for writing an article for a school magazine. Use the following notes together with your own idea to write an article in about (150-200 words) for your school magazine.
- 3. You are Hemant/Himakshi. Write a letter to the Editor of The Herald, New Delhi expressing your anguish over the problems faced by people due to illicit liquor and the deadly chemicals like anthrax.
- 4.You are Reshma/Raghu staying at the Press Apartments of Nagpur. The main road leading to this colony has three open manholes causing frequent accidents at night. Also, it gets so dark after seven in the evenings in winter that the children and women of these apartments just cannot venture to move out alone during night time. Write a letter to the Editor to The Times of India drawing attention of the government to this problem of the residents.
- 5. You are Ranjan/Rajani of 25, Civil Road, Damoh, Bihar. You feel concerned at the gradual decay of historical monuments in India in general and in Bihar in particular. Write a letter to the Editor of The Times of India describing the decay and degeneration that the historical monuments are facing in your state and also suggest some steps to maintain them properly.
- 6. You are Ramanuj am/Revathi, a student of Class XII, St. Xavier's School, Jhansi. You are interested in giving tuition in Maths to one or two students of class VIII. Draft an advertisement in not more than 50 words for a local newspaper. (Comptt. All India)
- 7. You want to rent out your newly constructed flat in the heart of the city. Draft an advertisement in not more than 50 words to be published in 'The Deccan Herald', Bangalore under classified columns. Give all the necessary details. You are Mohan/Mahima of Jayanagar, Bengaluru. (Delhi 2011)
- 8. You have lost your leather wallet containing your Examination Entry Ticket for Class XII while travelling by bus from Banashankari to M.G.Road in Bangalore. Write a notice in not more than 50 words, to be published in 'Deccan Herald'. You are Pranav/Parveen, 12 Gandhi Road, Bengaluru. (All India 2012)

# Evaluate the following

1. 
$$\int \frac{x+\sin x}{1+\cos x} dx$$

2. 
$$\int \frac{5x+3}{\sqrt{x^2+4x+10}} dx$$

3. 
$$\int \frac{dx}{(x^2+1)(x^2+2)} dx$$

4. 
$$\int \frac{(\sin x + \cos x)}{\sqrt{\sin 2x}} dx$$

5. 
$$\int \frac{(\sin x - \cos x)}{\sqrt{\sin 2x}} dx$$

6. 
$$\int \frac{2x+5}{\sqrt{7-6x-x^2}} dx$$

7. 
$$\int x \sin^{-1} x \, dx$$

8. 
$$\int x \log(x+1) dx$$

9. 
$$\int \frac{e^x}{\sqrt{5-4e^x-e^{2x}}} dx$$

$$10. \qquad \int \frac{x+3}{x^2-2x-5} \, \mathrm{d}x$$

### **ACCOUNTANCY**

# **Topic: Dissolution of Partnership Firm**

- 1. The breaking of economic relationship between all the partners of a firm is termed as the \_\_\_\_\_\_ while the breaking of economic relationship between some of the partners is called \_\_\_\_\_.
- 2. Which of the following results into dissolution of partnership firm?
- (a) Insolvency of a partner
- (b) Completion of venture, if partnership is formed for that
- (c) Expiry of the period of partnership, if partnership is for a specific period of time
- (d) None of the above
- 3. Dissolution of firm necessarily brings in dissolution of partnership. True/false? Give reason.
- 4. Dissolution of partnership necessarily involves dissolution of the firm. True/false? Give reason.
- 5. Two situations when the existing partnership is dissolved are \_\_\_\_\_
- 6. Two cases when a firm is necessarily dissolved are \_\_\_\_\_
- 7. A firm is compulsory dissolved when a partner decides to retire. True/false? Give reason.
- 8. Court can order a firm to be dissolved when a partner becomes insane. True/false? Give reason.
- 9. Dissolution of the partnership firm cannot take place without the intervention of the court. True/false? Give reason.
- 10. In case of dissolution, the order of the payment of liabilities are \_\_\_\_\_

#### **BUSINESS STUDIES**

- Q1. ABC Ltd. issued prospectus for the subscription of its shares for Rs. 500 crores in 2008. The issue was oversubscribed by 20 times. The company issued shares to all the applicants on pro-rata basis. Later SEBI inspected the prospectus and found some misleading statement about the management of the company in it. SEBI imposed a penalty of Rs. 5 crores and banned its three executive directors for dealing in securities market for three years. Identify the function and its type performed by SEBI in the above case.
- Q2. Mr. Sanjay Nehra was the Chairman of Taran Bank. The bank was earning good profits. Shareholders were happy as the bank was paying regular dividends. The market price of their shares was also steadily rising. The bank was about to announce taking over the 'Vena Bank.' Mr. Sanjay Nehra knew that the share price of Taran Bank would rise on this announcement. Being a part of the bank, he was not allowed to buy shares of the bank. He called one of his rich friends Sudhir and asked him to invest Rs.5 crores in shares of his bank promising him the capital gains.

As expected, the share prices went up by 40% and the market price of Sudhir's shares was now 7 crores. He earned a profit of Rs. 2 crores. He gave Rs. 1 crore to Mr. Sanjay Nehra and kept Rs. 1 crore with himself. On regular inspection and by conducting enquiries of the brokers involved, the Securities and Exchange Board of India (SEBI) was able to detect this irregularity. The SEBI imposed a heavy penalty on Mr. Sanjay Nehra.

By quoting the lines from the above paragraph, identify and state any two functions that were performed by SEBI in the above case

### **ECONOMICS**

- 1. SHG's
  - a. Self Higher Group
  - b. Social Help Group
  - c. Self Help Group
  - d. All of the above
- 2. Name the state where Kudumshree was started.
  - a. Kerala
  - b. Uttar Pradesh
  - c. Assam
  - d. Tamil Nadu
- 3. Which is the apex institute at national level which provide re-finance facilities to institutions engaged in providing rural credit
  - a. NBAARD
  - b. DABARD
  - c. NABADR
  - d. NABARD
- 4. An academy called \_\_\_\_\_ for rural prosperity has been established
  - a. Janta Tata National Virtual Academy
  - b. Jamshedji Tatron National Real Academy
  - c. Jamshedji Tata Net Virtual Academy
  - d. Jamshedji Tata National Virtual Academy
- 5. Mention any two non-farm activities which should be developed in rural areas.
- 6. Why is rural development important in India?
- 7. Why does a farmer need risk management and insurance?
- 8. State any 3 drawbacks of rural banking?

# **CHEMISTRY**

#### CLASS - XII CHEMISTRY (P - block elements)

#### Topic:- Group 15 elements: Chemical Properties, Dinitrogen

Give reasons for the following? [1X5=5]1. (a) Nitrogen does not show catenation. (b) PCl<sub>5</sub> exists but NCl<sub>5</sub> does not. (c) The stability of Hydrides follows the order- $NH_3 > PH_3 > Ar_5H_3 > SbH_3$ (d) PH3 is a weaker base than NH3. (e) Molecular nitrogen is chemically inert. 2. Complete and balance-[1x5=5] $NH_4CI(aq) + NaNO_2(aq) \rightarrow$ (a)  $Ba(N_3)_2 \rightarrow$ (b)  $3Mg + N_2 \rightarrow$ (c)  $N_2 + O_2 \xrightarrow{Haat}$ (d)  $2NaN_3 \rightarrow$ (e) 3. What are the two isotopes of nitrogen? [1]

[2]

4.

Write two uses of dinitrogen.

#### HISTORY

Write the answer of following questions not more than 350 words.

- 1. what were the distinctive festures of the Mughal nobality? How was their relationship with the emperor shaped?
- 2. Identify the elements that went into the making of the Mughal ideal of kinship.
- 3. Discuss with examples the distinctive features of Mughal chronicles.
- 4. Discuss the position of the women in the imperial household?
- 5. "Many consider jalaluddin Akbar the greeters of all Mughal emperors." Justify the statements .
- 6. How did Akbar act as a unifying force through his religious policy and policy of Sulh-I -kul?
- 7. How was information and news transmitted in the Mughal Empire?
- 8. What did Akhbarat contain? Why was it valuable?
- 9. "Chronicle are indispensable source for any scholar wishing to write a history of the Mughal". Explain.
- 10. Discuss the contribution of William Jones and the Asiatic Society in India.

#### **GEOGRAPHY**

Topic: Urban settlements in india

- 1. Explain the classification of urban settlement on base of population size in India.
- 2. Why do cities become multi functional?
- 3. State examples of uneven levels of urbanisation in India.
- 4. Explain with examples the functional classification of towns in India
- 5. Mention the problems of urban settlement.

#### **PSYCHOLOGY**

#### (VERY SHORT QUESTION: 1MARK)

1.	Four significant features of attitudes are:,, and
2.	The of an attitude tells us whether an attitude is positive or negative towards the attitude object.
3.	Suppose an attitude (say, towards nuclear research) has to be expressed on a 5-point scale, ranging from 1 (Very bad), 2 (Bad), 3 (Neutral — neither good nor bad), and 4 (Good), to 5 (Very good). If an individual rates her/his view towards nuclear research as 4 or 5, this is a attitude.
<b>1</b> .	Al attitude would have neither positive nor negative valence.
5.	The of an attitude indicates how positive or negative an attitude is.
5.	refers to how many attitudes there are within a broader attitude.
7.	refers to the role of a particular attitude in the attitude system.
3.	An attitude with greater centrality would influence the other attitudes in the system much more than attitudes would.
9.	Attitudes are learned through and through interaction with others.
10.	are unwritten rules about behaviour that everyone is supposed to show under specific
	circumstances.

## (SHORT QUESTION: 3 MARKS)

- **11.** What is the purpose served by an attitude? Explain with example.
- **12.** Are attitudes learnt? Explain how?
- **13.** How are attitudes formed?

#### (LONG QUESTION: 6 MARKS)

- **14.** State the factors that lead to formation of attitudes.
- **15.** Explain the four significant features of attitudes with example.

#### **LEGAL STUDIES**

- O1. What are the different forms of confession?
- Q2. Define and explain Extra-judicial confessions
- Q3. Distinguish between admission and confession as per Indian Penal code?
- Q4. Explain the different forms and principles of Evidence law, 1872?
- Q5. The CrPC provides for two types of procedure for the trial of warrant cases by a magistrate. Explain with examples.

#### POLITICAL SCIENCE

- 1. 'The emergency of 1975 proved to be a black mark in the Indian politics'. Explain the statement.
- 2. What is press censorship?
- 3. What is preventive detention?
- 4. Explain the consequences of Emergency.
- 5. How did people reacted against the emergency of 1975?

# OPTIONAL II

उच्च स्तरीय बुद्धि- कौशल प्रश्नों के उत्तर दीजिए-:

- 1. स्कंदगुप्त जीवन के अंतिम मोड़ पर ही देवसेना को पाने के लिए उत्सुक क्यूं हुआ, पहले क्यों नहीं?मानव प्रकृति की कोन सी प्रवृत्ति इस तथ्य के पीछे दिखाई देती है? लिखिए।
- 2. आह! वेदना मिली विदाई,पंक्ति के माध्यम से देवसेना के हृदय की पीड़ा को व्यक्त कीजिए।
- 3. सिद्ध कीजिए कि जय शंकर प्रसाद द्वारा लिखित "अरुण यह मधुमय देश हमारा" गीत जो पहले प्रासंगिक था क्या वो आज भी है? 4. कर्नेलिया ने भारत देश की गौरव गाथा का गुणगान किस आधार पर किया है? तर्क सहित लिखिए।

#### **FMM**

- Q1. Explain advantages of SBTS system.
- Q2. Explain trading system users hierarchy.

#### PHYSICAL EDUCATION

- Q1. Which test will you suggest to measure general motor ability?
- Q2. What do you mean by motor fitness?
- Q3. Which test is used for strength measurement?
- Q4. Explain the procedure for eight foot up and go test?
- Q5. What is the purpose of Harvard step test?

#### **PAINTING**

#### CHAPTER 4 – THE MUGHAL SCHOOL OF MINIATURE PAINTINGS **PAINTINGS**

- 1) MARRIAGE PROCESSION OF DARA SHIKOH
- 2) KABIR AND RAIDAS
- 3) FALCON ON A BIRD REST
- 4) BIRTH OF SALIM
- 5) KRISHNA LIFTING MOUNT GOVARDHANA

#### **MULTIPLE CHOICE QUESTIONS**

- Q.1) Who is the artist of the painting 'Marriage procession of Dara Shikoh?
  - A. Ramdas
  - B. Haji Madani
  - C. Miskin
  - D. Ustad Mansoor
- Q.2) Period of the painting 'Kabir and Raidas' is:
  - A. 1638 A.D.
  - B. 1639 A.D.
  - C. 1640 A.D.
  - D. 1641 A.D.
- Q.3) The artist of the painting 'Falcon on a bird rest' is:
  - A. Ustad Mansoor
  - B. Ramdas
  - C. Miskin
  - D. Haji Madani
- Q.4) Which painting is depicting the birth of Akbar's son?
  - A. Birth of Salim
  - B. Kabir and Raidas
  - C. Falcon on a bird rest
  - D. None of the above
- Q.5) Who is the artist of the painting 'Krishna lifting Mount Govardhana'?
  - A. Ramdas
  - B. Miskin
  - C. Ustad Mansoor
  - D. None of the above

## **SHORT ANSWER TYPE QUESTIONS**

- Q.1) Write a short note on the compositional arrangement of the painting 'Marriage Procession of Dara Shikoh.
- Q.2) What is the subject matter of the painting 'Kabir and Raidas'?
- Q.3) Mention the names of any four painters of Mughal school.
- Q.4) Write a short note on the subject matter of the painting 'Krishna lifting Mount Govardhana'.

#### LONG ANSWER TYPE QUESTIONS

- Q.1) Give a detailed description of the following paintings:
  - A. Marriage procession of Dara Shikoh
  - B. Kabir and Raidas
  - C. Falcon on a bird rest
  - D. Birth of Salim
  - E. Krishna lifting Mount Govardhana

# **YOGA**

- Q1. What do you mean by Yoga?
- Q2. Explain the importance of Yoga in modern age.
- Q3. Enlist the elements/limbs of Yoga.
- Q4. What do you mean by Pratyahara? Explain its benefits.
- Q5. Enlist any four asanas for corrective measures.



- Q1. What is the Use of Pandas Library?
- Q2. What are ndarray? How are they different from Python Lists?
- Q3. What are the axes in numpy array?
- Q4. What do you understand by a shape of a numpy array or series or dataframe?
- Q5. To create sequence of numbers, Numpy provides a function namely\_\_\_\_\_that works like range() but returns arrays instead of lists.
- Q6. Name the pandas object that can store one dimentional array like object and can have numeric or labelled indexes.
- Q7. Can you have duplicate indexes in a series object?
- Q8. What do these attributes of series signify? (a) Size (b) itemsize (c) nbytes
- Q9. If S1 in a series object then how will len(s1) and S1.count() behave?
- Q10. Write commands to create following data structures, each having three integers elements 3,4,5: (a) Ndarray (b) List (c) Series
- Q11. What are the NaNs? How do you store them in a data structures?
- Q12. Write the name of the method that is used to retrieve the first top & last five record of data frame?



#### (1 MARK QUESTIONS)

- 1.Ms. Kant Sengupta wants to prevent unauthorized access to/from his company's local area network. Write the name of a system (software/hardware), which he should install to do the above.
- 2.Seven Brother Fashion Inc. is a fashion company with design unit and market unit 130 meters away from each other. The company recently connected their LANs using Ethernet cable to share the stock related information. But, after joining their LANs, they are not able to share the information due to loss of signal in between. Which device out

of the following should you suggest to be installed for a smooth communication?

- (i) Modem (ii) Repeater (iii) UPS
- 3. Which of the following is not a feature of Networking?
- (i) Resource sharing (ii) Reliability (iii) Uninterrupted power supply (iv) Reduced cost
- 4. Raj kamal International school is planning to connect all computers, each spread over distance within 45 meters. Suggest an economical cable type having high-speed data transfer, which can be used to connect these computers.
- 5. Write the name of the most suitable wireless communication channels for each of the following situations.
- (i) Communication between two offices in different countries.
- (ii) To transfer the data from one mobile phone to another.

- 6. Chandervardhan is not able to identify the Domain Name in the given URL. Identify and write it for him.
- 7. Why is a switch called an intelligent hub?
- 8. What is the use of Repeater in a Network?
- 9. Distinguish between LAN and WAN.
- 10. What is the purpose of Modem in network?
- 11. Write one example of IP Address.

#### EAST POINT SCHOOL ASSIGNMENT-2 NETWORKING

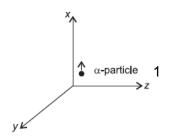
#### (2 MARKS QUESTIONS)

- 1. Identify the type of topology from the following:
- In it, each node is connected with the help of a single co-axial cable.
- In it, each node is connected with the help of independent cable with the help of a central switching (communication controller).
- 2. Define the following with reference to Threats to network security.
  - (i) Worm (ii) Trojan Horse
- 3. Ms. Rani Sen, General Manager of Global Nations Corporate recently discovered that the communication between her company's accounts office and HR office is extremely slow and signals drop quite frequently. These offices are 125 meters away from each other and connected by an Ethernet cable.
- (i) Suggest her a device, which can be installed in between the offices for smooth communication.
- (ii) What type of network is formed by having this kind of connectivity out of LAN, MAN and WAN?
- 4. Give an advantage of using Star topology over Bus topology. Show a network layout of star topology to connect 5 computers. (Twice in 2012 & 2013)
- 5. Give suitable example of URL and Domain name.
- 6. What is MAC address? What is the difference between MAC address and an IP address?
- 7. Identify the following device:
- (i) A device that is used to connect different types of network. It performs the necessary translation so that the connected network can communicate properly?
- (ii) A device that converts data from digital bit stream into an analog signal and vice versa.
- 8. Write one advantage and one disadvantage of using Optical fiber cable.
- 9. Define 'Domain Name Resolution'.
- 10. What do you understand by Network Security? Name two common threats to it. .(Twice in 2013 & 2015)

# **PHYSICS**

# **Below average**

- 1 Why does a moving charge experience a force when placed in a magnetic field?
- Write the expression, in a vector form, for the Lorentz magnetic force due to a charge moving with velocity in a magnetic field. What is the direction of the magnetic force?
- 3 Define one tesla using the expression for the magnetic force acting on a particle of charge q moving with velocity  $\vec{j}$  in a magnetic field  $\vec{j}$ .
- 4 A beam of α-particles projected along +x-axis, experiences a force due to a magnetic field along the +y-axis. What is the direction of the magnetic field?



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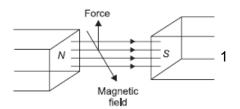
- A long straight wire carries a steady current *l* along the positive y-axis in a coordinate system. A particle of charge +*Q* is moving with a velocity along the *x*-axis. In which direction will the particle experience a force?
- In a certain region of space, electric field and magnetic field are perpendicular to each other.

  An electron enters in the region perpendicular to the directions of both and and moves undeflected. Find the velocity of the electron.
- 7 An electron and a proton moving with the same speed enter the same magnetic field region at right angles to the direction of the field. For which of the two particles will the radius of circular path be smaller?
- 8 Write the expression for the magnetic moment of a circular coil of area A carrying a current I, in a vector form.
- 9 Magnetic field lines can be entirely confined within the core of a toroid, but not within a straight solenoid. Why?
- 10 Using the concept of force between two infinitely long parallel current carrying conductors, define one ampere of current.
- 11 Which has greater resistance (a) milliammeter or ammeter (b) milliammeter or voltmeter?
- 12 A voltmeter, an ammeter and a resistance are connected in series with a battery. The voltmeter gives same deflection but the deflection of ammeter is almost zero. Explain why?
- 13 State the law used to determine the direction of magnetic field at the centre of current carrying circular coil.

# **Average**

- 14 A narrow beam of protons and deuterons, each having the same momentum, enters a region of uniform magnetic field directed perpendicular to their direction of momentum. What would be the ratio of the radii of the circular paths described by them?
- 15 Write two properties of a material used as a suspension wire in a moving coil galvanometer.

16 A charged particle enters into a uniform magnetic field and experiences an upward force as indicated in the figure. What is the charge sign on the particle?



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- 17 How does the magnetic moment of an electron in a circular orbit of radius *r* and moving with a speed v change, when the frequency of revolution is doubled?
- 18 A current carrying loop is free to turn in a uniform magnetic field B. Under what conditions, will the torque acting on it be (i) minimum and (ii) maximum?
- 19 Write two factors by which voltage sensitivity of a galvanometer can be increased.
- 20 An ammeter and a milliammeter are converted from the same galvanometer. Out of the two, which current measuring instrument has higher resistance?
- 21 What is the advantage of using radial magnetic field in a moving coil galvanometer?
- 22 Why is it necessary for voltmeter to have a high resistance?
- 23 What is figure of merit of a galvanometer?
- 24 Define gyromagnetic ratio.
- 25 Can we decrease the range of an ammeter?

# **Above Average**

- 26 Why can a galvanometer not be used as such to measure current in a given circuit? Write two reasons.
- 27 An electron does not suffer any deflection while passing through a region of uniform magnetic field. What is the direction of the magnetic field?
- What is the direction of the force acting on a charged particle q, moving with a velocity  $\overline{\phantom{a}}$  in a uniform magnetic field  $\overline{\phantom{a}}$ ?
- 29 A proton is moving along + ve x-axis in the presence of uniform magnetic field along + ve y-axis. What is the direction of the force acting on it?
- When a charged particle moving with velocity is subjected to magnetic field, the force acting on it is non-zero. Would the particle gain any energy?
- 31 Write two properties of a material used as a suspension wire in a moving coil galvanometer.
- Two protons moving with velocities v and 2v enter with the same magnetic field perpendicularly. Compare the radii of their paths and the time periods.
- 33 An electron and a proton, moving parallel to each other in the same direction with equal momenta, enter into a uniform magnetic field which is at right angles to their velocities. Trace their trajectories 1 in the magnetic field.
- 34 Under what conditions will the force exerted by the magnetic field on a charged particle be (i) maximum and (ii) minimum?
- 35 Which one of the following will experience maximum force, when projected with the same velocity 'v' perpendicular to the magnetic field 'B': (i) α-particle, and (ii) β-particle?