		CODE	**055**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II: (2021-2022)** **ACCOUNTANCY** **CLASS: XI** **Maximum Marks:20**	
1.		Which of the following is not a limitation of accounting? (a) Based on accounting conventions (b) Evidence in legal matters (c) Incomplete information (d) Omission of qualitative information	1
2.		Last step of accounting process is: (a) Providing information to various parties who are interested in business enterprise. (b) Recording transactions in the books. (c) To make summary in the form of financial statements. (d) To classify the transactions under separate heads in the ledger.	1
3.		Accrual concept is based on: (a) Matching Concept (c) Dual Aspect Concept (b) Cost Concept (d) Going Concern Concept	1
4.		What shall be the amount of Capital if Cash is ₹ 5,000; Furniture ₹ 12,000; Stock ₹ 30,000 and Creditors ₹ 6,000? (a) ₹ 53,000 (c) ₹ 47,000 (b) ₹ 41,000 (d) ₹ 50,000	1
5.		Sold goods worth list price of ₹ 8,000 at 10% trade discount and 2% cash discount. 25% received at the time of transaction only. The amount posted to discount account will be: (a) ₹ 36 on debit side (c) ₹ 144 on credit side (b) ₹ 40 on credit side (d) ₹ 144 on debit side	1
6.		Which of these is not a fundamental accounting assumption? (a) Going concern (c) Consistency (b) Accrual (d) Materiality	1
7.		The owner of the firm records his medical expenses in the firms' income statement. Indicate the principle that is violated. (a) Cost Concept (c) Prudence (b) Full disclosure (d) Entity concept	1
8.		Prove that the accounting equation is satisfied in all the following transactions of Sudhir: (a) Started business with Cash ₹ 50,000 and goods ₹ 20,000. (b) Bought goods for Cash ₹ 15,000 and on credit for ₹ 10,000. (c) Goods costing ₹ 24,000 sold at a profit of 33.3 %. Half the payment received in cash.	3
9.		Explain the following terms with example. (a) Revenue (c) Deferred Revenue Expenditure (b) Capital Receipts (d) Intangible Assets	(1+1+1+1)
10.		Journalise the following transactions in the books of Radha Kamal & Sons, timber merchants, giving suitable narrations: (a) Received a Cheque from J. Peterson ₹ 5,450. Allowed him discount ₹150. Cheque is immediately deposited into bank. (b) Returned goods to Sudershan of the value of ₹ 350. (c) Issued a Cheque in favour of M/s Karanvir Timber Co. on account of the purchase of Timber of ₹ 7,500. (d) Purchased machinery for ₹ 50,000 by cheque and installation charges of machinery ₹ 2,500 paid in cash. (e) Purchased goods for ₹ 1,00,000 from Ajay and supplied it to Vijay for ₹ 1,20,000.	(1+1+1+1+2)

Code 044

BURNPUR RIVERSIDE SCHOOL
ASSIGNMENT-II : (2021-2022)
BIOLOGY
CLASS: XI

Maximum Marks:20

1. **Read the passage given below and answer the following questions:** 1x4

Bryophytes are distributed throughout the world, from polar and alpine regions to the tropics. Water must, at some point, be present in the habitat in order for the sperm to swim to the egg. Bryophytes do not live in extremely arid sites or in seawater, although some are found in perennially damp environments within arid regions and a few are found on seashores above the intertidal zone. A few bryophytes are aquatic. Bryophytes are most abundant in climates that are constantly humid and equable. The greatest diversity is at tropical and subtropical latitudes. Bryophytes (especially the moss Sphagnum) dominate the vegetation of peatland in extensive areas of the cooler parts of the Northern Hemisphere.

The following questions are multiple choice questions. Choose the most appropriate answer:

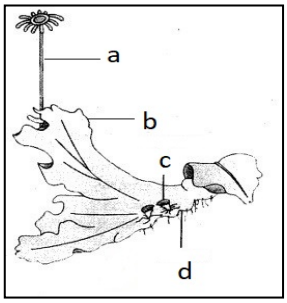
i) In Bryophytes the adult plant body is
A) Epiphyte B) Sporophyte C) Gametophyte D) Sporophyll

The following question have two statements - one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer to this question from the codes (a), (b), (c) and (d) as given below:
A) Both A and R are true, and R is correct explanation of the assertion.
B) Both A and R are true, but R is not the correct explanation of the assertion.
C) A is true, but R is false.
D) A is false, but R is true.

ii) Assertion: Lichens bears great ecological importance.
Reason: They decompose other Bryophytes making the substrate suitable for the growth of the higher plants.

iii) Examine the figure and select the correct option of four parts (a,b,c,d)

	a	b	c	d
A)	Archiegoniophore	Female thallus	Gemma	Rhizoids
B)	Archiegoniophore	Female thallus	Bud	Foot
C)	Seta	Sporophyte	Protonema	Rhizoids
D)	Antheridiophore	Male thallus	Globule	Roots



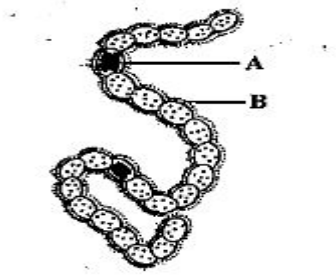
iv) Match and find the correct combination:

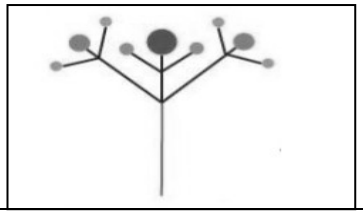
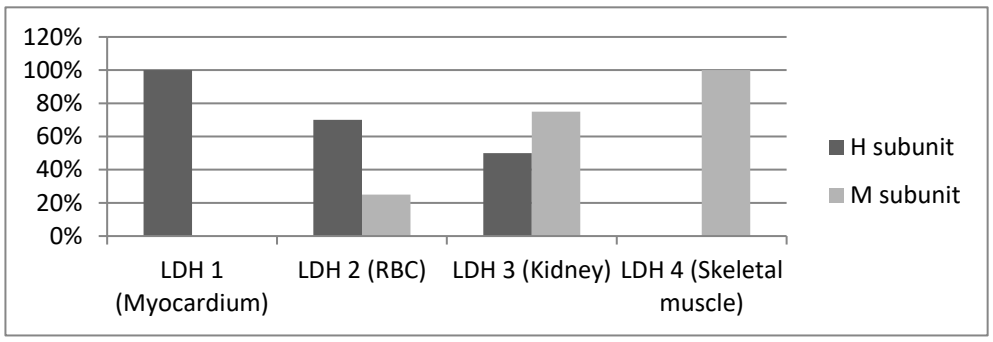
	I	II
a.	Gracilaria	i. Biflagellate spores
b.	Ectocarpus	ii. Biflagellate antherozoids
c.	Marchantia	iii. Carpogonium
d.	Cycas	iv.Multiciliated male gametes
		v. Elaters

A) a.-i, b.-iii, c-ii, d.-iv
B)a.iii, b-i, c.-ii, d.-iv
C) a-iii, b.-v, c.-ii, d.-i
D) a.iii, b-iv, c.-v, d.-i

2. **Read the passage given below and answer the following questions:** 1x4

This is a story of a desert community in the canyonlands area of Utah, USA. This dryland community comprising saltbush, Pinyon pine, Utah juniper, Indian ricegrass and all the animals it supports depend on the pioneer role of a microbial community termed the cryptobiotic crust (also known as microbiotic or cryptogamic crust). These microbial communities initially form an inconspicuous grey-brown covering of the sand surface ,

		consisting of fungi, cyanobacteria and lichens, but in later stages of development (after 50 years or more) the crusts form small "humps" on which mosses grow. The growth of all these pioneer organisms contributes organic matter which aids water retention and paves the way for growth of higher plants. Lichens, which consist of a fungal tissue containing either green algae or cyanobacteria as the photosynthetic partner, play a vital role in colonisation of the bare sand. In this case the lichens contain cyanobacteria (bottom centre and bottom left) which fix atmospheric nitrogen (N2) gas into amino acids and thus progressively enrich the soil with nitrogen for plant growth. The filamentous cyanobacteria also secrete a mucilaginous sheath which helps to bind sand particles together.	
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	i)	Choose the correct option to fill the gap: Lichen is a symbiotic association. Fungal component can be termed as_____. A) Phycobiont B) Mycobiont C) Cryptobiotic D) Mycellium.	
	ii)	Cell division of blue green algae is similar to that of A) Bacteria B) Green algae C) Brown algae D) Red algae	
		The following question have two statements - one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer to this question from the codes (a), (b), (c) and (d) as given below: A) Both A and R are true, and R is correct explanation of the assertion. B) Both A and R are true, but R is not the correct explanation of the assertion. C) A is true, but R is false. D) A is false, but R is true.	
	iii)	Assertion: Algin which is a hydrocolloid produced by some brown algae, used commercially. Reason: It shows water retaining property and used to make ice creams.	
	iv)	Identify which is the incorrect option related to the following diagram of *Nostoc*. A) 'A' structure in the picture helps to fix nitrogen, which may play a vital role in modern agro economy. B) 'B' is gelatinous sheath which prevent mixing of photosystem I with photosystem II. C) 'B' is a mucilagenous sheath which help to bind with particles of sand in a desert community of cryptobiotic crust. D) 'A' is heterocyst which has enzyme nirogenase.  	
3.		**Read the passage given below and answer the following questions:** Annelid, phylum name Annelida, also called segmented worm, any member of a phylum of invertebrate animals that are characterized by the possession of a body cavity (or coelom), movable bristles (or setae), and a body divided into segments by transverse rings, or annulations, from which they take their name. The coelom is reduced in leeches, and setae are lacking a few specialized forms, including leeches. A major invertebrate phylum of the animal kingdom, the annelids number more than 9,000 species distributed among three classes: the marine worms (*Polychaeta*), which are divided into free-moving and sedentary, or tube-dwelling, forms; the earthworms (*Oligochaeta*); and the leeches (*Hirudinea*).	1x4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	i)	Heart to pump blood evolved for the first time in A) annilids B) arthropods C) nematode D) platyhelminth.	
	ii)	Haemocoel occurs in A) earthworm B) hydra C) cockroach and pila D)leech	
	iii)	Annelids have A) Tube-within-a-tube plan, unsegmented body and haemocoel B) Blind sac plan, segmented body and true coelom C)Tube-within-a-tube plan, metameric segmentation and true coelom D) Tube-within-a-tube plan, metameric segmentation and enterocoelom.	

	iv)	Sponges and coelenterates resemble each other in being A) monoblastic and acoelomate, B) diploblastic and acoelomate, C) triploblastic and acoelomate, D) triploblastic and pseudocoelomate.	
4.		**Read the passage given below and answer the following questions:** If the axis is short or stunted, the flowers arise from a common point and appear to be at approximately the same level. This pattern, called an umbel, is actually a flattened raceme because the internodes of the axis, or peduncle (the point of origin of the leaves and flower axes), are shortened so that the pedicels are of the same length (e.g., the carrot family). A head is a raceme in which the peduncle is flattened and the flowers are attached directly to it (e.g., aster family, Asteraceae). This results in a grouping of small flowers in such a way as to appear as a single flower. In many members of the Asteraceae (e.g., sunflowers, Helianthus annuus), for instance, the outer (or ray) flowers have a well-developed zygomorphic corolla, and the inner (disk) flowers have a small actinomorphic corolla. The inner disk flowers generally are complete flowers, and the ray flowers generally are sterile.	1x4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	i)	In a raceme the flower arrangement is A) Basiseptal B) Centripetal C) Acropetal D) Centrifugal	
	ii)	Arrangement of flowers on the floral axis is A) Inflorescence B) Phyllotaxy C) Placentation D) Corymb.	
	iii)	Hypanthodium inflorescence is found in A) Coriender B) Sunflower C) Cauliflower D) Fig	
	iv)	Identify the type of inflorescence in the following picture:  A) Racemose B) Cymose C) Spike D) Hypanthodium	
5.		**Read the passage given below and answer the following questions:** Lactate dehydrogenase (LDH) catalyzes the conversion of lactate to pyruvate. There are five different forms of LDH can be found. They are distinguished by slight differences in their structure. These are LDH-1, LDH-2, LDH-3, LDH-4, and LDH-5. Different LDH types are found in different body tissues. **Now study the graph and choose the appropriate answers from the given multiple choice questions:**  	1x4
	i)	Different forms of LDH are commonly called as _____ of each other. A) coenzyme B) isoenzymes C) apoenzymes D)epienzymes	
	ii)	In the subtypes of LDH4, amount of H subunit is _____. A) 25 % B) 50 % C) 75% D) 20%	
	iii)	In which tissue as M subunit is absent, cannot show fatigue at all? A) Hepatocytes B) Renal tissue C) Bicep muscle D) AV Node	
	iv)	An organic substance essential for activity of an enzyme is A) coenzyme B) isoenzymes C) apoenzymes D) epienzymes	

		CODE	**054**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II (2021-2022)** **BUSINESS STUDIES** **CLASS :XI** **Maximum Marks: 20**	
		General instructions: • Read the following passages and answer the questions by choosing the most appropriate option.	
1.		Nikhil wants to start a wholesale business of stationery items. But he is hesitating as it will involve hindrances related to finding consumers, moving goods from place of production to market, storing goods because of time gap between production and consumption, risk of theft, fire, accidents, procurement of capital to finance above activities, providing information to the consumers about products etc. He approaches his friend Anant to discuss his problem. Anant, who himself imports the electric appliances for the purpose of exporting them to other countries, advises Nikhil to carry on with his plan and explains to him various functions performed by the second limb of business i.e., Commerce. Anant elaborates on various advantages of 'trade' and 'auxiliaries to trade'. After getting convinced by the advice given by Anant, Nikhil starts the business named Nikhil Ltd. and finds no major problems at all in converting his desire into a business venture. Nikhil gets his company registered under the Companies Act 2013.	
	1.1	Which of the following part of commerce exclusively helps in the process of trading the goods and services? (a) Trade (b) Auxiliaries to trade (c) Business (d) Employment	1
	1.2	Choose the type of trade under which Anant was doing his business: (a) Internal trade (c) Auxiliaries to trade (b) External trade (d) None of the above	1
	1.3	Which of the following service helps Nikhil to remove the hindrance of storing the stationery items? (a) Warehousing (b) Transportation (c) Insurance (d) Banking	1
	1.4	Which of the following service helps Nikhil to remove the hindrance of place? (a) Banking (b) Insurance (c) Warehousing (d) Transportation	1
2.		'A', 'B', 'C', 'D' and 'E' are partners in partnership firm. The firm has different types of partners. Mr. A has contributed capital and participates in the management of firm. He shares profits and losses and is liable to an unlimited extent to the creditors of the firm. Mr. B has contributed capital and shares its profits and losses. He also has unlimited liability but he does not take part in day to day activities of business. Association of Mr. C is not known to the general public but in all other aspects he is like an active partner. Mr. D has allowed the firm to use his name as he enjoys good reputation among clients but he does not either contribute capital or take part in the management. Master 'E', 15 years of age is entitled to the benefits of partnership with mutual consent of all their members. He is not eligible to take part in management of firm and shares only profits and not losses of the firm.	

	2.1	How many partners do the firm has? (a) 4 (b) 5 (c) 3 (d) 2	1
	2.2	Who is the active partner? (a) A (b) B (c) C (d)D	1
	2.3	Who is the sleeping partner in the firm? (a) A (b) B (c) C (d)E	1
	2.4	What kind of partner is Mr. C? (a) Secret partner (b) Active partner (c) Sleeping partner (d) Minor partner	1
3.		With Enactment of LIC Act, 1956, an autonomous body, Life Insurance Corporation of India was formed. The act defines its powers, duties and functions. It has a separate legal entity. It is fully owned by government. It has independent financial policy and can raise funds by borrowing from general public and government. However it is not a subject to any budgetary accounting or audit control like Railways. Its annual report is presented in parliament every year.	
	3.1	Which type of public sector enterprise referred in above case? (a) Public corporations (c) Departmental undertaking (b) Government company (d) Joint ventures	1
	3.2	Under which of the following act it is formed? (a) Government Company Act (c) Partnership Act 1932 (b) LIC Act 1956 (d) Companies Act 1913	1
	3.3	Identify the Statutory Corporation from the following : (a) ONGC (b) SAIL (c) Indian railways (d) Doordarshan	1
	3.4	Choose the correct feature of statutory corporation mentioned above: (a) Fully financed by the Government (b) Formation of passing an Act in the Parliament (c) Ministerial control (d) Separate Legal Entity	1
4.		Identify the form of public sector enterprise in the following cases.	
	4.1	It is under the control of concerned minister of department: (a) Government company (c) Statutory corporation (b) Departmental undertaking (d) None of the above	1
	4.2	It enjoys maximum autonomy in all management activities: (a) Government company (c) Statutory corporation (b) Departmental undertaking (d) None of the above	1
	4.3	LIC and Air India are the examples of this form of enterprise: (a) Government company (c) Statutory corporation (b) Departmental undertaking (d) Global enterprise	1
	4.4	This enterprise is most suitable when national security is concerned: (a) Departmental undertaking (c) Joint Ventures (b) Global enterprises (d) Government company	1
5.		Identify the following cases as traits of business, profession and employment.	
	5.1	Hari sells mobile phones on behalf of his employer: (a) Profession (b) Business (c) Employment (d) Retail trader	1
	5.2	A hawker sells toys for children outside a mall: (a) Profession (b) Business (c) Employment (d) Wholesaler	1
	5.3	It requires minimum academic and other qualifications: (a) Profession (b) Business (c) Employment (d) Trader	1
	5.4	Dhruv is the manager of a Mobile company: (a) Profession (b) Business (c) Employment (d) Wholesale Trader	1

		CODE	**043**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II : (2021-22)** **CHEMISTRY** **CLASS: XI** **Maximum Marks:20**	
1.		**Read the passage given below and answer the following questions:** A mole is collection of 6.022×10^{23} particles and the number 6.022×10^{23} is called Avogadro number. The mass of this number of atoms in an element is equal to its gram atomic mass and mass of this number of molecules in a compound is equal to its gram molecular mass. The volume occupied by this number of molecules of a gas at N.T.P is 22.4L. When 6.022×10^{23} molecules of a substance are dissolved in 1L solution, the solution is known as 1 molar solution.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	The mass of 10 molecules of naphthalene ($C_{10}H_8$) is (a) 2.12×10^{-22}g (b) 2.12×10^{-21}g (c) 2.12×10^{-23}g (d) 1280g	
	(ii)	Suppose the chemists would have choosen 10^{20} as the number of particles in a mole, the mass of 1mole of oxygen gas would be (a) 5.32×10^{-43}g (b) 5.32×10^{-3}g (c) 5.32×10^{-23}g (d) 5.32×10^{3}g	
	(iii)	One million atoms of silver (atomic mass=107.81) atoms weigh (a) 1.79×10^{-16}g (b) 3.58×10^{-16}g (c) 3.58×10^{-6}g (d) 1.79×10^{-6}g	
	(iv)	What is the volume of 11g carbon dioxide gas? (a) 5.6ml (b) 22.4ml (c) 5.6L (d) 22.4L	
2.		**Read the passage given below and answer the following questions:** The earlier method for determining the molecular weight of proteins was based on chemical analysis. The following compositions of proteins were found: Haemoglobin : 0.335% Fe Cytochrome protein : 0.376% Fe Peroxidase enzyme : 0.29% Se	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	If haemoglobin contains 4 atoms of iron, then approximate molecular mass of haemoglobin is (Atomic mass of Fe= 55.85) (a) 16700u (b) 33400 u (c) 66800u (d) 1670u	
	(ii)	The mole % of Se in the enzyme peroxidase is (Atomic mass of Se= 78.96) (a) 2.16×10^{-3} (b) 2.7×10^{5} (c) 3.67×10^{-3} (d) 1.83×10^{-3}	
	(iii)	If the cytochrome protein contains one atom per molecule then the molecular mass of protein is (a) 14850u (b) 29600u (c) 32960u (d) 12840u	
	(iv)	How many moles of iron are present in 1mg of haemoglobin (assuming amolecule of haemoglobin contains 4 atoms of iron) (a) 1.50×10^{-8} (b) 6.0×10^{-8} (c) 3.0×10^{-8} (d) 1.875×10^{-8}	
3.		**Read the passage given below and answer the following questions:** The characteristics of an orbital are expressed in terms of three quantum numbers called principal (n), azimuthal (l) and magnetic quantum number (m_l). These numbers are obtained from the solutions of the Schrodinger wave equation. Further, to represent the spin (rotation) of the electron about its own axis, a fourth quantum number called spin quantum number has been introduced. Thus a set of four quantum numbers which give us complete information about all the electrons present in an atom is called the quantum numbers.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	An electron is in one of the 3d orbitals. What are the possible values of n, l and m_l for this electron? a) n=3, l=0, m_l=0 b) n=3, l=2, m_l=-2 c) n=3, l=1, m_l=1 d) n=4, l=2, m_l=0	
	(ii)	If an atom has five unpaired electrons, what is likely to be the total spin of electron? a) 1 b) 2 c) 2.5 d) 5	

	(iii)	Total number of orbitals associated with third shell will be a) 2 b)3 c) 4 d) 9	
	(iv)	The number of radial nodes for 3p orbital is a) 1 b) 2 c) 3 d) 4 **OR** The number of angular nodes for 4d orbital is a) 1 b) 2 c) 3 d) 4	
4.		**Read the passage given below and answer the following questions:** The Aufbau principle and the electronic configuration of atoms provide a theoretical foundation for the periodic classification. The element in a vertical column exhibit similar chemical behavior. This similarity arises because these elements have the same number and same distribution of electrons in their outermost orbits. Thus elements are classified into four blocks that are s, p, d and f- blocks depending on the type of atomic orbitals. **In these questions a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the following choices.** A) Both assertion and reason are correct statements and reason is the correct explanation of the assertion. B) Both assertion and reason are correct statements but reason is not the correct explanation of the assertion. C) Assertion is correct but reason is wrong. D) Assertion is wrong but reason is correct.	1×4
	(i)	**Assertion:** He and Be have similar outer electronic configuration of the type ns^2. **Reason:** Both are chemically inert and present in same group.	
	(ii)	**Assertion:** The element with electronic configuration $[Xe]4f^15d^16s^2$ is a f-block element. **Reason:** The last electron enters the f-orbital.	
	(iii)	**Assertion:** Each series of d-block contains ten elements. **Reason:** d-subshell can have a maximum of ten electrons.	
	(iv)	**Assertion:** The elements having $1s^22s^22p^63s^2$ and $1s^22s^2$ belong to same group. **Reason:** The have same number of valence electrons. **OR** **Assertion:** Electron gain enthalpy becomes less negative as we go down a group. **Reason:** Size of the atom increases on going down the group and the added electron would be further from the nucleus.	
5.		**Read the passage given below and answer the following questions:** In 1924, de-Broglie proposed that every particle possesses wave properties with a wavelength, λ given by $\lambda = \frac{h}{mv}$ where m is the mass of particle, v is the velocity and h is Plank's constant. The de-Broglie prediction was confirmed experimentally when it was found that an electron beam undergoes diffraction, a phenomenon characteristic of waves. The de-Broglie wavelength can be estimated by measuring kinetic energy of an electron accelerating by a potential V as: $\frac{1}{2}mv^2 = eV$ where $1eV = 1.6\times10^{-19}$ C, $h = 6.6\times10^{-34}$ J.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	The wavelength of particles constituting a beam of helium atoms moving with a velocity of 2.0×10^4 ms^{-1} is (a) 4.99pm (b) 49.9pm (c) 499nm (d) 499pm	
	(ii)	If λ is the wavelength associated with the electron in the 4^{th} circular orbit of hydrogen atom, then radius of the orbit isπ (a) $\frac{\lambda}{2\pi}$ (b) $\frac{\lambda}{\pi}$ (c) $\frac{2}{\pi\lambda}$ (d) $\frac{2\pi}{\lambda}$	
	(iii)	The proton and He^{2+} are accelerated by the same potential, then their de-Broglie wavelength wavelength λ_{He2+} and λ_P are in the ratio of ($m_{He2+} = 4m_P$): (a) $\frac{1}{\sqrt{2}}$ (b) $\frac{1}{2\sqrt{2}}$ (c) $2\sqrt{2}$ (d) $\frac{1}{2}$	
	(iv)	The mass of photon moving with velocity of light having wavelength same as that of an α-particle (mass=6.6×10^{-27} Kg) moving with velocity of 2.5×10^2 ms^{-1} is (a) 7.92×10^{-21}Kg (b) 5.5×10^{-33}Kg (c) 5.65×10^{-31}Kg (d) 7.92×10^{-28}Kg	

	CODE	**083**
	BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II: (2021-2022)** **COMPUTER SCIENCE** **CLASS: XI** **Maximum Marks:20**	
	All questions are compulsory:	
1.	Xerox Technologies deals in hardware components required for assembling computer systems in the Nehru Place market. They provide reliable and efficient data storage devices to their customers. Six storage devices in which they deal are described below. Name the storage device being described and also list the appropriate category of storage. (a) Optical media which use one spiral track; red lasers are used to read and write data on the media surface; makes use of dual-layering technology to increase storage capacity. (b) Non-volatile memory chip: contents of the chip cannot be altered; it is often used to store the start-up routines in a computer (e.g., the BIOS). (c) Optical media which use concentric tracks to store data; this allows read and write operations to be carried out at the same time. (d) Non-volatile memory device which uses flash memories (which consist of millions of transistors wired in a series on a single circuit board). (e) Optical media which use blue laser technology to read and write data on the media surface. (f) Magnetic disc with very large storage capacity; can be used to store vast amounts of data; mostly fixed in computer cases and serves as the main storage device.	**1X6=6**
2.	World Class Telecom is planning to have a videoconference with its associates across several nations. In its videoconferencing area, there are some microphones, speakers and webcams. Describe the purpose of each of the devices.	**3**
3.	ABC School newsletter contains text and images in it. The head teacher needs one thousand copies of this newsletter. Give four reasons why a laser printer should be used rather than an inkjet or a dot matrix printer.	**3**
4.	Rahul wants to evaluate and know how a computer converts decimal to binary and vice-versa for evaluation of a particular mathematical problem. Please convert the following and help him solve his cause. a) $(10110110)_2 \rightarrow (\quad)_{10}$ b) $(564.25)_{10} \rightarrow (\quad)_2$ c) $(111000.11)_2 \rightarrow (\quad)_{10}$ d) $(763.125)_{10} \rightarrow (\quad)_2$	**1X4=4**
5.	Nisha wants to find the relationship between Octal, Binary and Hexadecimal number system through some conversions. Suggest her the suitable method to accomplish the same. a) $(FACE)_{16} \rightarrow (\quad)_8$ b) $(1266)_8 \rightarrow (\quad)_{16}$ c) $(CAFE)_{16} \rightarrow (\quad)_2$ d) $(12776)_8 \rightarrow (\quad)_2$	**1X4=4**

		CODE	**030**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT II : (2021-2022)** **ECONOMICS** **CLASS:XI** **Maximum Marks: 20**	
		General Instruction: Read the sources given below and answer the MCQ's that follows by choosing the most appropriate option. Answer any four MCQ's out of five from each case based question.	
1.		In every research studies, the scientists want to identify the truth or they wish to develop meaningful insights into the matter. In order to make any valid conclusion about the research problem or hypothesis, we need valid evidence. The researcher collected the Primary data through surveys, experiments, interviews etc. and it is considered to be the best research methodology as the data are collected from original source. For example, in many psychological experiments the investigators often collect primary data through lab experiments, questionnaire etc. to understand the relationship between the variables under study. The data collected by someone other than the user is called secondary data. It includes various published or unpublished data, books, magazines, newspaper, trade journals etc. Secondary data analysis affords researchers the opportunity to investigate research questions using large-scale data sets that are often inclusive of under-represented groups, while saving time and resources. Quantitative secondary research is much more common than qualitative secondary research. When conducting secondary research, authors may draw data from published academic papers, government documents, statistical databases, and historical records.	
	1.1	Valid evidences are required for any valid a)experiments b) conclusions c) research d) work.	1
	1.2	Primary data are collected from ..... source. a) any b) published c) original d) artificial	1
	1.3	For dealing with large scale data, the most suitable method of collection of data is a) primary b) secondary c) tertiary d) any one of a or b .	1
	1.4	The resources are saved by collecting the data through a) primary method b) secondary method c) any method d) mixture of both a and b.	1
	1.5	Write any one difference between primary and secondary data.	1
2.		Statistics is the study and manipulation of data, including ways to gather, review, analyse and draw conclusions from data. The two major areas of statistics are descriptive and inferential statistics. Statistics can be used to make better-informed business and investing decisions. Psychologists use statistics to assist them in analysing data and also to give more precise measurements to describe whether something is statistically significant. Statistics is a mathematical science including methods of collecting, organising and analysing data in such a way that meaningful conclusions can be drawn from them. Inferential statistics is a scientific discipline that uses mathematical tools to make forecasts and projections by analysing the given data. Statistical analysis is the collection and interpretation of data in order to uncover patterns and trends. It is a component of data analytics. Statistical analysis can be used in situations like gathering research interpretations, statistical modelling or designing surveys and studies. The types of data analysis are Descriptive Analysis, Diagnostics Analysis, Perspective Analysis and Predictive Analysis.	
	2.1	Statistics is ..... science. a) psychological b) economical c) mathematical d) physiological	1
	2.2	Statistics is the method of collection of data, organisation of data and ..... of data. a) gathering b) analysis c) externalities d) internalities.	1
	2.3	How many types of data analysis are there? a) Two b) Three c) Four d) Five	1

	2.4	Which of the following is not the type of data analysis? a) Descriptive b) Diagnostics c) Predictive d) Prospective	1
	2.5	Statistics in singular sense implies a) statistical methods b) statistical data c) aggregate of facts d) multiplicity of causes	1
3.		Microeconomics is the branch of economics that considers the behaviour of decision takers within the economy, such as individuals, households and firms. Microeconomics contrasts with the study of macroeconomics, which considers the economy as a whole. Fundamental concepts of demand and supply, rational choice, opportunity costs, efficiency, incentives, production, profits, competition, monopoly, externalities and public goods will help to understand the world. Microeconomics studies the decisions of individuals and firms to allocate resources of production, exchange and consumption. It deals with prices and production in single markets and the interaction between different markets but leaves the study of economy wide aggregates to macroeconomics. Microeconomics is concerned with the study of economic behaviour of individual economic units. It is useful in framing economic policies such as taxation policy, public expenditure policy, price policy etc.	
	3.1	Macroeconomics is the study of a)individuals b) groups c) economy as a whole d) singles.	1
	3.2	Microeconomics is the study of a) individuals b) groups c) economy as a whole d) differences.	1
	3.3	Allocation of resources is the study under a) microeconomics b) macroeconomics c) welfare economics d) social economics	1
	3.4	Aggregate demand is the study under ..... and market demand is the study under ..... a) microeconomics, macroeconomics b) macroeconomics, microeconomics c) microeconomics, microeconomics d) macroeconomics, macroeconomics	1
	3.5	Different laws are formulated under a) microeconomics b) macroeconomics c) both in micro and macroeconomics d) neither micro or macroeconomics	1
4.		Consumer equilibrium is the state of balance obtained by end users of product, which refers to the number of goods and services the consumers can buy with their existing level of income and the prevailing level of cost prices. Consumer's equilibrium permits a consumer to get the most satisfaction possible from his income. There are two alternative approaches namely 'utility analysis' approach and 'indifference curve analysis' approach to attain the state of consumer's equilibrium. According to the law of equi-marginal utility a consumer will be in equilibrium when the ratio of marginal utility of a commodity to its price equals the ratio of marginal utility of other commodity to its price. $MU_x/Pr_x = MU_y/Pr_y = MU_m$. According to IC approach, consumer's equilibrium refers to a situation in which a consumer derives maximum satisfaction, with no intention to change it and subject to given prices and his given income. The point of maximum satisfaction is achieved by studying indifference map and budget line together. The condition of consumer's equilibrium is that a given price line should be tangent to an indifference curve or marginal rate of satisfaction of good X for good Y must be equal to the price ratio of two goods. The second order condition is that indifference curve must be convex to the origin at the point of tangency.	
	4.1	Law of equi-marginal utility is applicable for a) one commodity b) two commodities c) three commodities d) more than one commodity.	1
	4.2	Consumers' equilibrium condition is that the a) slope of total utility curve is equal to the slope of price line b) slope of marginal utility curve is equal to the slope of indifference curve c) slope of total utility curve is equal to the slope of marginal utility curve d) slope of price line is equal to the slope of indifference curve.	1

	4.3	Indifference map is the set of a) price lines b) utility curves c) indifference curves d) budget lines.	1
	4.4	Price line is also known as a) utility curve b) indifference curve c) indifference map d) budget line	1
	4.5	The shape of indifference curve is a)straight line b) concave to the origin c) convex to the origin d) upward sloping	1
5.		Demand implies the quantity of consumers who are willing and able to buy products at various prices during a given period of time. Demand for any commodity implies the consumers' desire to acquire the good, the willingness and ability to pay for it. Demand is always defined in reference to three key factors price, point of time and market place. An effective demand has three characteristics namely desire, willingness and ability of an individual to pay for the product. The law of demand states that quantity purchased varies inversely with price. The assumptions of law of demand are prices of related goods do not change, income of the consumer do not change, tastes and preferences of the consumer remains constant, no change in future expectations. The horizontal summation of individual demand gives rise to market demand. The schedule of market demand can provide the information about total market demand at different prices. It helps the management in deciding how much increase or decrease in the price of the commodity is desirable.	
	5.1	The demand curve is a)positively sloped b) negatively sloped c) horizontal straight line d) vertical straight line.	1
	5.2	Related goods are a) substitutes b) complementary c) both a and b d) neither a nor b.	1
	5.3	..... demand helps the management in deciding the increase or decrease in the price of the commodity. a)individual b) market c) aggregate d) single	1
	5.4	Demand will be effective demand when it is backed by a) price b) purchasing power c) time d) market place.	1
	5.5	Movement along demand curve occurs due to change in a) price of the commodity b) price of related goods c) income of the consumer d) tastes and preferences of the consumers	1

		CODE	**301**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT II : (2021-2022)** **ENGLISH** **CLASS: XI** **Maximum Marks: 20**	
		General Instruction: Answer all the questions. Questions have an internal choice. Marks are indicated against each question.	
1		**Read the source given below and answer the questions that follow:** People said that she had once been young and pretty and had even had a husband, but that was hard to believe. My grandmother, like everybody's grandmother, was an old woman. She had been old and winkled for the twenty years that I had known her. My grandfather's portrait hung above the mantelpiece in the drawing room. **Answer any 4 MCQs by choosing the most appropriate option:** **i) Who is the author of 'The Portrait of a Lady'?** a) Ruskin Bond b) Kushwant Singh c) Naipaul d) Vikram Bhatt **ii) Who is the main character of the chapter?** a) mother b) sister c) grandmother d) daughter **iii) How do you feel about the character of the grandmother in the chapter?** a) emotional b) strong c) selfless d) loving **iv) How did the grandfather in the portrait hang on the wall look like?** a) old, long white beard, worn big turban b) old, skinny, wrinkly c) young, handsome, well-built d) old, well-built **v) How did the grandmother look?** a) old, fat, long b) long, fat, slightly bent c) old, short, slightly bent, fat d) slightly bent, fat	**(1+1+1+1=4)**
2		**Read the source given below and answer the questions that follow:** I knew my cousin Mourad enjoyed being alive more than anybody else who had ever fallen into the world by mistake, but this was more than even I could believe. In the first place, my earliest memories had been memories of horses and my first longings had been longings to ride. This was the wonderful part. In the second place, we were poor. This was the part that wouldn't permit me to believe what I saw. We were poor. We had no money. Our whole tribe was povertystricken. Every branch of the Garoghlanian1 family was living in the most amazing and comical poverty in the world. **Answer any 4 MCQs by choosing the most appropriate option:** **i) No member of the Garoghlanian family could be _____.** a) poor b) rich c) a thief d) crazy **ii) What according to Aram, was his fast longing?** a) to own a horse b) to become rich c) to ride a horse d) to visit a vineyard **iii) Mourad enjoyed being _____ more than anybody else.** a) crazy b) alive c) funny d) insane **iv) What were the hallmarks of the Garoghlanian tribe?** a) trust b) honesty c) both (a) and (b) d) none of these **v) "The Summer of the Beautiful White Horse" is a story of two _____ boys.** a) Armenian b) Arabian c) Assyrian d) African	**(1+1+1+1=4)**

3		**Read the source given below and answer the questions that follow:** Now she's been dead nearly as many years As that girl lived. And of this circumstance There is nothing to say at all. Its silence silences. **Answer any 4 MCQs by choosing the most appropriate option:** **i) When did the poet's mother die?** a) two years ago b) five years ago c) thirteen years ago d) twelve years ago **ii) Which word is similar to the phrase 'events that change your life, over which you have no control'?** a) silences b) circumstances c) situation d) fact **iii) Which literary device is used in 'its silence silences'?** a) simile b) metaphor c) alliteration d) oxymoron **iv) What does the poet feel in the last phase?** a) pain and contented b) happy and nostalgic c) sad and nostalgic d) pain and nostalgic **v) On which issues do the poet discuss in this poem?** a) life is temporary b) death is a reality c) importance of photographs d) all of the above	**(1+1+1+1=4)**
4		**Read the source given below and answer the questions that follow:** The Laburnum top is silent, quite still In the afternoon yellow September sunlight, A few leaves yellowing, allits seeds fallen. Till the goldfinch comes, with a twitching chirrup A suddenness, a startlement, at a branch end. **Answer any 4 MCQs by choosing the most appropriate option:** **i) How was the tree standing in the month of September?** a) still and death-like b) alive c) green and happy d) still and green **ii) What happened to the leaves of the Laburnum tree?** a) they were green b) turned yellow c) fallen down d) new leaves growing **iii) How does the September sunlight appear?** a) bright b) light yellow c) yellow d) red **iv) What role does the tree play for the Goldfinch bird?** a) As a shelter b) As a supporter c) As a means to feed her family d) As a resting place **v) What is the theme of the poem?** a) Repaying relationship between the Laburnum tree and the Goldfinch bird b) Repaying relationship between the Laburnum tree and the baby birds c) Repaying relationship between the Goldfinch bird and the baby birds d) Repaying relationship between the Goldfinch bird and the sky	**(1+1+1+1=4)**
5		**Read the source given below and answer the questions that follow:** It is the engine of her family. She strokes it full, then flirts out to a branch-end Showing her barred face identity mask Then with eerie delicate whistle-chirrup whisperings She launches away, towards the infinite And the laburnum subsides to empty. **Answer any 4 MCQs by choosing the most appropriate option:** **i) What effect does the line 'And the Laburnum subsides to empty' create?** a) It creates the contrast between the liveliness of the tree and its silence	**(1+1+1+1=4)**

		b) It creates the contrast between the change of season c) It creates an opportunity to plant more Laburnum tree d) It creates the scene of the arrival of new bird species on the tree **ii) What Transferred Epithet has been used in the poem?** a) Her barred face identity mask b) Engine of her family c) Sleek as a lizard d) September sunlight **iii) What is the meaning of the word 'eerie'?** a) stripy b) strange c) gentle whisper d) diminishing **iv) Which literary device has been used in the given line -' It is the engine of her family'?** a) simile b) metaphor c) alliteration d) personification **v) Why was the Goldfinch's body barely visible?** a) Due to her dark coloured yellow body b) Because she was small c) Because of the height of the tree d) Because she was brown in colour	

		CODE	**029**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT II : (2021-2022)** **GEOGRAPHY** **CLASS:XI** **Maximum Marks:20**	
1.		**Read the source given below and answer the questions that follows:**	
		P waves are also known as Primary waves. They are longitudinal waves like sound waves in which the movement of the particles is in the direction of the propagation of waves. Their average velocity is 8km per second which is higher than any other waves. P waves can travel through all the mediums including solids and liquids and gases. S waves are known as secondary waves and are transvers like light waves. The movement of the particles is at right angles to the direction of the waves. Their average velocity is 4 km per second. They can travel through solids only and disappear in liquids. L waves are also known as Long waves. They travel along the surface of the earth and are often referred as surface waves.L waves can travel through all the mediums but their average velocity is just 3 km per second. P and S waves are of a class called body waves because they travel through the solid body of the earth. Body waves are distinguished from surface waves, which move along the free upper crust of the earth.	
		Answer the following MCQs by choosing the most appropriate option(Any four):	
	1.1	The fastest earthquake wave is- a)P wave b)L wave c)Love wave d)S wave	1
	1.2	S -waves can travel through- a)solids and liquids b)solids only c)solids,liquids and gases d)liquids only	1
	1.3	Which earthquake wave is most destructive? a)Long wave b)Primary wave c)Secondary wave d)Body wave	1
	1.4	Shadow zone of earthquake is related to- a)pedology b)biology c)seismology d)meteorology	1
	1.5	_____is the slowest seismic wave. a)Primary wave b)Long wave c)Body wave d)Secondary wave	1
2.		**Read the source given below and answer the questions that follows:**	
		A galaxy is formed by accumulation of hydrogen gas in the form of very large cloud which is known as *nebula.* Light travels at the speed of 300,000km. per second. At this speed light travels about 9.461×10^{12}km. in one year. The sun is about 149.6million km from the earth and light takes about 8.311 minutes to travel from the sun to reach the earth. The nearest star, Alpha Centauri is 4.29 light years away from the earth.	
		Answer the following MCQs by choosing the most appropriate option (Any four):	
	2.1	A _____year is the distance travelled by light in one year. a)leap year b)light year c)sun year d)nebula year	1
	2.2	A galaxy is related to- a)accumulation of gas. b)accumulation of sand. c)accumulation of silt. d)construction of buildings.	1
	2.3	The planets are formed from the stars which are localised lumps of gas within a- a)light year b)satellite c)nebula d)batholith	1
	2.4	The nearest star, _____ is 4.29 light years away from the earth. a)sun b)alpha centauri c)akash ganga d)nebula	1
	2.5	Light takes about 8.311 minutes to travel from the _____ to earth. a)moon b)venus c)proxima centauri d)sun	1
3.		**Read the source given below and answer the questions that follows:**	
		India is situated in the continent of Asia. It lies between *latitudes 8°4′ N and 37°6′N* and longitudes *68°7′ E and 97°25′ E*. India is divided by Tropic of Cancer 23°30′ N in almost two equal parts. The upper half has a temperate cooler climate and the lower half has a tropical climate. India is enormous in size, and is the 7th largest country in the terms of landmass. The total area of India is *3.28* million square km. India also accounts for 2.4% of the area on the globe, with a land boundary of *15,200 km* and the coastal	

		boundary that includes the islands is 7,516 km. When we see the outline of India on the map, we can easily identify the natural features like young fold mountains bordering the country in the northern, northwestern and northeastern borders of India.	
		Answer the following MCQs by choosing the most appropriate option(any four):	
	3.1	India lies in which hemisphere? a)Northern and eastern hemisphere b)Northern and southern hemisphere c)Northern and western hemisphere d) Southern and eastern hemisphere.	1
	3.2	Which one of the following state is experience cooler temperate climatic condition? a)Tamil Nadu b)Karnataka c)Himachal Pradesh d)Kerala	1
	3.3	The total area of India is _____. a)3.82 million square km b)2.38 million square km c)8.32 million square km d)3.28 million square km	1
	3.4	Which mountain bordered India from northern side? a)Satpura b)Himalaya c)Vindhya d)Aravalli	1
	3.5	What is the time lag between western most and eastern most point of India? a)3Hours b)4Hours c)2Hours d)1Hour	1
		Read the source given below and answer the questions that follows:	
4.		The Ganga plain extend between Ghaggar and Teesta rivers. It is spread over the states of north India, Haryana, Delhi, UP, Bihar partly Jharkhand and west Bengal to its East, particularly in Assam lies the Brahmaputra plain. The vast plains have diversed relief features. The northern plains can be divided into four regions. The rivers after descending from the mountains deposit pebbles in a narrow belt of about 8-16 km in width lying parallel to the slopes of the Shiwaliks. It is known as *bhabar*. All the rivers are disappear in the bhabar belt. South of this belt, the streams and the rivers re-emerge and create a wet, swampy and marshy region known as *terai*. this was a thickly forested region full of wildlife. The forest have been cleared to create agricultural land and to settle migrants. The largest part of the northern plain is formed of older alluvium. They lie above the flood plains of the rivers and present a terrace like feature. This part is known as *bhangar.* The soil in this region contains calcareous deposits locally known as Kankar. The newer younger deposits of the flood plain are called *khada*r. They are renewed almost every year and so are fertile.	
		Answer the following MCQs by choosing the most appropriate option.(Any four)	
	4.1	The forests have been cleared to create _____. a)field. b)biosphere reserve. c)agricultural land. d)national park.	1
	4.2	Which part of northern plain is the narrowest part? a)Bhabar b)Terai c)Bhangar d)Khadar.	1
	4.3	Which river is located in eastern India? a)Krishna b)Meghna c)Brahmaputra d)Indus.	1
	4.4	Which part of northern plain is most fertile? a)Khadar b)Bhangar c)Terai d)Bhabar	1
	4.5	Which part of northern plains contain pebbles? a)khadar b)Bhangar c)Terai d)Bhabar	1
5.		**Read the source given below and answer the questions that follows:**	
		The term geography was first coined by Eratosthenese, a Greek scholar (276-194 BC.). The word has been derived from two roots from Greek language geo (earth) and graphy (description), they mean description of the earth. The earth has always been seen as the abode of human beings and thus, scholars defined geography as, “the description of the earth as the abode of human beings”. You are aware of the fact that reality is always multifaceted and the ‘earth’ is also multi-dimensional, that is why many disciplines from natural sciences such as geology, pedology, oceanography, botany, zoology and meteorology and a number of sister disciplines in social sciences such as economics, history, sociology, political science, anthropology etc. study different aspects of the earth’s surface.	

		The study of every subject is done according to some approach. The major approaches to study geography have been (i) Systematic and (ii) Regional. The systematic geography approach is the same as that of general geography. This approach was introduced by Alexander Von Humboldt, a German geographer (1769-1859) while regional geography approach was developed by another German geographer and a contemporary of Humboldt, Karl Ritter (1779-1859).	
		Answer the following MCQs by choosing the most appropriate option(any four):	
	5.1	Who first used the term 'geography'? a)Humboldt b)Ratzel c)Eratosthenes d)Alfred Wegner	1
	5.2	Oceanography is the branch of _____. a)biogeography b)physical geography c)human geography d)social geography.	1
	5.3	Which one of the following feature can be termed as physical feature? a)Port b)Park c)Road d)Plain	1
	5.4	Which one of the following approach is the oldest approach? a)Systematic b)Dualism c)Regional d) Spatial	1
	5.5	Who introduced systematic approach? a)Karl Ritter b)Humboldt c)Galileo d)Herodotus	1

		CODE	**041**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II: (2021 – 2022)** **MATHEMATICS** **CLASS: XI** **Maximum Marks: 20**	
		General Instructions: **1.** All questions are compulsory. 2. Each case study comprises of 5 case-based MCQs. An examinee is to attempt **any 4 out of 5 MCQs**.	
1.		There are two circular field. The arcs of the same length in two circles subtend angles of $\theta_1 = 60^o$ and $\theta_2 = 75^o$ at their respective centres.	
	i)	Represent θ_1 as radian measure a)$(\frac{\pi}{2})^c$ b) $(\frac{\pi}{3})^c$ c) $(\frac{\pi}{4})^c$ d) $(\frac{\pi}{6})^c$	1
	ii)	Represent θ_2 as radian measure a)$(\frac{5\pi}{4})^c$ b) $(\frac{5\pi}{6})^c$ c) $(\frac{5\pi}{12})^c$ d) $(\frac{5\pi}{24})^c$	1
	iii)	The ratio of their radii is a)4:5 b)5:4 c) 3:4 d) 4:3	1
	iv)	The ratio of their areas is a)16:25 b)25:16 c) 9:16 d) 16:9	1
	v)	The ratio of their circumference is a)4:5 b)5:4 c) 3:4 d) 4:3	1
2.		A horse tied to a post by a rope. If the horse moves along a circular path, always keeping the rope tight and describes 88 metres when it traces $\theta = 72^o$ at the centre.	
	i)	Represent θ as radian measure a)$(\frac{2\pi}{3})^c$ b) $(\frac{2\pi}{5})^c$ c) $(\frac{2\pi}{7})^c$ d)$(\frac{2\pi}{9})^c$	1
	ii)	Length of the radius is a)35cm b)70cm c) 50cm d)60cm	1
	iii)	Area of the minor sector a)3008 cm^2 b)3080 cm^2 c) 3800 cm^2 d) 308 cm^2	1
	iv)	Area of the circle a)14005 cm^2 b)15400 cm^2 c) 14500 cm^2 d) 10405 cm^2	1
	v)	Ratio of minor sector and major sector is a) 4:1 b) 1:4 c) 1:2 d) 2:1	1
3.		A man started walking from the Origin of a coordinate system. Towards west man covered $\sqrt{3}$ km and from there towards south he covered 1 km. Let θ be the angle formed by the man, when starting point and finishing point is joined.	
	i)	The value of $sin\theta$ is a) $-\frac{1}{2}$ b) $\frac{1}{2}$ c) $-\frac{\sqrt{3}}{2}$ d) $\frac{\sqrt{3}}{2}$	1
	ii)	The value of $cos\theta$ is a) $-\frac{1}{2}$ b) $\frac{1}{2}$ c) $-\frac{\sqrt{3}}{2}$ d) $\frac{\sqrt{3}}{2}$	1
	iii)	The value of $tan\theta$ is a) $-\frac{1}{2}$ b) $\frac{1}{2}$ c) $-\frac{\sqrt{3}}{2}$ d) $\frac{1}{\sqrt{3}}$	1
	iv)	The value of $sec\theta.cosec\theta$ is a) $-\frac{2}{\sqrt{3}}$ b) $\frac{2}{\sqrt{3}}$ c) $-\frac{4}{\sqrt{3}}$ d) $\frac{4}{\sqrt{3}}$	1
	v)	The radian measure of the angle is a) $(\frac{7\pi}{3})^c$ b) $(\frac{7\pi}{5})^c$ c) $(\frac{7\pi}{6})^c$ d) $(\frac{7\pi}{4})^c$	1
4.		A man started walking from the Origin of a coordinate system. Towards west man covered 4 km and from there towards north he covered 3 km. Let θ be the angle is formed, when starting point and finishing point is joined.	

	i)	The value of $sin\theta$ is a) $-\frac{3}{5}$ b) $\frac{3}{5}$ c) $-\frac{4}{5}$ d) $\frac{4}{5}$	1
	ii)	The value of $cos\theta$ is a) $-\frac{3}{5}$ b) $\frac{3}{5}$ c) $-\frac{4}{5}$ d) $\frac{4}{5}$	1
	iii)	The value of $tan\theta$ is a) $-\frac{3}{4}$ b) $\frac{3}{4}$ c) $-\frac{4}{3}$ d) $\frac{4}{3}$	1
	iv)	The value of $sec\theta.cosec\theta$ is a) $-\frac{25}{12}$ b) $\frac{25}{12}$ c) $-\frac{12}{25}$ d) $\frac{12}{25}$	1
	v)	The radian measure of the angle is a) $(\frac{7\pi}{3})^c$ b) $(\frac{7\pi}{5})^c$ c) $(\frac{7\pi}{6})^c$ d) None of these.	1
5.		There is a signum function $f(x) = \begin{cases} a+bx, x<1 \\ 4 \quad\quad , x=1 \\ b-ax, x>1 \end{cases}$. Functional value at $x=1$ exists and let functional value at $x=1$ is equal to limiting value at $x=1$.	
	i)	The value of $\lim_{x\to 1^+} f(x)$ is a) $a-b$ b) $a+b$ c) $b-a$ d) 2a	1
	ii)	The value of $\lim_{x\to 1^-} f(x)$ is a) $a-b$ b) $a+b$ c) $b-a$ d) 2a	1
	iii)	The value of a is a) 0 b) 1 c) -1 d) ½	1
	iv)	The value of b is a) 0 b) 1 c) -4 d) 4	1
	v)	The value of $b \div a$ is a) 0 b) 4 c) infinity d) Not defined	1

		CODE	**048**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT- II : (2021– 2022)** **PHYSICAL EDUCATION** **CLASS: XI** **Maximum Marks: 20**	
		Read the following passages carefully and choose and write the appropriate answer:	
1.		A teacher in a preschool noticed that a child is not singing along with other children. She is not responding even when her name is called. Then the teacher asked the child to stand next to her and repeat the rhyme along with her, while she prompted her. With effort the child was able to sing like other children of her age.	
	(i)	What do you think the child is suffering from? a) OCD b) SPD c)ODD d)ASD	1
	(ii)	What values are shown by the teacher? a)The values shown by the teacher are compassion who thinks for all the students, kindness, observant. b) The values shown by the teacher are doing their normal duties. c) The values shown by the teacher are compassion for particular student. d) The values shown by the teacher are helps in reducing feeling of depression	1
	(iii)	What type of school is it? a) High school b)CWSN School c)Preschool d) Middle school	1
	(iv)	Which category of disability the child is having? a) Cognitive disability b) Hyperactivity disability c) Arthritis disability d) Sensory processing disability	1
2.		Once upon a time, during an athletic meet in stadium, 8 girls were on starting line ready for the race. With the the sound of whistle, all 8 girls started running. Hardly had they covered 10 to 15 metres, when accidently one girl slipped and fell. Due to pain, the girl started crying. As soon as the other seven girls heard her cry; all of them stopped running, stood for while, turned back, and ran towards her. Suddenly, the girls returned, specified her, joined their hands together, lifted her, walked together and reached the finishing line. The officials were shocked to see such scene and unity. Quite a many eyes were filled with tears.	
	(i)	What morale do you get by reading the above paragraph? a) Unity ,coordination, understanding b) Peace c) Equality d) Enjoyment and understanding	1
	(ii)	What quality girls have shown by walking together? a) For help the needy at the time of crises. b) For enjoyment c) Good behaviour d) For leadership	1
	(iii)	What was so special about the race? a) For championship b) For good result c) Sportsman spirit d) For entertainment	1
	(iv)	Is the decision taken by the participants correct? a) Wrong b) Not fair c) Not justified d) Correct	1
3.		During 1972 Munich Olympics Games 11 players of Israel were shot Dead ruthlessly, during 1936 Berlin Olympic Adolf Hitler refused to honour Jesse Owens, the negro athlete who got 4 gold medals in that Olympic and 3 Olympic games were not held due to World Wars.	
	(i)	Which values of Olympic are hampered in the above mentioned games? a) Fair play b) Free from discrimination and friendship c) Leadership d) Respect	1

	(ii)	Which difference still exists inspite of all trials by the leading countries of world and global leaders ? a) Excellence differences b) Nonethnic differences c) Global differences d) Racial differences	1
	(iii)	What is your message to the sporting arena in this context? a) To take steps to bring the world under one roof. b) To take steps to bring the world under different roof. c) To take steps to bring the world under different organisations. d) To take steps to bring the world under professional organisations.	1
	(iv)	In which year Munich Olympics was held? a) 1956 b) 1966 c) 1972 d)1976	1
4.		In a hockey match two forward players scored equal number of goals. Both of them wants to become best scorer. In the last minute when one of the forward player gets an opportunity to put the ball in the goal, to everyone's surprise, he passes the ball to the other forward player of his team to score.	
	(i)	What does this action of passing on the opportunity to another player depicts? a) Responsibility b) The spirit of sportsmanship c) Game planning d) Confidence	1
	(ii)	What value do you get from the action of the player? a) It is team spirit b) It is game plan c) It is friendship d) It convey the message that team is above the individual or player performance.	1
	(iii)	Who want to become the best scorer in the match? a) Defender b) Goalkeeper c) Striker d) Forward	1
	(iv)	What lesson we have learnt from this game? a) Friendship b) Sportsmanship c) Gameship d) Leadership	1
5.		Risk factor for cardiovascular diseases fall into two categories: • physical activity and level of stress • age and ethnicity These are long term processes that should begin when we are young. It's important to develop heart -healthy habits early in life.	
	(i)	What is cardiovascular disease? a) Bone injury b) Muscle injury c) Heart disease d) Neurologic disease	1
	(ii)	Who are less prone to cardiovascular diseases? a) People who have less stress in life and performed regular exercises. b) People who have stress in life. c) People who do not performed regular exercises . d) People who have more stress in life and performed irregular exercises.	1
	(iii)	Mention the values you will imbibe in your life from above paragraph? a) Follow an irregular routine of exercise from young age. b) Follow an irregular routine of exercise and stressful life. c) Follow a regular routine of exercise from young age, leave a healthy and stress free life. d) Leave a healthy and stressful life.	1
	(iv)	How we will develop our healthy habits? a) To follow proper physical activities.. b) To follow proper food habits, rest and physical activities. c) To follow fast food habits and rest. d) To follow proper food habits.	1

		CODE	**042**
		BURNPUR RIVERSIDE SCHOOL **ASSIGNMENT-II : (2021-2022)** **PHYSICS** **CLASS: XI** **Maximum Marks:20**	
1.		**Read the passage given below and answer the following questions:** **<u>Dimensional analysis</u>** Dimensional analysis is the use of a set of units to establish the form of an equation, or more often, to check that the answer to a calculation as a guard against many simple errors. Dimensional analysis can be used to check if a mistake in your algebra has occurred. For example, if you mistakenly divided a mass by an area to get density, the answer would be in kg/m^2. Given that we know density must be in kg/m^3, we would spot the mistake. A dimensionally homogeneous equation is one in which the dimensions (or units) are the same on both sides of the equation. Dimensionally homogeneous equations are correct whichever consistent set of units is used for the quantities (m, cm, kg, g, etc.). Thus F=kx for a spring works whether spring constant and extension are measured in N/m and m or N/cm and cm. However if you mixed these up, and used N/m for the constant, but cm for the extension, you would not get the answer right.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	If energy dimension is written as M^xLT^{-2}, then the value of x is (a) 1 (b) 2 (c) -1 (d) -2	
	(ii)	The correct dimensional formula of pressure is (a) MLT^{-3} (b) $M^{-1}L^{-1}T^{-2}$ (c) $ML^{-1}T^{-2}$ (d) $M^{-1}LT^{-2}$	
	(iii)	The dimension of work is same as the dimension of (a) Momentum (b) Impulse (c) Torque (d) Tension	
	(iv)	Using dimensional analysis we can (a) Find the dimensions of unknown quantity (b) Find an equation using dependent factors (c) Find the unknown dimensionless constant (d) Verify a given equation	
2.		**Read the passage given below and answer the following questions:** **Uniform and Non-uniform motion:** Uniform motion is defined as the motion of an object in which the object travels in a straight line and its velocity remains constant along that line as it covers equal distances in equal intervals of time, irrespective of the duration of the time. If a body is involved in rectilinear motion and the motion is consistent, then the acceleration of the body must be zero. Non-uniform motion is defined as the motion of an object in which the object travels with varied speed and it does not cover same distance in equal time intervals, irrespective of the time interval duration. If a body is involved in rectilinear motion, and if the motion is not consistent, then the acceleration of the body must be non-zero. Now, people usually get confused between uniform motion and uniform acceleration. In the later phenomena, the object is having a constant acceleration in rectilinear motion, which means the object has different speed in every second, which clearly defines that motion is changing.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	An example of uniform motion is (a) projectile motion (b) motion on a smooth inclined plane (c) motion of the blades of a fan (d) motion of a train entering a station	
	(ii)	The motion of free fall of an object is an example of (a) uniform motion (b) non uniform motion (c) cannot be predicted (d) depends on the height of the object	

	(iii)	In which of the following cases, the acceleration of the object is not constant? (a) Object falling under gravity in absence of air (b) Projectile motion (c) Uniform circular motion (d) Both A and B	
	(iv)	Which of the following cases is considered to be rectilinear motion? (a) Projectile motion (b) A train moving in a straight track (c) A bus moving between towns (d) Uniform circular motion	
3.		**Read the passage given below and answer the following questions:** **Instantaneous velocity and speed:** Instantaneous velocity is defined as the rate of change of position for a time interval which is very small (almost zero). Measured using SI unit m/s. Instantaneous speed is the magnitude of the instantaneous velocity. It has the same value as that of instantaneous velocity but does not have any direction. In simple words, the velocity of an object at that instant of time. Instantaneous velocity definition is given as "The velocity of an object under motion at a specific point of time."If the object possesses uniform velocity then the instantaneous velocity may be the same as its standard velocity. It is determined very similarly as that of average velocity, but here time period is narrowed. We know that the average velocity for a given time interval is total displacement divided by total time. As this time interval approaches zero, the displacement also approaches zero. We know that the average speed for a given time interval is the total distance traveled divided by the total time taken. As this time interval approaches zero, the distance traveled also approaches zero. But the limit of the ratio of distance and time is non-zero and is called the instantaneous speed. To understand it in simple words we can also say that instantaneous speed at any given time is the magnitude of instantaneous velocity at that time.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	When the graph of distance-time is parallel to the t-axis, we can conclude a) uniform speed b) zero speed c) constant non-zero speed d) Non-uniform speed	
	(ii)	Instantaneous speed and instantaneous velocity is same in magnitude is applicable for a) Any type of motion b) Uniform motion c) Non-uniform motion d) Rectilinear motion	
	(iii)	Instantaneous speed is observed from a) Speedometer b)Odometer c) Can't be predicted d) graph of displacement vs time	
	(iv)	Differential time interval means a) A very short but finite interval of time b) A differentiable time interval c) A time interval that approaches zero but not zero d) A time interval that changes its value every time	
4.		**Read the passage given below and answer the following questions:** **Uniform circular motion:** The term "Uniform circular motion" is the kind of motion of an object in a circle at a constant speed. With uniform circular motion, as an object moves in a particular circle, the direction of it is constantly changing. Uniform circular motion refers to the circular motion if the magnitude of the velocity of the particle in circular motion remains constant. The non-uniform circular motion refers to the circular motion when the magnitude of the velocity of the object is not constant. Another special kind of circular motion is when an object rotates around itself also known by spinning motion. The magnitude of this acceleration by comparing ratios of velocity and position around the circle. Since the particle is traveling in a circular path, the ratio of the change in velocity to velocity will be the same as the ratio of the change in position to position. The angle which is subtended by the position vector at the center of the circular path refers to the angular displacement.	1×4

		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	The direction of acceleration in uniform circular motion is a) Along the tangent of the path b) Towards the center of the path c) Away from the center of the path d) Parallel to the velocity	
	(ii)	The expression of acceleration is given by – a) v^2r b) r^2/v c) v^2/r d) r^2v	
	(iii)	The direction of change of velocity is always a) Along the tangent of the path b) Towards the center of the path c) Parallel to the initial velocity d) At an angle 45^0 with the final velocity	
	(iv)	Which of the following is true for uniform circular motion? a) Uniform motion in respect of acceleration b) Uniform motion in respect of speed c) Non-uniform in respect of speed d) Uniform in respect of velocity	
5.		**Read the passage given below and answer the following questions:** **Products of vectors:** The multiplication of vectors can be done in two ways, i.e. dot product and cross product. The definition of dot product can be given in two ways, i.e. algebraically and geometrically. Algebraically, the dot product is defined as the sum of the products of the corresponding entries of the two sequences of numbers. Geometrically, it is the product of the two vectors' Euclidean magnitudes and the cosine of the angle between them. Both the definitions are equivalent when working with Cartesian coordinates. However, the dot product of two vectors is the product of the magnitude of the two vectors and the cosine of the angle between them. Cross product is the binary operation on two vectors in three dimensional space. It again results in a vector which is perpendicular to both the vectors. Cross product of two vectors is calculated by right hand rule.	1×4
		The following questions are multiple choice questions. Choose the most appropriate answer:	
	(i)	Which of the following is obtained using scalar product or dot product? (a) Torque (b) Angular momentum (c) Work (d) Area of parallelogram	
	(ii)	For two vectors to be parallel, which condition is to be satisfied? (a) Angle between them is 90^0 (b) Their dot product is zero (c) Their cross product is zero (d) Angle between them is 45^0	
	(iii)	Which of the following properties is not followed by vector product? (a) Commutative (b) Reflective (c) Distributive (d) Both B & C	
	(iv)	Which of the following is true? (a) $\mathbf{i} \times \mathbf{j} = -\mathbf{k}$ (b) $\mathbf{j} \times \mathbf{k} = -\mathbf{i}$ (c) $\mathbf{k} \times \mathbf{i} = \mathbf{j}$ (d) $\mathbf{j} \times \mathbf{i} = \mathbf{k}$	