SUBJECT-2ND LANGUAGE (BENGALI)

FULL MARKS: 50

91	(हा) मित्रश्रीय प्राणि ३ कर्षे विधा प्रकृष्टि विधा
2	उरामिला जकारि मित्रि ल्ला (कक्ष द्वास ३२० अदवं सद्यो लिश्ए),
0	
20	निस्निधि छन्त्रमूलिङ डेउड़ प्रड,
81	(हा) आक्ष्म हिंदे प्राप्त कार्चेश्य देखें (हा) आहुम आक्ष्म कि अबड़ वार्चा क्ष्मण दिएं आल्पड़े (हा), वाडावं, वप्पित कार्च क्षमा क्षिमण इति हैं (क) कार्च स्पत्तां कार्ध स्वाहुम सम्भिष्,—
<u>a</u>	'वाल्ग्रीकि' करिलार के विव्या है (२+२+७+७)=30
31	यानीकि, याप्तां सहि, ३ क्रिकं अपिं लात् कर्म कुं ५)
91	कि उम्हाल कि दर्धालन ?
b) =	क्ष्यिकं युन्ह द्रापाइयं, हेम्पेट्र थिथिं द्राप्तां (प्पर्व ()

SUBJECT-2ND LANGUAGE (HINDI)

FULL MARKS: 50

Question 1. भीचे लिखे विषयों में से जिसी एक विषय पर 150 शब्दों में (15) मुळ निबंध लिखी। (i) मानव और विज्ञान (ii) क्षमाचार पत्र पढ़ेन की उपयो गिता । Question 2. मीचे लिखे विषयों में से िकसी एक विषय पर पत्र लिखिए (i) आपके क्षेत्र में परीक्षाकाल में ध्विन विस्तारक येत्र पर (7) रोक लगाने हेनु जिलाधीक्षा को विषकायती पत्र लिखे। (ii) छान्नावास में रहने वाले अपने भाई/बहन को पत्र लिखकर 'समय के सदूपयोग' के महत्व पर प्रकाश डालिए। भीचे लिखे गधाश को पढ़कर उसके भीचे दिए गष्ठ प्रक्रों के उत्तर लिखिए। Question 3. गांधी जी ने कल था, "में मसी स्थित लाना चारता हूं जिसमें अवना ब्यामिन दरजा समान माना जाए। मजदूरी फरने वाले वर्गी को खेनड़ों वर्षी से सम्भ समाज से अलग रखन गया है और उन्हें नीचा दर्जा दिया गया है, लेकिन में बुनकर, किसान और बिाक्षक के बच्चों में कोई भेद नहीं होने दे सकता।" उनके अनुसार यही आर्थिक समानता है। आर्थिक समानता का अर्थ हैं जगन में सबके पास अमान अम्पत्ति का होना। मतलब सबके पास इतनी सम्पत्नी होनी चाहिए जिससे वे अपनी शेटी

	अपड़ा और मनान की मूलभून आवश्यकताओं को र इस सकें। यह एक चिंतन का विषय है कि पह आत समानता समारे देश में केसे लाई जा सकती है? धनवान लोग अपने धन को और उसके कारण जिल्ला को ग्राजी- खुली छोड़ कर या सबके के के लिए उपयोग करने के लिए तैयार हो जॉफ, तो आर्थिक समानता संभव है।	थे क अगर मलने कल्याण
	प्रवनः ं गांधी जी डेसी वियती लाना चाहने थे?	(2)
	(ii) आर्थिक समानना का ज्या अर्थ है?	(2)
	(iii) आर्थिक समानता कब संभव है?	(2)
	8 अध्यांक 4. (i) निम्न शब्दों में से किन्टी दो शब्दों के विलोम लिओं 3. सन्यास, अ. विरोधी: इ.आजादी	(1)
((ii) निम्न शब्दों के वर्ग विच्छेद की जिए (कोइ दो) 3. पैकेज स्म किताबें हा. समुद्र	(1)
(क. हद्य , अ. निंदा	(1)
	iv) निम्न शब्दों के वचन बदली। इ. अध्यापिका , ब. कविना	(1)
v.) निम्न अशुध्द शक्दों को शुध्द छरके लिखो: क. प्रसंसात्मक, अ शुरिली	(1)
V	i) निम्न शब्दों के अर्घ लिखों: इ. मीका, क्र मर्यादा	(1)

24015		
	(vii) निम्न अह्दों से वान्य बनाइछ:	(1)
	क धमाची कड़ी ,ख. भूरि - भूरि प्रशंसा करना	
	(Viii) निम्न वान्यों के रिक्त रूथान भरो:	(1)
	छ जेब से नकदी निकालकर बर्ध के प्रकृति में रखने लगे।	छोन
	म २२७म लग ।	
	व्यः पुराने तटों को छोड़कर बनाले।	
	Question 5. निम्न प्रश्नों के उत्तर दीजिए	
1	तं सम्ब किन किन के आचरण को गरिमा के आर	4122
1	0 2 3	(3)
	एं) समुद्र जिन-किन के आचरण को गरिमा के सार चुपचाप सहन करती है?	
	(गं) समुद्र की अपेक्षा नदी को क्या आजादी है?	(3)
	(iii) हमें केसी वाणी बोलनी चाहिए ?	(2)
1	1V) हरखू का जीन-सा गुणं तुम्हे सबसे अधिक	(3)
1	(iv) हरखू का कोन-सा गुण तुम्हे सबसे अधिक प्रमानिन छिया और क्यों?	
1	v) समुद्र की कीन सी विशेषना का आप अपने	127
1	र राजु प्र का जान बना विश्वापना का जान जनन	(3)
	जीवन में अपनाना चाहागे व ज्यों ?	

SUBJECT-3RD LANGUAGE (BENGALI) FULL MARKS: 50

১) কমবেশি২০০টিশব্দেরমধ্যেরচনাটিলেখো।

তোমারপ্রিয়খেলা। ১৫

২) "তা পরীক্ষা করে দেখছি। "

ক) বক্তা কে? খ) কাকে বলছে? গ) কী পরীক্ষা করছিল? ঘ) বক্তা কবে, কোথায় জন্মগ্রহণ করেন?

ঙ) তার পিতামাতার নাম লেখে।চ) বক্তা মেলা থেকে কী কিনেছিল? ছ) বক্তার গুরুর কী নাম ছিল?

জ) তাঁর প্রতিষ্ঠিত প্রতিষ্ঠানের নাম লেখো।ঝ) তিনি কবে দেহত্যাগ করেন? ২+২+২+২+২+২+২+১

- ৩)' তিনিই ব্যারিস্টার বাবু।'
- ক) তিনি কে? খ) তিনি কী উপকার করলেন?
- গ) তিনি কবে কোথায় জন্মগ্রহণ করেন? ঘ) তাঁর বাবার নাম লেখো। ২+২+(২+২)+২=১০
- ৪) বাক্যরচনা করো। ৫×১=৫

কোর্ট, সভা, কৃপা, চেক, সাহসী

CLASS-VIII

SUBJECT-3RD LANGUAGE (HINDI)

FULL MARKS: 50

प्र01- "चिड़िया" कविता की पहली की 15 पंक्तियाँ लिखिए? (15)

प्र02-"रङ्गार्बंधन" पर 10 लाइनी में एक निर्वंध लिखिए? (10)

प्र03- निम्नलिखित प्रश्नो के उत्तर दीजिए।

- (क) चिड़िया की वया खुहाता है ? (2)
- (ख) चिड़िया को सबसे अधिक क्या अच्छा लगता है? (3)
- (ग) चिड़िया को किन किन चीजी से डर मही लगता है ? (3)
- (धा) चिड़िया को किस चीन की परवाह नहीं हैं। (2)
- (ड.) चिडिया की मनुष्य से क्या शिकायत हैं ? (2)

प्रविभ सिंही उत्तर युनिए१ (3x1=3)

(क) चिडिया क्या करती है?

(क) निश्चित उड़ती हैं। [(ख) परेशान रहती हैं।

(ख) चिड़िया क्या करने की कहती हैं?

(क) केंद्र न करने की। 🛘 (ख) स्वतंत्र न करने की। 🗖

(ग) चिड़िया को किस चीज का लालच नही है? (क) पानी का 🗆 (ख) ड्राने का 🗖

प्र04 (B)- नीचे दिए गए शब्दी का अर्थ लिखकर वाक्यों में प्रयोग कीनिए ? (5x2=10)

(क) (कोंकी -

(म) सुहाता -

(ग) भीड़ —

(डः) डर —

SUBJECT-BIOLOGY

FULL MARKS: 50

SECTION-I (25MARKS)

Attempt all the question

Q1. Choose th	e correct option:			(1x5=5)	
A) Loss of wa	ter as droplets from hyda	athods is called			
(a) Transpirati	on (b) Bleeding	(c) Guttation			
B) High humid	d conditions in the environ	onment will			
(a) reduce the	rate of transpiration	(b) increase the r	ate of tran	spiration	
(c) not change	the rate of transpiration	(d) stop the proce	ess of tran	spiration	
C) Most of the	transpiration in plants i	s carried out by			
(a) lenticels	(b) cuticle	(c) roots	(d) stomat	ca	
D) Emasculati	on is the process of				
(a) removal of	pistil	(b) removal of ca	alyx		
(c) removal of	petals	(d) removal of an	nthers		
E) pollen grain	ns are light and dry in				
(a) anemophile	ous flower (b) hydrop	hilous flower			
(c) entomophi	lous flower (d) zoophi	lous flower			
Q2. Fill in the	blanks:			(5x1=5)	
a) The excess	ss water within a pla	ant is transporte	d to the		for
transpiration.					
b) The transpir	ration rate decreases in s	till air because of		·	
c) p	lants are living in dry an	nd hot condition.			
d)	_ pollination requires an	external agent.			
e) The flowers	s having only stamens ar	e called	flowe	er.	
Q3. State when	ther the following staten	nents are true or fa	alse:	(1x5=5)	
a) Plants loss of	excess water in the form	of water droplets.	•		
b) Both the sur	rfaces of leaves contain	abundant stomata			
c) Pollination	in hydra takes place with	n the help of wind			
d) Prostate gla	nd enhances motility and	d fertility of the sp	perms.		
e) Transpiration	on creates a suction force	e that causes the a	bsorption (of water by re	oots.
Q4. Match the	following:			(5x1=5)	
	a. Testis	i. petals			
	b. Corolla	ii. vallisneria			
	c. Hydrophilous plant	iii. cooling ef	ffect		
	d. Transpiration	iv. tissue			
O5 Nama tha	e. Zylem	v. scrotum		$(5_{\rm W}1-5)$	
Q5. Name the	C			(5x1=5)	
a) Exact locati					
,	n in the desert. er in the form of water d	ronlets from the r	nargin of 1	eaves	
d) Pollination		nopicis nom me i	nargin or i	caves.	
a) i Oiiiiaii0ii	oy msecis.				

e) Male sex cells.

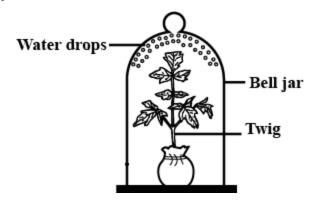
SECTION-II (25MARKS)

Answer the following questions

- Q6. a) Write down the disadvantages of transpiration.
- b) What are internal factors that affecting transpiration? 3+2
- Q7. a) What is the function of cuticle?
- b) Do plants loss water through lenticle? 3+2
- Q8. a) Give the difference between autogamy and geitonogamy.
- b) Write the characteristics of insect pollinated anthers. 2+3
- Q9. a) What is double fertilization?
- b) Why is double fertilization called triple fusion? 3+2
- Q10. Given below is an experimental set-up to study a particular process.

5

- (i) Identify the process being studied.
- (ii) Explain the process named in (i)
- (iii) Why is the pot showing water drops after some time?
- (iv) Mention one advantage of this process to the plants.
- (v) According to you what can be the suitable control for this experiment.



SUBJECT-CHEMISTRY

FULL MARKS: 50

Question 1. Explain the following:

(2x10=20)

- a) Solids cannot be compressed.
- b) A liquid can flow and takes the shape of the container in which it is poured.
- c) Gases have neither a fixed shape nor a fixed volume.
- d) Law of conservation of mass is followed during burning of a magnesium ribbon.
- e) Inter conversion of states of matter is carried out by changing temperature and pressure.
- f) A gas can fill the whole vessel in which it is enclose.
- g) When sodium chloride is added to a definite volume of water and stirred well, a solution is formed, but there is no increase in the level of water.
- h) A piece of chalk can be broken easily into smaller pieces while a coal piece can't be broken easily.
- i) Gases have maximum kinetic energy.
- j) Robert Brown observed that the pollen grains were moving in an irregular manner.

Question 2. Define:

(1x10=10)

a. Sublimation f. Inter conversion of the states of matter

b. Deposition g. Law of conservation of mass

c. Brownian motion h. Liquefaction

d. Mattere. Condensation pointi. Fusionj. Fluids

Question 3. Differentiate between solid, liquid and gas on the basis of— (5x1=5)

a. Intermolecular force of attraction. b. Fluidity c. Shape d. Inter particle

space e. Compressibility

Question 4: Choose the correct answer:

(5x1=5)

- a. Particles of the matter have following characteristic:
- (i) They constantly move (iii) They are very small
- (ii) They attract each other (iv) All of the above
- b. Diffusion in liquids is an example of
- (i) Smell and perfume (iii) Spreading of in water
- (ii) Smell of food (iv) Fragrance of incense stick
- c. Name the particles which make up matter:

(i) Non-metals (iii) Metalloids

(ii) Metals (iv) Atoms

d. The melting point of a solid is an indication of

(i) Its rigidity (iii) Intermolecular force of attraction

(ii) Its shape (iv) Its ability to intermix with other solids

e. Which of the following is the property of solid?(i) Can be compressed (iii) Have law density

(ii) Have definite shape (iv) Intermolecular force is less

SUBJECT-ENGLISH (PAPER-I) FULL MARKS: 50

Question 1.

Write a composition on any one of the following topics:

[15]

- a) Give an account of a religious festival at which you were present.
- b) In your summer vacations you had to visit a place of comfort and natural beauty. Describe your experience of it.
- c) Narrate an incident of extreme bravery which you come to know or you were involved in it.

Question 2.

Select one of the following:

[10]

- a) Write a letter to your cousin congratulating her on being selected in the final round of inter-school singing competition and wishing her good luck for the competition.
- b) Write a letter to the principal of your school requesting him to start special hobby classes during the summer vacation.

Question 3.

Read the following passage and answer the questions:

It is important to keep a level head at all times. However, there are two occasions when keeping a level head is absolutely necessary – when we achieve a big success and when we make bad failure. An exceptional success usually inflates our ego and makes us boastful; a miserable failure fills us with dejection and makes life meaningless. Both these experiences are common in student life. A brilliant performance in one examination turns one's head while a dismal result in another makes one feel as if this were the end of the world. Both these reactions are equally flawed. Superiority complex is as deplorable as inferiority complex.

To be successful in life, one should be in total control of oneself, one should remain unmoved both by the ups and downs of life, for he who gets broken by a stroke of bad luck is equally likely to get broken by a run of good luck too. No progress is possible in either case.

How can one keep a level head? If our value system is correct, we will not get easily strayed in life. If a businessman gives greater importance to health, character, a happy family and a friendship than to money, he will not lose his head if he suddenly turns rich or if there is a slump in business and his income suddenly goes down. Similarly, if a student's focus is on acquiring knowledge, or on personality development, one performance whether exceptionally good or bad, will not destroy his or her balance.

We should also remember that nothing is permanent in this world. Neither good fortune will keep smiling at us nor bad luck keep hounding us all the time. Both

prosperity and adversity are bound to pass, to be swallowed by a shadowy past. Why then rejoice in one and grieve at the other?

- A. Answer the following questions:
 - 1. On what two occasions is it most important to maintain one's balance?
 - 2. What are the usual consequences of an exceptionally good performance or a very bad result?
 - 3. What should be a student's attitude towards his/her studies?
 - 4. What great reality of life can help us to remain cool in all situations?
- B. Find words from the passage which mean the following:
 - 1. poor, hopeless
 - 2. a sudden fall in sales, prices

<u>Question 4:</u> [15x1=15]

- a) In each of the following sentences replace the underlined adjectives by an adjective phrase of the same meaning:
- 1) She wore a diamond necklace.
- 2) A <u>valuable</u> ring was found yesterday.
- 3) He is a professional cricketer.
- b) Replace the adverbs which are underlined by an adverb phrase of the same meaning:
- 1) The dying man replied <u>feebly</u>.
- 2) They have only <u>recently</u> arrived.
- 3) He spoke <u>eloquently</u>.
- c) Pick out the noun phrases in the following sentences:
- 1) The wicked vizier loves getting people into trouble.
- 2) Horses prefer living in dark stables.
- 3) He denies stealing the money.
- d) Replace each of the following underlined adjective phrases by an adjective of the same meaning:
- 1) He wore a turban made of silk.
- 2) Nobody likes a person with a bad temper.
- 3) Nelson was a boy without fear.
- e) Pick out the adverb clauses in the following sentences:
- 1) They went where living was cheaper.
- 2) Take a lamp because the night is dark.
- 3) If you eat too much you will be ill.

CLASS-VIII

SUBJECT-ENGLISH (PAPER-II)

FULL MARKS: 50

I) Read the extract below and the answer the question that follow:

1	
A.	
"Six humans trapped by happenstand	ce
In bleak and bitter cold	
Each one possessed a stick of wood	1
Or so the story's told."	
1) Explain the meaning of "happenstance" and "bleak".	2+2
2) What did the people do with "stick of wood"?	3
3) What did the "third man" think?	4
4) What did the "first man" do?	3
5) What did the "rich man" think?	2
B.	2 21
"Their logs held tight in death's still hands was pro	
They didn't die from the cold without	ut
They died from the cold within."	
i) Justify the title of the poem "The Cold Within".	4
ii) What did the "last man" do?	4
iii) What do the "logs" denote?	3
iv) Who are "they" referred to here? Where were they?	3
v) What massage does the poet convey through the poem?	2
II) The Merchant of Venice	
1) Why did Antonio and Bassanio went to Shylock toget	her? What Shylock did?
Explain the brief.	4
2) "The happiness of these lovers was sadly crossed	"Who are 'these' lovers
and why they were sad?	2+2
3) In what disguise Portia went to save Antonio? How did	I see react when the trial
first began?	1+3
4) "Portia hearing this, seemed very angry," Why	_
happened?	4
5) How much money did Antonio went take or lend from Si	
of 120 in model money did i mice of tend from Di	<u> </u>

SUBJECT-GEOGARPHY FULL MARKS: 50 Q1. Mark the following on the on the outline map of India: 10x1=10a) Karakoram Range b) Western Ghat c) Decan Platean d) Tropic of cancer e) Nilgiri Hills f) Vindhya Range g) Gulf of Kuchch h) Gulf of Mannar i) Malwa Plateau Q2. Answer in short form: 5x2 = 10a) What is Population Dynamics? b) Define Population Distribution? c) Name the most densely populated country in the World. d) What do you understand by 'population change'? e) What is the difference between immigration and emigration? Q3. a) What is meant by population? How does population act as a resource? (2) b) Define population density. Name two areas of high density population and low density population. (2) c) What is population composition? Why is it important? **(2)** d) Distinguish between Internal and International migration. (2) e) Write the factors which affect the population density **(2)** Q4. a) What is overpopulation? **(1)** b) Write the impact of overpopulation. **(3)** c) Why the people move out of their country? (2) d) Write a short note on Census? **(2)** e) Sex ratio is an important indicator of the status of women in a country – why? (2) Q5. a) What is population pyramid? What is its significance? **(3)** b) Write the characteristic of population pyramid in underdeveloped countries. (2) c) State one positive and one negative effects of under population. **(2)**

(3)

d) Why India is considered as Developing country?

CLASS-VIII SUBJECT-HISTORY

FULL MARKS: 50

the second second second second second second	
	ATTEMPT ALL THE QUESTIONS FROM PART-1
	PART-1
8-1	ANSWERALL THE QUESTIONS 5X2 = 10M
<u>(i)</u>	What do you mean by Carriya Piyaka? How maky
	tohat do you mean by Cariya Piyaka? How many tales are collected from Cariya Piyaka?
(II)	How the islaughter of animals contributed for
	the Rise of Buddhism and Jainism.
(111)	What are the throw-fold-path for leading a pure
	1148
(IV)	who was Magasthatias P Namo the book written by
	Mogasthones.
N N	Mogasthones. What wore the two titles given to Ashore
0-2	ANSWER ALL THE QUESTIONS 5×2=10 M
	Define the form "Constitution? What does
	Indian Constitution define?
	What are the three organs of the Government?
(ji)	Whon did the constitution as a whole come into
	force & who was the first Propident of India ?
Comp of	How much time did the constituent assembly take
	to draft the constitution of How many parts,
	articles and It schodules are there in Indian
	Constitution ?
	In which your and in which isession
	of Congress The pladge for Purna Swaring
	In which your and in which isession of Congness the pladge for Purna Swaring was doclared?

	(ATTEMAT)
	PART-II- SECTION -A (ATTEMPT)
8-3	
0	write down two factors (anytwo) for the Rise
	of Budohism.
(M)	who was the last of the tip thankaras who made
	Jainism populat ? What was his original name? Twhen was he borin?
SHEET	twhen was he borin ? (3)
(III)	Why were the followers of Mahawina called Jains &
	THE COLUMN TOWN OF THE PROPERTY OF THE PROPERT
8-4	The state of the s
(1)	Write any three changes that came in Ashoka's life after the Kalinga war was over 3 Britly discuss the war of succession between Ashoka and his half-brothers after Bindysanadied 3
	after the Kalinga was was over. 3
	Bridly discuss the tour of succession between
	Ashoka and his half-brothers after Bindusaradied (3)
(111)	Give a brief introduction to the Character
S. For	of Ashoka - the greatest emperon of the Mauryan
MALA	Synasty. (4)
	at the second of
8-5	La contitue of the telephone to the telephone of telephone of the telephone of t
	what is the most crucial source of knowledge
	about Mauryan Synasty ? Who wrote it? When
	was the book discoursed? 3
	Write a short note Indica. (3)
	Write any four features of Ashoka's Dhamma'.
0	6.

	SECTION-B
	ATTEMPT ANY ONE (BETWEENS-6 and 8-7)
9-6	Owhat is the importance of 26th January 23 What is the significance of Single Citizanship 23 Write a short-note on Universal Adult Franchise
	what is the significance of Single Citizenship 3
(A)	Write a short note on Uniconsal Adult Franchise
	(4)
8-7	
0	to hat do you know about dualcitisonship?
	Mamo one country that practices dual citizenship.
	(3)
	What does Indian Constitution dofine ? what does it state about the duties of the three organs of the government? What does it mean if anyone is denied the right to work ? What message does Universal Adeil Franchise ispread ?
	it state about the duties of the three organs
	of the government?
(n)	What does it man if anyone is donied the right to
	cote P What massage does Universal
	Adeilt Franchise Suspread D (9)

SUBJECT-MATHEMATICS

FULL MARKS: 50

Attempt all questions from Section-A and Section-B

Section-A (20 Marks)

Question 1.

a) Rajesh bought an A.C. for ₹38500 including 10% GST. Find the price of AC before GST was added. (3)

b) Find the value of x for which

$$\left\{ \left(-\frac{2}{7} \right)^2 \right\}^{\chi} \times \left(-\frac{7}{2} \right)^{-1} = -\frac{8}{343} \tag{2}$$

c) Find the amount and compound interest on ₹2500 in 2 years if the rates are 5% and 6% for the successive years. (3)

d) Factorise:
$$x^2 + \left(a + \frac{1}{a}\right)x + 1$$
 (2)

Question 2:

a) Find twenty rational numbers between
$$-\frac{3}{7}$$
 and $\frac{2}{3}$ (3)

b) Area of a square is 4 m² more than $\frac{2}{3}$ of the area of a rectangle. If the area of the square is 64 m², then find the dimensions of rectangle, given that the breadth is $\frac{2}{5}$ of the length.

c) Rahul can do $\frac{2}{7}$ of a certain work in 6 days while Suresh can do $\frac{3}{5}$ of the same work in 9 days. They started work together but after 7 days Rahul left the work. Find in how many days Suresh can complete the remaining work? **(4)**

Section-B (30 Marks)

Question 3: Factorise the following:

a)
$$625 - p^4$$

b)
$$x^4 - y^4 + x^2 - y^2$$

c)
$$4a^2 - 4b^2 + 4a^2 + 1$$

d)
$$14(a-3b)^3 - 21p(a-3b)$$

e)
$$2y^2 + y - 45$$
 (5x2=10)

Question 4:

a) Simplify:
$$[2^{-1} + 3^0 + 5^1 + 7^2 + 9^3] \div \left(\frac{2}{3}\right)^{-1}$$
 (2)

b) Prove that
$$(a + b)^{-1}(a^{-1} + b^{-1}) = (ab)^{-1}$$
 (2)

c) By what number should
$$\left(-\frac{3}{2}\right)^{-4}$$
 be divided to get $\left(-\frac{2}{3}\right)^{3}$ (2)

d) Evaluate:
$$\frac{x^p}{x^{p+q}} + \frac{1}{x^{p-q+1}}$$
 (2)

d) Evaluate:
$$\frac{x^p}{x^{p+xq}} + \frac{1}{x^{p-q+1}}$$
 (2)
e) Evaluate: $\left(\frac{x^p}{x^q}\right)^{p+q} \times \left(\frac{x^q}{x^r}\right)^{q+r} \times \left(\frac{x^r}{x^p}\right)^{r+p}$ (2)

Question 5:

- a) Marked price of an article is ₹2860 and rate of GST is 8%. Shopkeeper allows a discount of 20% and still makes a profit of 10%. If he spent 4% as overheads, then find the original cost price of the article and final selling price including GST. (4) b) Find the sum invested for 1½ years compounded half yearly at the rate of 8% p.a.
- that will amount to ₹17576. (3)
- c) The difference between the compound interest and the simple interest on ₹42000 for two years is ₹105 at the same rate of interest per annum. Find (i) the rate of interest (ii) the compound interest earned in second year. (3)

SUBJECT-PHYSICS

Question 1.

FULL MARKS: 50

(5x2=10)

Section-A

a) Define the term relative density of a substance.		
b) Name the SI unit of density. How is it related to go	em ⁻¹ ?	
c) Arrange the following substances in order of their		k,
Water, Mercury.		
d) Distinguish between density and relative density.		
e) The density of brass is 8.4g/cm ³ . What do you mea	n by the statement?	
Question 2.	(5x2=10))
a) State two effects of a force when applied on a body	. · · · · · · · · · · · · · · · · · · ·	
b) Define the term moment of force.		
c) State the SI unit of force and moment of force.		
d) (i) 1 kgf = N(nearly)		
(ii) In a door, handle is provided from the	e hinges.	
e) What will be the changes when force applied on a r	_	
body?		
Question 3.	(5x2=10))
a) (i) The weight of a body floating in a liquid is	· · · · · · · · · · · · · · · · · · ·	
(ii) The density of a body which sinks in water is	_	
b) Sate the law of floatation.		
c) Match the following		
Column A	Column B	
a) Wood	i) density bottle	
b) No unit	ii) floats on water	
c) Iron	iii) relative density	
d) Relative density	iv) sinks in alcohol	
d) State two applications of floatation.		
e) A piece of iron of volume 30 cm ³ has a mass of 23	4g. Find the density of iron.	
Santian D		
Question 4:		
	z wise moment of force? (1)	
a) What do you mean by the clock wise and anti clock	wise moment of force: (4)	
b) Explain the following:	(2)	
The steering wheel of a vehicle is of large diameter.	(3)	1
c) The moment of a force of 25N about a point is 2		ar
distance of force from that point.	(3)	
Question 5:		
a) The density of air is 1.28g litre ⁻¹ . Express it in (i) g	cm^{-3} (ii) kg m^{-3} (2+	2)
b) It is easier to swim in sea water than in river water.	Explain the reason. (3)	
c) For a floating body, how is its weight related to the	buoyant force? (3)	