

Time: 2 Hrs**Instructions:**

1. All questions are compulsory.
2. All questions must be answered in the question booklet itself in the space provided for this purpose.
3. All sub-questions under the main question carry equal marks.
4. Rough work, if required, may be done on the last few pages of this question booklet, provided for the purpose.

Part-A (English)**35 Marks**

1.	Read the unseen passage below and answer the questions that follow: (10)
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Evolution is a word that is often on our lips. We speak of the evolution of the railway engine, the evolution of the aeroplane, and even of the evolution of men's character. What we mean is that since they were invented, the railway engine and the aeroplane have changed a great deal. They have changed their shape and size; they have become faster and more powerful, and so on. In the same way, as a man grows older, his character may change. Ill health may make him bad-tempered, poverty may turn him into a miser, too much success may lead him to be careless and boastful, and so we say that with the passing years his character has evolved from one kind to another. This idea of evolution is an old one, but it was Darwin who first showed beyond doubt that it was the way in which species of living things change. As the centuries go by, he taught, species of animals and plants change very slowly. During thousands of years the horse has evolved from a small, clumsy and hairy animal to the splendid animal that we know. Some species, such as the pre-historic sabre-toothed tiger, have died out, some are slowly dying out, and sometimes new species appear. The dog is a species which man has caused to evolve from the wolf.

How do some species survive and how do others become extinct? How have species changed? These were the other questions that Darwin had set himself to answer. The answer he gave us was that in the world of nature there is ceaseless struggle for life. One wild animal preys on another, and all living things compete for food, water and shelter. It is the strongest, fastest and hardiest creature or plant that survives. The weak perish. Species which are able to conquer their rivals and are fit or adapt themselves to the climate and the country in which they live, outlive those which are weaker and less adaptable. For example, the giraffe with the longest neck could get more food than the shorter-necked ones, and so the latter disappeared from the earth.

Darwin planned to write a book describing his discoveries. He spent nearly twenty years collecting the matter for his book, which was to deal with every known fact concerning the problem of the species. Unluckily for Darwin, a naturalist named Wallace had been thinking over the same problems and had reached the same solution. He sent Darwin an essay which almost word for word repeated Darwin's own ideas. Yet Wallace, who was an explorer, had been working far away in the Malay Archipelago, whilst Darwin had not left England for several years. The two naturalists decided not to quarrel for the first place, and their discovery was published under both their names. Afterwards Wallace yielded the leadership to Darwin, in whom he recognised a greater naturalist than himself. In 1859 Darwin published the book he had planned for so many years. It was called The Origin of Species.

Question No.	Question	Space for Answer
a)	<p>How does the writer show that a man's character may change as he gets older?</p> <ul style="list-style-type: none"> (i) ill health makes him bad tempered (ii) success makes him careless and boastful (iii) poverty turns him into a miser (iv) all of the above 	
b)	<p>Following are the examples of the evolution of animals which has in each case produced a creature more useful to man.</p> <ul style="list-style-type: none"> (i) dog evolved from wolf (ii) plants and animals change slowly (iii) horse evolved from clumsy animal (iv) all of the above 	
c)	<p>Why do all present-day giraffes have long necks?</p> <ul style="list-style-type: none"> (i) hardest creatures survive (ii) get more food than shorter necked ones (iii) to adapt themselves (iv) weaker are less adaptable 	
d)	<p>What is important for the species to survive?</p> <ul style="list-style-type: none"> (i) ability to adapt to climate and country (ii) ceaseless struggle for life (iii) weak perish (iv) get more food 	
e)	<p>Identify the word which is similar in meaning to the word 'adjust' in the passage.</p>	

Question No.	Question	Space for Answer
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3.	<p>In the following sentences for each underlined part three substitutions are given. Mark the one which is better than the underlined part. If none of the substitutions improves the sentence the answer will be D. (10)</p>	
a)	<p>His job requires <u>that he defends</u> the indefensible.</p> <ul style="list-style-type: none"> A. That he should defend B. That he defended C. That he would defend D. No improvement 	
b)	<p>He always <u>acts as the martyr</u> when he had to do the housework.</p> <ul style="list-style-type: none"> A. Acts the martyr B. Will act the martyr C. Acted the martyr D. No improvement 	
c)	<p>It appears <u>that what I said</u> was untrue but I did not knowingly lie to you.</p> <ul style="list-style-type: none"> A. What I said B. That I did say C. What I use to say D. No improvement 	
d)	<p>A trip of Mussoorie should <u>benefit you</u>.</p> <ul style="list-style-type: none"> A. Be beneficial with you B. Do you benefit C. Do you good D. No improvement 	
e)	<p>Do you know <u>who was Krishna Dev Raya</u>?</p> <ul style="list-style-type: none"> A. Who Krishna Dev Raya was B. Who is Krishna Dev Raya C. Who could be Krishna Dev Raya 	

4.	Fill in the blank with suitable option given: (5)	
a)	I have almost finished, but I'm not done _____. (ago/still/yet)	
b)	Jai, you've grown so much. ____ tall are you now? (How/Why/About)	
c)	We ____ a very enjoyable holiday last year. (had/have/have had)	
d)	They ____ be away for the weekend but I'm not sure. (can/might/will)	
e)	If an accident ____, you should report it to the police. (occur/occurs/occured)	

Part-B (Maths)

30 Marks

Question No.	Question	Space for Answer
1.	Find the answer to the following: (5)	
a)	$39 + (-24) - (15) =$	
b)	$(-36) \div (-9) =$	
c)	$1/7 \text{ of } 6/5 =$	
d)	$651.2 / 4 =$	
e)	Find the mode of the numbers: 2,3,5,6,4,2,3,5,6,3,3,2,3,4,5,6,2,2	
2.	Fill in the blanks (5)	
a)	The line segment joining a vertex of a triangle to the midpoint of its opposite side is called a _____ of the triangle.	
b)	Pythagoras theorem states that the square of the _____ equals to the sum of square on its legs.	
c)	In a map with scale $2\text{cm} = 1000\text{ km}$, the actual distance represented by 3.5 cm in the map would be	

d)	The number _____ is neither a positive, nor a negative rational number.	
e)	Mass of the Earth, 5,976,000,000,000,000,000 kg can be expressed in exponential form as _____.	
3.	Answer the following (10)	
a)	Find the cost of polishing a semi-circular table top of diameter 1.6 m, if the rate of polishing is Rs. 15/m ² . ($\pi=3.14$)	
b)	Out of 20,000 legal voters in a city, 65% voted. How many legal voters did not cast their vote?	
c)	If of 950 people polled 721 like basketball, how many of 10,000 should like basketball (rounded)?	
d)	How many seconds are in 2 hours and 26.9 minutes?	
4.	Find the answer to the following real life problems: (10)	
a)	If 10 people can do a piece of work in 5 days, working 2 hours a day, how long will 2 people take to do the same work, working 5 hours a day?	
b)	Suppose your father's present age is thrice your age and your grandfather's age is 13 years more than the sum of your and your father's age. If your grandfather would be celebrating his 75 th birthday in 2 years from now, find the present age of each.	

Part-C (Science)**20 Marks**

Question No.	Question	Space for Answer
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1.	Select and write the correct answer: (5) a) The hotness of an object is determined by its _____. (temperature/heat/light) b) The air moving from the sea towards the land is known as the _____. (land breeze/sea breeze/radiation) c) The process of formation of large crystals of pure substances from their solutions is known as _____. (sedimentation/neutralisation/crystallization) d) The presence of _____ in blood makes it appear red. (red blood cells/ platelets/ haemoglobin) e) In the symbol of the electric cell, the positive terminal is represented by the _____ line. (longer/shorter/dotted)	
2.	Write TRUE or FALSE (5) a) The process by which the heat of the sun reaches us is known as radiation. b) The process of deposition of a layer of iron on zinc is known as galvanization. c) An image formed by a plane mirror is known as a real image. d) Drip irrigation is a technique of watering plants by narrow tubings which deliver water directly at the base of the plant. e) An electric bulb glows as because its glass gets heated to a high temperature.	

3.	<p>Answer the following questions: (10) (Each question carries 5 marks. Attempt any two. Maximum 150 words)</p>	
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a) What do you know about the working of heart in a human body?

b) What is neutralization? Can you give two examples of neutralization in everyday life?

c)

Take us through the life history of EITHER a silk moth OR a butterfly.

Part-D (General Knowledge)

15 Marks

Question No.	Question	Space for Answer
1.	Identify the authors of the following books? (5)	
a)	Discovery of India	
b)	Godan	
c)	The Half-Blood Prince	
d)	Macbeth	
e)	Origin of Species	
2.	Write TRUE or FALSE (5)	
a)	The national tree of India is Peepal tree.	
b)	Epilepsy is a heart disease.	
c)	Africa is the largest continent in the world.	
d)	Dr. S. Radhakrishnan was the first Speaker of the Lok Sabha constituted in 1952	
e)	Magic Johnson was a renowned Basketball player.	

3.	Answer the following questions: (5)	
a)	What is the unit used for measuring distance in space?	
b)	What are the citizens of Netherlands known as?	
c)	Which blood group is known as the universal recipient.	
d)	Whatsapp is owned by which popular social media website?	
e)	Who is the current Minister of Railways in India?	

End of Question Paper

SPACE FOR ROUGH WORK