

ADITYA TALENT SCHOOL

X CLASS

DAILY EXAM- 5

Dt :30-0-2020

GENERAL SCIENCE - 1 (25 MARKS)

SECTION - I

$1/2$ mark questions.

$20 \times 1/2 = 10$

1. Match column-I with column-II

Column-I

Column-II

- p) Electric motor a) Converts Mechanical energy into electrical energy
q) Electric generator b) Converts electrical energy into mechanical energy

2. In electric motor, the direction of electric current is reversed for every

- a) half rotation b) one fourth rotation
c) three fourth rotation d) full rotation

3. Which of the following are applications of Faraday's law of electro magnetic induction?

- a) Electric generator b) Usage of ATM card
c) Electric Motor d) Induction stove

4. Weber/m² is the S.I unit of which physical quantity?

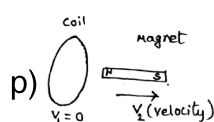
5. When a conductor of length ' ℓ ' moves perpendicular to field 'B' with a speed 'v' then a potential difference, known as motional emf (ϵ) is generated between the ends of conductor. What is its magnitude?

6. Faraday's law of electro magnetic induction is based on law of conservation of

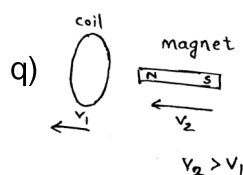
7. Match Column-I with Column-II

Column-I

Column-II



- a) the face of the coil opposite to magnet behaves as south pole .



- b) the face of the coil opposite to magnet behaves as North pole.

8. What changes do we need to make in an A.C. generator to be converted into a D.C generator?

9. The magnetic lines of force come out from pole and end into pole of a bar magnet.

10. The relation among magnetic flux (ϕ) small area (A) and magnetic field induction (B) is

11. The total number of sigma bonds and pi bonds present in Acetylene molecule are and respectively.
12. Which allotropic form of Carbon is different from others among the following?
 a) Coal b) Coke c) Lamp black d) Graphite
13. Name the simplest hydrocarbon.
14. Name the product other than water formed on burning of Ethanol in air.
15. Match the following. '
- | Column-I | Column-II |
|-----------------|------------------|
| i) C_3H_6 | p) Alkane |
| ii) C_4H_6 | q) Alkene |
| | r) Alkyne |
16. The bond angle and C–C bond length in Diamond are and
17. Write the structural formula of Methyl Vinyl ether.
18. Statement - I : "Oxy–" is the prefix that can be used for carboxylic acid.
 Statement -II : "–Oic acid" is the suffix that can be used for carboxylic acid.
 Now, choose the correct option.
- a) Statements I and II both are correct
 b) Statement I is correct and Statement II is incorrect
 c) Statement I incorrect and Statement II is correct
 d) Statements I and II both are incorrect
19. Write the structural formula of Hex-4-en-1-yne.
20. $CH_3COOH + C_2H_5OH \xrightleftharpoons{\text{Conc. } H_2SO_4} \dots\dots\dots + H_2O.$

SECTION - II

1 mark questions.

15 x 1 = 15

21. State Faraday's law of electro magnetic induction.
22. State Lenz's law.
23. In right hand rule, while determining force experienced by a charged particle projected into an external magnetic field, in which directions the three fingers are oriented?
24. A conductor of length 30 cm, carrying current 5A is placed in an external magnetic field of induction 2 tesla. Find the force experienced by it.
25. Find the length of the conductor which is moving with a speed of 5m/s in a direction perpendicular to the direction of magnetic field of induction 0.6 tesla if it induces an emf of 1.2 V between the ends of the conductor.

26. When a charged particle 'q' is moving with a speed 'v' perpendicular to the magnetic field of induction 'B', it moves in a circular path. ('M' is mass of the particle what is the expression for
- (i) radius of the circular path (ii) time period of the particle
27. Answer the following.
- (i) Oersted is the unit of which quantity?
- (ii) Weber is the unit of which quantity?
28. Define catenation.
29. Write the balanced Chemical equation showing the reaction between Ethanol and Sodium metal.
30. What is Polymerization?
31. What is Isomerism?
32. Write the structural formulae of Aldehyde and ketone functional groups.
33. Write the IUPAC name of
- $$CH \equiv C - CH = C = CH - COOH$$
34. Draw a soap molecule and mention the Hydrophobic and Hydrophilic ends.
35. What is an alkyl group?

ENGLISH - 2 (25 MARKS)

1. Read the following passage carefully

"Ibrahim was a poor man. He was very honest. He worked as a watchman in a mango grove. one day his master went to the garden and said, "A few guests are visiting us tomorrow. Please bring some good mangoes to my house. Bring the sweet ones." The next day Ibrahim picked some mangoes and put them in a basket. He took the mangoes to the master's house. Master felt happy because the mangoes were big in size and yellow in colour. The master thought that the mangoes would be sweet. After the dinner the guests ate the mangoes. They did not like them because they were all sour. The master got angry and went to the garden. Ibrahim was guarding the garden. His master said to him, "What is this, Ibrahim? All the mangoes you brought were sour. Why didn't you pick the sweet ones?" Ibrahim said, "How do I know which mangoes are sweet?" The master said angrily, "What! You have been watching my garden for some years and now you don't know such simple thing. Are you doing your work properly? you don't know which trees in my garden yield sweet mangoes. Are you watching my garden or some other's garden?" Ibrahim said calmly, "sir, I work here as a watchman. I don't eat these mangoes. I don't know which trees bear sweet mangoes and which trees bear sour ones. I am sorry I brought you sour mangoes." The master's angry was gone. He felt happy at the watchman's honesty. He said to Ibrahim, "I like you. I'm glad I have such an honest servant. I shall give you a rise in your salary immediately."

Now , arrange the following sentences in a meaningful order. 5x1=5 m

1. Ibrahim brought some mangoes which were served to the guests.
2. Ibrahim said that he was only a watchman and he didn't know which mangoes are sweet.
3. The master got angry because all the mangoes that Ibrahim brought were sour.
4. The master ordered Ibrahim to bring him some sweet mangoes for the guests.
5. The master was pleased with Ibrahim's honesty.

II. Read the paragraph and write the synonyms of the underlined words choosing from the words given in the box. $4 \times \frac{1}{2} = 2m$.

Asked movement purpose freedom difficult acquired
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"It was the best decision they could have made for me "adds Nick,who later achieved (a) a degree in Financial Planning and Real Estate." It was very hard (b) but it gave me independence (c). Nick who was teased and bullied, had an electric wheel chair for mobility (d).

III. Read the paragraph and match the words under 'A' with their antonyms under 'B' $4 \times \frac{1}{2} = 2m$

Ben is also in complete (a) new mourning .He is rather a Jolly (b) little man, but at present trying to adapt himself to the regrettable (c) occasion. Mrs Jordan sails into the room and solemnly goes straight (d) to Mrs Slater and kisses her.

- | A | B |
|-----------------|----------------|
| (a) Complete | 1. indirect |
| (b) Jolly | 2. welcome |
| (c) Regrettable | 3. unfortunate |
| (d) Straight. | 4. incomplete |
| | 5. direct |
| | 6. unhappy. |

IV. Fill in the blanks with the right form of the words given in brackets $4 \times \frac{1}{2} = 2m$

'I (a) (realised / realisation / realise) why God had made us like this -to give (b) (hope / hopeful / hopefully) to others. It was so (c) (inspiration / inspire / inspirational) to me that I decided to use my life to encourage other people and give them the (d) (courageous / courage / courageously) that the article had given me.'

V. Complete the spellings of the words with ou, ai,oo,ee,ii,ei,ie. 2×1/2=1m
 It would never do for them to find you in col rs (a) with grandfather lying dead, upst
 rs. (b)

VI. Complete the words with correct suffixes given in brackets 2×1/2=1m
 Although over 70, he is vigor(a) (us/ous) and well coloured. His bright
 malic.....(b) (eous/ious) eyes twinkle under his heavy, reddish grey eyebrows.

VII. Find the wrongly spelt word and write its correct spelling 2×1=2m

- | | | | | |
|----|--------------|-----------|---------|------------|
| 1 | Bargain | stupified | drawers | startled |
| 2. | Persaverance | mounted | bitter | terrified. |

VIII. Read the following dictionary entry of the word 'Lethargy' given below. 2×1=2m

im·mi·nent /'ɪmɪnənt/ *adj.* (especially of sth unpleasant) likely to happen very soon : *the imminent threat of invasion* ◊ *The system is in imminent danger of collapse.* ◊ *An announcement about his resignation is imminent.* ► **im·mi·nence** /-əns/ *noun* [U] : *the imminence of death* **im·mi·nent·ly** *adv.*

Now answer the following questions using the information above.

1. What is the noun form of 'imminent'?
2. Write the meaning of the word 'imminent'?

IX. Arrange the following words under the correct headings. 8×1/4=2m

imaginative	outgoing	haughty	stingy
malicious	meticulous	finicky	logical

Words express positive attitude

Words express negative attitude

- 1)
- 2)
- 3)
- 4)

- 1)
- 2)
- 3)
- 4)

X. Use the following expressions in sentences of your own 4×1=4m

1. Phrasal verb : stagger in
2. Idiomatic expression : get her own way

3. Binomial expression : part and parcel

4. Foreign expression : Alma mater

XI. Match the following one word substitutes with their meanings. **4×1/2=2m**

Part-A

Part-B

1. Introvert

A) a very unpleasant and rude fellow.

2. Placid

B) sensitive and always shows sympathy for people who are suffering.

3. Compassionate.

C) a feeling of hatred for others

4. boorish.

D) quiet and calm doesn't like to spend time with others.

E) Extremely unpleasant and always tries to offend people