Questions for QUESTION BLAST

Class – 11th Science

Round – 1

Subject : English Core

The Portrait of a Lady

1.Draw a comparison between the author's village school education and city school education.
2.The grand mother had a divine beauty. How did the author bring it out?
3. How did the grandmother react to the fact that the author was being given music lessons?Why?
4. How did the narrator and his grandmother become good friends?
5. How did the grandmother spend her time when the narrator went up to university?
Or
How did the sparrows pay their last homage to the grandmother?
Or
Why was it hard for the narrator to believe that the grandmother was once young and pretty?

We're Not afraid to Die…

6. How did the weather change on January 2? How did the voyagers feel?
7. Whom did the narrator employ and why? When did he do so?
8. What action did the narrator take after having decided to fight with the sea?
9. How did the narrator manage to survive through the attacks of subsequent waves?
10. 'I didn't want to worry you when you were trying to save us all," said Sue. What has happened to her?
Or
Why did the narrator feel that 'The Iie Amsterdam' was the most beautiful island? / Why do you think, did the narrator call lie Amsterdam 'the most beautiful island in the world'?
Or
How did little Jonathan react to the desperate situation they found themselves in on 5 January?

A Photograph

11. What has not changed over the years? Does this suggest something to you?
12. Explain: The sea holiday was her past, mine is her laughter.
13. What had the camera captured in the poem "A Photograph"? What moment does the photograph depict?
14. What does "this circumstance" refer to in the poem "A Photograph"?
15. What is the meaning of the line "Both wry with the laboured ease of loss."

The Laburnum Top

16. What happened when the mother goldfinch bird came to the laburnum tree?

17. How does the laburnum tree appear in September? Does the arrival of the goldfinch bring about a change in it?
Or
How is the tree transformed during the bird's visit? Write the line that shows this transformation.
18. In the poem 'Laburnum Top', what is the bird's movement compared to? What is the basis for the comparison?
19. How does the Laburnum ensure security for the nestlings?
20. How does the poet describe the goldfinch bird in the poem?

The summer of the beautiful White Horse

21. Why did Aram find it hard to believe what he saw that morning?
22. Who was uncle Khoarove? What were some of the notable traits of his character?
23. What did John Byro mean when he said, " A suspicious man would believe his eyes instead of his heart"?
24. You own an independent house in B Block, South City, Gurgaon. You are interested in disposing it of as you are going to settle abroad. Draft an advertisement in not more than 50 words to be published in 'Gurgaon Times', giving necessary details.
25. You are Vikram/Sonia, an electronics engineer who has recently returned from the U.S. and looking for a suitable job in the IT industry. Draft an advertisement in about 50 words for the 'Situation Wanted' column of a national newspaper. Put the advertisement in a box.
26. Is today's education enough to ensure a child's future success? Are the subjects being taught in schools and colleges relevant to what a child has to face in life and for his/her career? Write a speech as Mamta/Manav Mehra addressing the above-mentioned questions in not more than 150-200 words.

N.B. Que no 24 and 25 are optional and Que. 26 is compulsory

Subject – Hindi

1.आशय स्पष्ट कीजिए- दुनिया सोती थी पर दुनिया की जीभ जगती थी।

2. अलोपीदीन के कचहरी में आते ही कचहरी के सभी अधिकारी और अमले हलचल में क्यों आ गए?

3.लड़कियां हैं वह घास फूस की तरह बढ़ती चली जाती हैं।वाक्य समाज में लड़कियों की स्थिति की किस वास्तविकता को प्रकट करता है?

4. नमक का दरोगा कहानी के माध्यम से मुंशी प्रेमचंद हमे क्या संदेश देना चाहते हैं?

5.

6.वंशीधर सत्य पक्ष पर अडिग रहते हुए भी अकेले क्यों पड़ गए ?

7 .मासिक वेतन को पूर्णमासी का चाँद क्यों कहा गया है ?

8.न्याय और नीति सब लक्ष्मी के ही खिलौने हैं, इन्हें वह जैसा चाहती है, नचाती हैं -आशय स्पष्ट कीजिए।

9 . कबीर संसार में किस एक को मानते हैं ?

10. कवि ने परमात्मा की एकता किस प्रकार सिद्ध की है ?

11. संसार नश्वर है किंतु आत्मा अमर है -इस बात को किस से उदाहरण से सिद्ध किया गया ?

प्रश्न 12 .कबीर की दृष्टि में ईश्वर एक है इनके समर्थन में उन्होंने क्या तर्क दिए ?

13 लता मंगेशकर के गायन की किन्हीं तीन विशेषताओं का वर्णन कीजिए।

14. क्या आप इस कथन से सहमत हैं की लता मंगेशकर ने भारतीय लोगों की रुचि को संवारा है।

प्रश्न 15. नीचे दिए गए अपठित गद्यांश को पढ़कर उस पर आधारित प्रश्नों के उत्तर दीजिए ।

आज हम स्वतंत्र देश के नागरिक हैं ,जहां लोकतंत्र है। देश की बागडोर हमारे द्वारा चुने गए प्रतिनिधियों के हाथ में हैं। आज हम महिलाओं की भलाई के बारे में ज्यादा सोच सकते हैं। पिछली सरकारों ने महिलाओं के कल्याण के लिए अनेक योजनाएं बनाई। उनकी शिक्षा पर जोर दिया जाने लगा। देश की अनेक गैर सरकारी संस्थाओं ने उनकी शिक्षा के लिए स्कूल, कॉलेज खुलवाएं। जीवन के हर क्षेत्र में उन्हें प्रोत्साहित करने हेतु अनेक उपाय सोचे गए और लागू किए गए। महिलाओं को पारिवारिक या सामाजिक उत्पीड़न से बचाने के लिए महिला आयोग का भी गठन कर दिया गया। आज के समय में महिलाएं जीवन के हर क्षेत्र में पुरुषों से कंधे से कंधा मिलाकर काम कर रही हैं। महिलाएं शिक्षा के क्षेत्र में भी पुरुषों की अपेक्षा कहीं आगे जा चुकी हैं नौकरियों में भी महिलाओं की संख्या धीरे-धीरे पड़ रही है। समाज में महिलाओं का वर्चस्व सूर्य के प्रकाश की तरह तेज होता जा रहा है। देश के उच्च पदों पर भी स्त्रियां बखूबी कार्य कर रही हैं पहले तो कुछ गिने-चुने महिलाएं थी जिनका नाम हम गौरव के साथ लेते हैं लेकिन अब देश के सर्वोच्च पदों पर महिलाएं अपना दायित्व सफलतापूर्वक निभा रही हैं।

निम्नलिखित में से दिशा निर्देशानुसार विकल्पों का चयन कीजिए।

1 .लोकतंत्र का आशय है -

(क) लोक कल्याणकारी शासन

(ख) लोकपाल का चुनाव

(ग) संसद का शासन

(घ) चुने हुए प्रतिनिधियों का शासन।

2. महिला आयोग का मुख्य कार्य है -

(क) महिलाओं को शक्तिशाली बनाना

(ख) सामाजिक शोषण से बचना

(ग)नौकरियां दिलाना

(घ) उच्च पदों पर पहुंचाना।

3.उत्पीड़न का अर्थ है-

(क) पीड़ित होना

(ख)पीड़ा से मुक्ति

(ग) पीड़ा पहुंचाना

(घ)पीड़ा ना होना

4.कंधे से कंधा मिलाना का आशय है -

(क)प्रतियोगिता करना

(ख) होड़ में आगे रहना

(ग)स्वास्थ्य रक्षा के उपाय करना

(घ)बराबरी करना।

5.उपर्युक्त गद्यांश का उपयुक्त शीर्षक हो सकता है-

(क) भारतीय नारी का इतिहास

(ख)लोकप्रिय महिलाएं

(ग)महिलाकल्याण के उपाय

(घ)आगे बढ़ती भारतीय

प्रश्न 16. रचनात्मक लेखन- परोपकार

प्रश्न 17-रचनात्मक लेखन- समय का सदुपयोग

प्रश्न 18- रचनात्मक लेखन- देश प्रेम

प्रश्न 19 - रचनात्मक लेखन- आज़ादी का अमृत महोत्सव

20.मीरा के कुल बंधुओं ने उनके साथ कैसा व्यवहार किया?

21.चित्रपट संगीत और शास्त्रीय संगीत में अंतर लिखिए।

प्रश्न 22. दिए गए गद्यांश को पढ़कर प्रश्नों के उत्तर दीजिए ।

उनके पिता एक अनुभवी पुरुष थे। समझाने लगे बेटा घर की दुर्दशा देख रहे हो। ऋण के बोझ से दबे हुए हैं। लड़कियां हैं वह खास दोस्त की तरह बढ़ती जा चली जाती हैं। मैं कगारे का एक वृक्ष हो रहा हूं ,ना मालूम कब गिर पड़ूँ। अब तुम ही घर के मालिक -मुख्तार हो ।नौकरी में ओहदे की ओर ध्यान मत देना ,यह तो पीर का मजार है ।निगाह चढ़ावे और चादर पर रखनी चाहिए। ऐसा काम होना जहां कुछ उपरी आए हो ।मासिक वेतन तो पूर्णमासी का चांद है, जो एक दिन

दिखाई देता है और घटते- घटते लुप्त हो जाता है। ऊपरी आय बहता हुआ स्रोत है जिससे सदैव प्यास बुझती है।

1. अनुभवी पिता ने पुत्र से क्या कहा ?
2. लड़कियों के विकास एवं घास फूस में क्या समानता लेखक ने बतलाई है ?
3. वृद्धावस्था किसके समान होता है ?
4. पिता ने किस तरह की नौकरी ढूंढने के लिए पुत्र को सलाह दी ?
5. मासिक वेतन को पूर्णमासी का चांद क्यों कहा गया है ?

प्रश्न 23. भगत देखि राजी हुई ,जगत देखि रोई - इस पंक्ति का आशय स्पष्ट कीजिए |

प्रश्न 24. बादशाह के नाम का प्रसंग आते ही लेखिका की बातों में मियां नसीरुद्दीन की दिलचस्पी क्यों खत्म होने लगी ?

प्रश्न 25.पंच हजारी अंदाज में किसने- किससे वक्त निकालने की बात कही ? पंच हजारी से क्या अभिप्राय है ?

प्रश्न 26.विष का प्याला राणा भेज्या पीवत मीरा हँसी- इसमें क्या व्यंग है ?

Subject – Physics

1. Define unit &dimension of physical quantity.
2. What is the fundamental physical quantity and how many its type.
3. What is fundamental &derived unit.
4. What is the method to measure the mass describe.
5. What is the method to measure length.
6. What is the ave velocity &instantaneous velocity.
7. What is the property of displacement.
8. Write the difference between distance and displacement.
9. What do you know about positive &negative acceleration.
10. What is the difference between speed &velocity.
11. Rest and motion are related comment on it.
12. State any two property of dot and cross product of two vector.
13. Describe the trangal law of vector addition.
14. What do you mean by resolution of vector explain.
15. What is polar and axial vectors.
16. What is unit and position vector.
17. What is inertial and non inertial reference frame.
18. What is the importance of reference frame.
19. What is relative velocity.

20. What is scalar and vector quantity.
21.define one,two and three dimensional motion.and give two example.
22.what do you mean about point mass.
23.what is kinamatics and dynamics?
24.what is the importance of reference frame.
25.what is the property of zero vector.

Subject – Chemistry

Q1. Calculate the mass percent of different elements present in sodium sulfate (Na_2SO_4)

Q2. The density of the 3 molal solution of NaOH is 1.110 g mL^{-1}. Calculate the molarity of the solution.

Q3. Explain law of multiple proportion by giving suitable example.

Q4. On analysis a substance was found to have the following percentage composition, K = 28.16, Cl = 25.63, O = 46.21. Determine the molecular formula if it's molecular mass is 138.5 U. Write the name of compound.

Q5. In the reaction 2A + 4B → 3C + 4D, if 5 moles of A react with 6 moles of B,then -

1. Which is the limiting reagent.
2. Calculate the amount of C formed?

Q6. What is molarity and molality? Give the mathematical expression for both molarity and molality.

Q7. Calculate the molecular masses of the following –

1. Sulphuric acid
2. Nitric acid
3. Glucose.

Q8. The Balmer series in the hydrogen spectrum corresponds to the transition from $n_1 = 2$ to $n_2 = 3,4,\ldots$ This series lies in the visible region. Calculate the wave number of the line associated with the transition in the Balmer series when the electron moves to n = 4 orbit. ($R_H = 109677\ cm^{-1}$)

Q9. An electron is in one of the 3d orbitals. Give the possible values of n, l and m for the electron.

Q10. What is the photoelectric effect? State the result of a photoelectric effect experiment that could not be explained on the basis of laws of classical physics. Explain this effect on the basis of quantum theory of electromagnetic radiation.

Q11. A 100 watt bulb emits monochromatic light of wavelength 400nm. Calculate the no. Of photons emitted per second by the bulb.

Q12. What is spectrum? How many types of spectrum? Define absorption spectrum with example.

Q13. What is electromagnetic radiation? Write it's important terms which is used to represent the different characters of electromagnetic radiation.

Q14. Write the electronic configuration of (i) Mn^{2+} (ii) Cr^{3+} (iii) Fe^{2+}

And mention the number of unpaired electrons in each case.

Q15. State Paulis exclusion principle ? Explain it by giving suitable examples.

Q16. Table-tennis ball has a mass of 10 g and a speed of 90 m/s. If speed could be measured with the accuracy of 4%, what will be the uncertainty in speed and position?

Q17. Derive de broglie equation.

Q18. What is the basic difference in approach between Mendeleev's Periodic Law and the Modem Periodic Law.

Q19. Nitrogen has positive electron gain enthalpy whereas oxygen has negative. However, oxygen has lower ionization enthalpy than nitrogen. Explain.

Q20. Give the general characteristics of the long form of the Modern periodic table?

Q21. Explain the followings –

1. Why do Na and K have similar properties ?
2. How does valency vary in a group and period in the periodic table?

Q22. Explain why cations are smaller and anions are larger in radii than their parent atom?

Q23. Na^+ has a higher value of ionization enthalpy than Ne, though both have the same electronic configuration.

Q24. The atomic number of an element is 16. Determine its position in accordance with its electronic configuration.

Q25. Why does the electronegativity value increases across a period and decreases down a period?

Subject – Biology

Q1.What are the different defining properties of a living organism?

Q2. Explain metabolism and its types with examples.

Q3.Explain the structure and function of stomata.

Q4. Who proposed five kingdom classification write its basis.

Q5. Explain the rules of Binomial Nomenclature.

Q6. Explain the structure of bacterial cell.

Q7. Distinguish between G positive and G negative bacteria.

Q8.Explain types of bacteria basis on the shape.

Q9. Write any 5 economic importance of Monera Kingdom.

Q10. Write short notes on symbiosis. Give any two examples.

Q11. Write living and nonliving characteristics of virus.

Q12.Both gymnosperms and angiosperms bear seeds, then why are they classified separately?

Q13. Explain the structure of angiospermic ovule.

Q14.Explain different types of placentation.

Q15. Explain life cycle of bryophyta.

Q16. Explain briefly the following terms with suitable examples:

(i) protonema (ii) antheridium (iii) archegonium (iv) diplontic (v) sporophyll (vi) isogamy

Q17. Explain diagrammatically double fertilization and triple fusion.

Q18. What are the peculiar features that you find in parasitic platyhelminthes?

Q19. A.How important is the presence of air bladder in Pisces?

B. Could the number of eggs or young ones produced by an oviparous and viviparous mother be equal? Why?

Q20. Explain diagrammatically the characteristics of phylum arthropoda.

Q21. Bats included in mammal not in aves. Justify.

Q22.Explain the characteristics of the followings...

Amphibians, reptilians and mammals.

Q23. Explain different types of tap root modification.

Q24. Distinguishing between monocot and dicot stem.

Q25. Explain internal structure of monocot root.

Subject – Maths

1-If in two circles, arcs of the same length subtend angles 60° and 75° at the centre, find the ratio of their radii.

Que 2-Find the angle in radian through which a pendulum swings if its length is 75 cm and the tip describes an arc of length

(i) 10 cm(ii) 15 cm(iii) 21 cm.

Que 3-Find the value of: (i) sin 75°, (ii) tan 15°

Que 4-prove that

$\cos\left(\frac{3\pi}{2}+x\right)\cos(2\pi+x)\left[\cot\left(\frac{3\pi}{2}-x\right)+\cot(2\pi+x)\right]$ is equal to 1

Que 5-Prove that: sin x + sin 3x + sin 5x + sin 7x = 4 cos x cos 2x sin 4x

Que 6-Find the value of the trigonometric function sin 765°and cosec (- 1410°)

Que 7-**Find the values of other five trigonometric functions cos x = -1/2, x lies in third quadrant.**

Que 8- $\frac{\cos 4x+\cos 3x+\cos 2x}{\sin 4x+\sin 3x+\sin 2x}=\cot 3x$

Que 9- $\tan 4x=\frac{4\tan x\left(1-\tan^2 x\right)}{1-6\tan^2 x+\tan^4 x}$

Que 10-

cos 6x = 32 cos^6 x – 48 cos^4 x + 18 cos^2 x – 1

Que 11- $2\cos\frac{\pi}{13}\cos\frac{9\pi}{13}+\cos\frac{3\pi}{13}+\cos\frac{5\pi}{13}=0$

Que 12-- $(\cos x+\cos y)^2+(\sin x-\sin y)^2=4\cos^2\frac{x+y}{2}$

Que 13- $\frac{\sin 5x+\sin 3x}{\cos 5x+\cos 3x}=\tan 4x$

Que 14- $\frac{\sin x-\sin 3x}{\sin^2 x-\cos^2 x}=2\sin x$

Que 15 $\frac{\tan\left(\frac{\pi}{4}+x\right)}{\tan\left(\frac{\pi}{4}-x\right)}=\left(\frac{1+\tan x}{1-\tan x}\right)^2$

Que 16- $\cos\left(\frac{\pi}{4}-x\right)\cos\left(\frac{\pi}{4}-y\right)-\sin\left(\frac{\pi}{4}-x\right)\sin\left(\frac{\pi}{4}-y\right)=\sin(x+y)$

Que 17-Express the following expression in the form of a + ib:

$$\frac{(3+i\sqrt{5})(3-i\sqrt{5})}{(\sqrt{3}+\sqrt{2}i)-(\sqrt{3}-i\sqrt{2})}$$

Que 18-solve the quadratic Equation √3x^2 – √2x + 3√3 = 0

Que 19-Express each of the complex numbers givenin the form a + ib $\left(\frac{1}{5}+i\frac{2}{5}\right)-\left(4+i\frac{5}{2}\right)$

Que 20- (-2 – 1/3i)^3

Que 21-**Compute**

$$\frac{8!}{6!\times 2!}$$

Que 22-How many words, with or without meaning, can be made from the letters of the word MONDAY, assuming that no letter is repeated, if.

(i) 4 letters are used at a time, **(ii) All letters are used at a time,**

(iii) All letters are used, but the first letter is a vowel.

Que 23-In how many of the distinct permutations of the letters in MISSISSIPPI do the four I's not come together?

Que 24--Determine n

$^{2n}C_3$: $^{n}C_3$ = 12:1

Que 25- $^{2n}C_3$: $^{n}C_3$ = 11:1

Subject – PE

Q1.Define Physical Education? Explain the aims and objectives of Physical Education.

Q2. What do understand by the term physical education? What are the career options in Physical Education?

Q3. What are modern careers in physical education explain any four of them?

Q4. Describe in brief about Khelo India program?

Q5. Classify various playing surfaces in sports ?

Q6. Write briefly on Ancient Olympic before 1896 and Explain modern Olympic after 1896.

Q7. What is the Aim & Objective of Olympic Games?

Q8. Explain the Olympic flag. What is the role of rings in the Olympic flag?

Q9. Explain in detail IOA and IOC?

Q10.What are the Olympic Symbol and Motto?

Q11. What is the difference between Ancient and Modern Olympics? Explain in detail?

Q12. What do you mean by the term yoga? Write a note on the importance of yoga.

Q13. Define yoga. Write a note on elements of yoga.

Q14. Define yoga. Explain the relaxation techniques for improving concentration through Yoga Nidra.

Q15. What are yogic kriyas? Explain in detail the various types of yogic kriyas?

Q16. Describe in detail about ashtanga yoga with its purpose, benefits and advantages.

Q17. Elucidate upon the eight elements followed in ashtanga yoga briefly?

Q18. What is the purpose and advantages of Yogic kriyas?

Q19. Mention all the precautions and benefits of yogic kriyas?

Q20. What is meditation? What is the importance of meditation in sports?

Q21. How do a special education Counsellor,Occupational therapist, speech therapist and special educator help children with special needs (only two or three points each).

Q22. Write in detail the aims and objectives of adaptive physical education.

Q23. Differentiate between Disability and Disorder?

Q24. What do you understand by cognitive disability? Briefly explain its types?

Q25. Elaborate the role and importance of physical education teacher in growth of special need children?

Subject – CS

1.To run your computer system, what types of software are necessary ? What role does each type play in computer's functioning ? How is system software different from application software ?

2. What is the importance of an OS ? Discuss the role of utility software in the context of computer performance.

3. What are major functional components of a mobile system ? What is cache memory ? How is it useful ?

4. What are RAM and ROM ? How are they alike ? How are they different ? What are EEPROM, PROM and EPROM?

5.Distinguish between internal and external memory. What is the meaning of the term volatile primary memory ? What can be done to overcome the problems of volatility ?

6.Convert the following binary numbers to decimal, octal and hexadecimal numbers.

i.100101.101

ii.10101100.01011

7.Convert the following decimal numbers to binary and octal :

(a) 23. (b) 100

(c) 145. (d) 19

(e) 121. (f) 161

8.Convert the following hexadecimal numbers to binary :

(a) A6. (b) A07

(c) 7AB4. (d) BE

(e) BC9. (f) 9BC8

9.Convert the following binary numbers to hexadecimal and octal :

(a) 10011011101. (b) 1111011101011011

(c) 11010111010111. (d) 1010110110111

(e) 10110111011011. (f) 1111101110101111

10.What are some number systems used by computers ? Explain with examples.

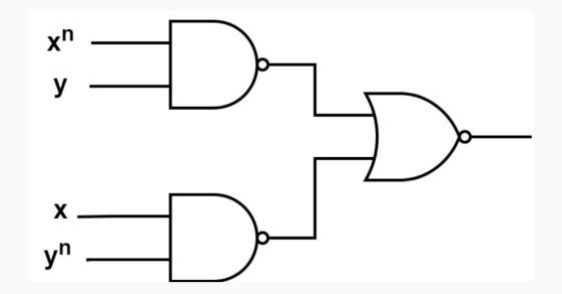
11.Discuss UTF-8 encoding scheme. How is it different from UTF-32 encoding scheme?

12. What are Boolean operators? Explain AND, OR, NOT operators.

13.Verify the following using truth table:

(i) a.(a+b) = a. (ii) X.(Y+Z) = X.Y + X.Z

14.Obtain the Boolean expression for the logic circuit shown below:



15. State De Morgan's law and prove it with a truth table.

16. What is program and programming language? Explain the term comment with examples.

17. What are advantages/disadvantages of working in Interactive mode in Python?In how many different ways, can you work in Python?

18.What are some limitations of Python programming language?What are the advantages of Python programming language?

19.Who was Python's developer and which two languages contributed to Python as a programming language?When was Python released ?

20. What is the advantage of preparing a digital content in Indian language using UNICODE font?

21. Explain the term

I. ASCII
II. ISCII

22.Draw a logic circuit of the following Boolean expression:

(i) $(A.\overline{B}) + (C + \overline{D}) + (B.\overline{D})$

(ii) $(A+B).(BC+\overline{D})$

23.Convert the following base of number system:

(a) (1010100)10 = (.....)2

(b) (3674)8 = (.....)2

(c) (266)10 = (.....)8

(d) (9F2)16 = (.....)2

24.Write the name of following law and verify using truth table:

a(b + c) = ab + ac

25.Draw the logic circuit for the following Boolean expression:

(X'+Y).Z + W’