

POST UTME QUESTIONS AND ANSWERS

2010 to 2023 (exception of 2016)

JAMB Subject combination chart Included

College of Medicine

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College of Medicine

JAMB Subject Combination chart for RSU

Course	UTME Combination	O level Requirement Five (5) credit passes
Mathematics Medicine and Surgery	Mathematics, physics, Chemistry/biology, Use of English	Including English language. Mathematics, physics, chemistry/Biology
	Use of English, Mathematics, Physics and chemistry or biology	To include English language, Mathematics., physics plus two (2) other science subject
	Use of English, Physics, Mathematics. And any other science Subject. xeera.ng	In English, Physics, chemistry, Mathematics and any other science subject.
	Use of English, Chemistry, Mathematics and any other science subject.	In English, Mathematics, Physics, chemistry and biology
	Use of English, Physics, Chemistry and biology or Mathematics is accepted	English, Mathematics, Physics, chemistry and Biology
	Use of English, Biology and any two (2) of physics, chemistry and Mathematics.	In English, Mathematics, Biology and two (2) other science subject
	Use of English, Mathematics, Biology or Geography, chemistry or physics.	In English, Biology, chemistry, Mathematics and any other subject

	Use of English, Biology, Chemistry and either physics or Mathematics	In English, Mathematics, chemistry, biology and physics
	Use of English, Biology or agriculture science, Chemistry and physics or Mathematics.	In English, Mathematics, Chemistry and biology or Agric. Science and any other subject
	Use of English, Chemistry, Biology and either physics or Mathematics.	In English Language, Biology, Mathematics., Chemistry and any other one (1) of Health science, statistics, physics and Geography.

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ABOUT RSU-

QUESTION NO: 1

Choose the correct option.

Absence from school examinations will only be considered on medical premises as approved by ____.

- ☐ A. the Dean of the faculty
- ☐ B. the Director of the University Health Services
- ☐ C. the Head of Exams and Records
- ☐ D. the Senate

The correct answer is option [B]

QUESTION NO: 2

Choose the correct option.

The sum of ____ is required as a fee for an appeal for the reassessment of examination record by a student in the Rivers State University.

- ☐ A. five hundred naira only
- ☐ B. one thousand naira only
- ☐ C. five thousand naira only
- ☐ D. seven hundred naira only

The correct answer is option [A]

QUESTION NO: 3

Choose the correct option.

The fee paid by a student who appeals for the reassessment of examination record in the Rivers State University is refundable only if the appeal results in ____.

- ☐ A. a change in score above 50%
- ☐ B. a change in score above 60%
- ☐ C. a change in grade
- ☐ D. an upward change of grade

The correct answer is option [D]

QUESTION NO: 4

Choose the correct option.

Ideally, a student in a four-year degree programme in the Rivers State University should complete his programme in eight semesters. However, an exception may occur where ____.

- ☐ A. he will be allowed to complete the programme in 10 semesters, provided he maintains a CGPA of 1.50 and above
- ☐ B. he will be allowed to complete the programme in 12 semesters, provided he maintains a CGPA of 1.50 and above
- ☐ C. he will be allowed to complete the programme in 14 semesters, provided he maintains a CGPA of 2.00 and above
- ☐ D. he will be allowed to complete the programme in 12 semesters, provided he maintains a CGPA of 2.00 and above

The correct answer is option [B]

QUESTION NO: 5

Choose the correct option.

Ideally, a student in a five-year degree programme in the Rivers State University should complete his programme in eight semesters. However, an exception may occur where ____.

- ☐ A. he will be allowed to complete the programme in 10 semesters, provided he maintains a CGPA of 1.50 and above
- ☐ B. he will be allowed to complete the programme in 12 semesters, provided he maintains a CGPA of 1.50 and above
- ☐ C. he will be allowed to complete the programme in 14 semesters, provided he maintains a CGPA of 1.50 and above
- ☐ D. he will be allowed to complete the programme in 15 semesters, provided he maintains a CGPA of 1.50 and above

The correct answer is option [C]

QUESTION NO: 6

Choose the correct option.

A student is said to be on clear standing when ____.

- ☐ A. he maintains a CGPA of at least 1.00 and passes at least 70% of all his courses
- ☐ B. he maintains a CGPA of at least 1.50 and passes all his courses
- ☐ C. he maintains a CGPA of at least 1.00 and passes at least 80% of all his courses
- ☐ D. he maintains a CGPA of at least 1.50 and passes at least 60% of all his courses

The correct answer is option [B]

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QUESTION NO: 7

Choose the correct option.

A transfer from one department to another will involve all of the following, except the ____.

- ☐ A. Committee of Deans
- ☐ B. Senate
- ☐ C. Pro-Chancellor and Chairman of Council
- ☐ D. Registrar

The correct answer is option [C]

QUESTION NO: 8

Choose the correct option.

The approval of a transfer from one department to another in the Rivers State University is done by the ____.

- ☐ A. Senate
- ☐ B. Registrar
- ☐ C. Committee of Deans
- ☐ D. Heads of the departments involved

The correct answer is option [A]

QUESTION NO: 9

Choose the correct option.

For a four-year programme in the Rivers State University, a regular student for Direct Entry into year three is expected to earn a minimum of ____ credit units.

- ☐ A. 160
- ☐ B. 130
- ☐ C. 100
- ☐ D. 70

The correct answer is option [D]

QUESTION NO: 10

Choose the correct option.

For a five-year programme in the Rivers State University, a CCE student is expected to earn a minimum of ____ credit units.

- ☐ A. 160
- ☐ B. 190

- ☐ C. 130
- ☐ D. 100

The correct answer is option [A]

QUESTION NO: 11

Choose the correct option.

For a six-year programme in the Rivers State University, a CCE student for Direct Entry into year two is expected to earn a minimum of ____ credit units.

- ☐ A. 100
- ☐ B. 130
- ☐ C. 190
- ☐ D. 160

The correct answer is option [D]

QUESTION NO: 12

Choose the correct option.

All of these are institutes of the Rivers State University, except ____.

- ☐ A. Institute of Political Studies (IPS)
- ☐ B. Institute of Education (IED)
- ☐ C. Institute of Foundation Studies (IFS)
- ☐ D. Rivers Institute of Agricultural Research and Training (RIART)

The correct answer is option [A]

QUESTION NO: 13

Choose the correct option.

____ is the current Registrar of the Rivers State University.

- ☐ A. Mr. Markson B. Meyebo
- ☐ B. Rev. Manasseh Y. Oguru (JP)
- ☐ C. Mr. Clinton Ogorobia Maxwell
- ☐ D. Mr. S.C Enyindah

The correct answer is option [D]

QUESTION NO: 14

Choose the correct option.

The Rivers State University is the only university in Nigeria that offers first degree programmes in ____ and ____.

- ☐ A. Marine Engineering and Secretarial Administration

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- ☐ B. Educational Foundations and Crop/Soil Science
 - ☐ C. Land Surveying and Aeronautical Telecommunication Engineering
 - ☐ D. Forestry and Environment, and Chemistry
- The correct answer is option [A]

QUESTION NO: 15

Choose the correct option.

Rivers State University received its institutional accreditation with a score of 67.25% from the National Universities Commission (NUC) in ____.

- ☐ A. May, 2012
- ☐ B. April, 2012
- ☐ C. June, 2012
- ☐ D. March, 2012

The correct answer is option [B]

QUESTION NO: 16

Choose the correct option.

Which of these statements is false?

- ☐ A. The booking and payment system is used for the process of accomodation.
- ☐ B. Students are mandated to preview and approve their ID cards for printing.
- ☐ C. Verification during physical clearance is ensured by the Admissions Officers and the Registrar.
- ☐ D. The online PIN shop is used to purchase PINs for payment of Acceptance fee, Portal Access, and School fees.

The correct answer is option [C]

QUESTION NO: 17

Choose the correct option.

Online registration for bed spaces for hostel accomodation as a fresh student is done with the use of ____.

- ☐ A. student's school ID Card
- ☐ B. JAMB registration number
- ☐ C. School fees receipt number
- ☐ D. designated hostel number by GENDER

The correct answer is option [B]

QUESTION NO: 18

Choose the correct option.

A student may withdraw from the Rivers State University with the permission of the Faculty Board and Senate, but may apply for registration within one year of the withdrawal.

- ☐ A. True
- ☐ B. False

The correct answer is option [A]

QUESTION NO: 19

Choose the correct option.

____ is the code used for the category of courses that are optional in the Rivers State University.

- ☐ A. E
- ☐ B. R
- ☐ C. C
- ☐ D. O

The correct answer is option [A]

QUESTION NO: 20

Choose the correct option.

According to the grading system adopted by the Rivers State University, all of the following are correct, except ____.

- ☐ A. 40% - 49%: D (Satisfactory): 2points
- ☐ B. 0% - 39%: F (Very Poor/Fail): 0point
- ☐ C. 60% - 69%: B (Good): 4points
- ☐ D. 50% - 59%: C (Average): 3points

The correct answer is option [A]

QUESTION NO: 21

Choose the correct option.

For a five-year programme in the Rivers State University, a CCE student for Direct Entry into year three is expected to earn a minimum of ____ credit units.

- ☐ A. 190
- ☐ B. 100
- ☐ C. 130
- ☐ D. 160

The correct answer is option [B]

QUESTION NO: 22

Choose the correct option.

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What is the likely punishment mete on a student who is caught impersonating during an examination?

- ☐ A. Suspension
- ☐ B. F grade
- ☐ C. Demotion
- ☐ D. Dismissal

The correct answer is option [D]

QUESTION NO: 23

Choose the correct option.

For the purpose of conducting examinations at the undergraduate level, internal examiners only shall be made available.

- ☐ A. True
- ☐ B. False

The correct answer is option [B]

QUESTION NO: 24

Choose the correct option.

All handwritten examination question papers are submitted to the Head of Department not later than 4 weeks to the beginning of the semester examinations.

- ☐ A. True
- ☐ B. False

The correct answer is option [A]

QUESTION NO: 25

Choose the correct option.

Which of these is an offence by a teaching staff of the university?

- ☐ A. Inclusion of continuous assessment papers into textbooks and handouts.
- ☐ B. Renting of boys' quarters to students or other individuals.
- ☐ C. Sexual harassment.
- ☐ D. All of the above.

The correct answer is option [D]

QUESTION NO: 26

Choose the correct option.

All lecturers must make available office addresses and contact time to their students.

- ☐ A. True
- ☐ B. False

The correct answer is option [A]

QUESTION NO: 27

Choose the correct option.

Non-academic staff must not append their signatures on forms ____ and ____.

- ☐ A. D and F
- ☐ B. A and B
- ☐ C. A and C
- ☐ D. all of the above

The correct answer is option [A]

QUESTION NO: 28

Choose the correct option.

All of the following are offences that can be committed by a non-academic staff, except ____.

- ☐ A. altering of examination results
- ☐ B. misappropriating university funds
- ☐ C. renting of boys' quarters to students and other persons
- ☐ D. none of the above

The correct answer is option [D]

QUESTION NO: 29

Choose the correct option.

Students are expected to approach their ____ on academic challenges such as choice of course electives, academic progress, etc they face in their departments.

- ☐ A. Course Representatives
- ☐ B. Deans of Faculties
- ☐ C. Course Advisers
- ☐ D. Examination Officers

The correct answer is option [C]

QUESTION NO: 30

Choose the correct option.

The ban of the compulsory sale of handouts, course-based textbooks and practical manuals by the Senate

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was a decision considered and reached at the ____ regular meeting held.

- ☐ A. 104th and 107th
- ☐ B. 100th and 104th
- ☐ C. 103rd and 105th
- ☐ D. 105th and 107th

The correct answer is option [A]

QUESTION NO: 31

Choose the correct option.

A ____ member task force was to be constituted to monitor the implementation of the ban of the compulsory sale of handouts, course-based textbooks and practical manuals to students by the Senate at the 107th regular meeting.

- ☐ A. 2-5
- ☐ B. 3-6
- ☐ C. 2-6
- ☐ D. 3-5

The correct answer is option [D]

QUESTION NO: 32

Choose the correct option.

Teaching staff must not delegate students and non-academic staff to:

- I. Supervise examinations
- II. Teach courses
- III. Mark examination scripts
- IV. Handle examination results

- ☐ A. I, II and III
- ☐ B. II, III and IV
- ☐ C. I, II and IV
- ☐ D. I, II, III and IV

The correct answer is option [D]

QUESTION NO: 33

Choose the correct option.

The Chief Invigilator collects answer booklets from the Departmental Examination Officer ____ before the examination.

- ☐ A. two hours
- ☐ B. one day
- ☐ C. two days

- ☐ D. one hour

The correct answer is option [D]

QUESTION NO: 34

Choose the correct option.

Attendance and score sheets for each class are issued out by the Faculty Examination Officer to the ____ for completion for every examination.

- ☐ A. Chief Invigilator
- ☐ B. Departmental Examination Officer
- ☐ C. Dean of the Faculty
- ☐ D. A, B or C

The correct answer is option [A]

QUESTION NO: 35

Choose the correct option.

The students' results considered and approved by the Faculty Board of Examiners are presented to the Dean of the Faculty.

- ☐ A. True
- ☐ B. False

The correct answer is option [B]

QUESTION NO: 36

Choose the correct option.

Service courses are core departmental courses handled by teaching staff in a given department.

- ☐ A. True
- ☐ B. False

The correct answer is option [B]

QUESTION NO: 37

Choose the correct option.

Faculties and Institutes that offer service courses are responsible for setting and moderating examination questions in their courses.

- ☐ A. True
- ☐ B. False

The correct answer is option [A]

QUESTION NO: 38

Choose the correct option.

Which of these statements is false?

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- ☐ A. Under no condition can examinations for service courses be conducted outside the Faculty or Institute offering the course.
- ☐ B. Faculties and Institutes that offer service courses are responsible for setting and moderating examination questions in their courses.
- ☐ C. Faculties and Institutes offering service courses are responsible for producing adequate number of question papers for examinations in their courses.
- ☐ D. Examination questions for service courses are brought to the examination halls by the Head of Department or Director of Institute thirty minutes before start of exams.

The correct answer is option [A]

QUESTION NO: 39

Choose the correct option.

Attendance and score sheets for examinations of service courses are submitted to the Faculty Examination Officer by the Faculty/Department/Programme being serviced.

-
- ☐ A. True
- ☐ B. False

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The correct answer is option [A]

QUESTION NO: 40

Choose the correct option.

All students of the Rivers State University are expected to be at their examination halls ____ to the commencement of all examinations.

-
- ☐ A. 20 minutes
- ☐ B. 15 minutes
- ☐ C. 30 minutes
- ☐ D. 10 minutes

The correct answer is option [C]

QUESTION NO: 1

Read the passage carefully and answer the question.

Wives maximise their singleness and do not fret over whom they would be found by, how and when they would be found. They trust God always and strive to please Him, knowing assuredly that all good and perfect gifts come from Him.

Wives cherish their period of preparation and are not in a hurry to get over with it, which makes them not to compromise in their standards, principles and virtues according to God's word. In fact, they are not in a hurry to jump out of their preparatory period for any man because they would only become incomplete and unfulfilled if they stopped half-way through their preparatory class.

A woman may try to "impress" in order to seek the approval of some men, while wives are just impressive in all things. Not to get it wrong, wives may not be all that some men would want them to be, but most times, they turn out to be what God wants them to be to the man so that he also can become what God wants him to be.

A woman may prefer you if your parents were dead, but a wife is groomed to handle the complicated patterns of relating with her in-laws. Wives are not rigid, rather they are malleable, trustworthy, loving and loveable, forgiving and forgivable, submissive and respected. They are almost always prepared for your ministry and are willing to stand by you at both good and bad times.

Remember friends, except the woman is prepared, she cannot be a wife. The period of singleness is not just a period of waiting but more of the period of preparation and training for her man. If she's not prepared a wife, it may be difficult to make her one.

Arise sisters, prepare yourselves; be wives and not just women. For it is only when a man finds a wife that he finds a good thing and obtains favour from the Lord. MARRIAGE IS ABOUT WIVES AND NOT WOMEN!

(Adapted from Peculiar Truth)

Why would women prefer their parents-in-law dead?

- ☐ A. They want to have the men all to themselves.

- ☐ B. They are not prepared to handle the complications of relating with their in-laws.
- ☐ C. They are prepared to handle the complications of relating with their in-laws.
- ☐ D. They will always find it difficult impressing their in-laws.

The correct answer is option [B].

QUESTION NO: 2

Read the passage carefully and answer the question.

Chike must have passed the house five times, yet he was still not sure. Was this the house he had visited so often in the past? The house he used to visit was a bungalow, but this house was also a bungalow. The old house was situated between two-storey buildings; this one too was so situated. But inspite of this feeling of certainty, Chike had a vague suspicion that the house he had passed so often that day might be the wrong house after all. Could an absence of two years have blurred his memory so badly? After a few moments of hesitation, Chike began to move towards the house and then stopped as if held back by an invisible hand. His attention had been distracted by a girl of about twenty-four, who was tripping along the pavement to his right. He turned and advanced towards her, and was about to call her by what he felt was her name when he discovered that he had made a mistake in respect of her identity.

Just as Chike turned from the girl to continue his quest, he heard voices shouting 'thief! thief!' and saw a crowd materialise in seconds. At the head of this justice-impelled rabble was a ludicrously fat woman who inspite of her size, bounced along with the agility of a prize athlete. This barrel bellowed loudest and clapped her hands vigorously to punctuate her outburst. And as she did so, the surplus flesh on her podgy arms quivered. 'They are all the same!' the woman screamed, addressing nobody in particular. 'They dress gorgeously, but underneath they are rogues'. Again, she clapped her hands and again, there was a quivering of loose flesh. Chike was so busily occupied with watching the antics of this woman that he did not notice at first that the object of her venom was the girl that he had seen earlier. It was this girl that was now surrounded by the crowd, with many people groaning, sighing

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and hissing in unison. Chike relaxed and prepared to watch the drama unfolding before him. Chike left the girl alone because he ____.

- ☐ A. discovered that she was a thief
- ☐ B. was afraid of the fat woman
- ☐ C. did not know her
- ☐ D. did not like her

The correct answer is option [C].

QUESTION NO: 3

Fill in the blank space with the correct option.

Neither John nor Mary felt happy _____ the accident.

- ☐ A. for
- ☐ B. in
- ☐ C. about
- ☐ D. by
- ☐ E. on

The correct answer is option [C].

QUESTION NO: 4

Fill in the blank space with the correct option.

I started writing at 9am; it is now 10am. By 11am, I _____ writing for two hours.

- ☐ A. will be
- ☐ B. am
- ☐ C. will have been
- ☐ D. have been

The correct answer is option [C].

QUESTION NO: 5

From the options lettered A - E, choose the one that best interprets the sentence below:

I'll call at your house this evening if it doesn't rain. This means that I ____.

- ☐ A. will visit you this evening if it rains
- ☐ B. will only phone you if it rains this evening
- ☐ C. will sleep over in your house this evening if it rains

- ☐ D. am not certain of my visit this evening
- The correct answer is option [D].

QUESTION NO: 6

Choose the correct option.

The sentence, "They would have already graded your exam," indicates that ____.

- ☐ A. event time and relevance time are the same
- ☐ B. event time follows relevance time
- ☐ C. event time precedes relevance time
- ☐ D. event time and relevance time are uncertain
- ☐ E. None of the above

The correct answer is option [D]

QUESTION NO: 7

Read the passage carefully and answer the question.

Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

According to the passage, International English is ____.

- ☐ A. a kind of arbitrary classification
- ☐ B. an imaginary classification
- ☐ C. an informal standard

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- ☐ D. a recognised formal standard

The correct answer is option [B]

QUESTION NO: 8

Fill in the blank space with the correct option.

Yours is to command, _____ is to obey.

- ☐ A. theirs'
☐ B. their's
☐ C. their
☐ D. theirs

The correct answer is option [D].

When the pronoun denoting ownership is not followed by a noun, it usually takes the letter (s) without the apostrophe.

QUESTION NO: 9

Fill in the blank space with the correct option.

The road cannot be constructed without _____.

- ☐ A. those huge earth-moving machines
☐ B. those huge-moving earth machines
☐ C. those earth-moving huge machines
☐ D. machines those huge earth-moving

The correct answer is option [A].

QUESTION NO: 10

Fill in the blank space with the correct option.

The military _____ is something to watch on national days.

- ☐ A. fight
☐ B. marching
☐ C. regalia
☐ D. match past
☐ E. parade

The correct answer is option [E].

QUESTION NO: 11

Choose the correct option.

In the sentence "We need to get OURSELVES up to speed", the capitalised word is an example of _____.

- ☐ A. a relative pronoun
☐ B. a personal pronoun
☐ C. a reciprocal pronoun
☐ D. a reflexive pronoun
☐ E. an interrogative pronoun

The correct answer is option [D]

QUESTION NO: 12

Choose the correct option.

_____ refers to the specific names of people, animals, places, ideas and concepts.

- ☐ A. Proper Noun
☐ B. Common Noun
☐ C. Specific Noun
☐ D. A and C
☐ E. B and C

The correct answer is option [D]

QUESTION NO: 13

Choose the correct option.

Which of the following is an example of a complex sentence?

- ☐ A. The woman walked into the sitting room and found Olu sitting on a chair.
☐ B. The teacher flogged him because he jumped over the fence.
☐ C. Your creditor came yesterday when you were not home, but I was able to pay him.
☐ D. Nike went to the market yesterday.
☐ E. Adenike was told not to break the news to her in-laws.

The correct answer is option [B]

QUESTION NO: 14

Fill in the blank space with the correct option.

She went _____ to collect her exam results.

- ☐ A. pretty
☐ B. cleverly

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- ☐ C. hopefully
- ☐ D. bitterly
- ☐ E. giggling

The correct answer is option [C]

QUESTION NO: 15

Choose the correct option.

If speaking time is now, and event time is tomorrow, which of the following sentences expresses the tense correctly?

- ☐ A. I thought about slapping you.
- ☐ B. I'm thinking about slapping you.
- ☐ C. I will be thinking about slapping you.
- ☐ D. I am thinking of how I slapped you.
- ☐ E. I thought of how i slapped you.

The correct answer is option [C]

QUESTION NO: 16

Fill in the blank space with the correct option.

This machinery needs to be ____ before putting it into operation.

- ☐ A. suited
- ☐ B. adjusted
- ☐ C. accommodated
- ☐ D. conformed
- ☐ E. used

The correct answer is option [B]

QUESTION NO: 17

Fill in the blank space with the correct option.

As Brian is having his summer vacation, he is ____ about the village all day long.

- ☐ A. striding
- ☐ B. staggering
- ☐ C. running
- ☐ D. sauntering
- ☐ E. none of the above

The correct answer is option [D]

QUESTION NO: 18

Fill in the blank space with the correct option.

____ did the President appoint as a Special Adviser
____ Economic Affairs?

- ☐ A. When/for
- ☐ B. Who/on
- ☐ C. Where/in
- ☐ D. Whom/in
- ☐ E. Who/for

The correct answer is option [B].

QUESTION NO: 19

Choose the correct option.

Identify the prefix which matches the word 'standard' to give it the meaning 'below standard'.

- ☐ A. sub-
- ☐ B. under-
- ☐ C. mini-
- ☐ D. counter-
- ☐ E. pre-

The correct answer is option [A]

QUESTION NO: 20

Fill in the blank space with the correct option.

His suggestion is completely ____ the point and cannot be accepted.

- ☐ A. to
- ☐ B. about
- ☐ C. beside
- ☐ D. on
- ☐ E. under

The correct answer is option [C].

QUESTION NO: 21

Fill in the blank space with the correct option.

By the end of this year, ____ in this town for eleven years.

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- ☐ A. I'm living
- ☐ B. I'd be living
- ☐ C. I'll live
- ☐ D. I'll have lived
- ☐ E. I have lived

The correct answer is option [D].

QUESTION NO: 22

Fill in the blank space with the correct option.

The pieces of evidence of all the accused persons _____ by the judge sitting at No. 2 Assizes last week.

- ☐ A. were disbelieved
- ☐ B. was disbelieved
- ☐ C. is disbelieved
- ☐ D. are disbelieved
- ☐ E. has been disbelieved

The correct answer is option [A].

QUESTION NO: 23

Fill in the blank space with the correct option.

Good exercise may help a person fight _____ cold.

- ☐ A. out
- ☐ B. at
- ☐ C. with
- ☐ D. off
- ☐ E. of

The correct answer is option [D].

QUESTION NO: 24

Choose the correct option.

In the sentence "SOMETHING is burning", the capitalised word is an example of _____.

- ☐ A. a noun
- ☐ B. a personal pronoun
- ☐ C. a reciprocal pronoun
- ☐ D. an indefinite pronoun
- ☐ E. a demonstrative pronoun

The correct answer is option [D]. The word 'SOMETHING' is an indefinite pronoun because it refers to an unspecified thing.

QUESTION NO: 25

Choose the correct option.

If speaking time is now, and event time is now, which of the following sentences expresses tense correctly?

- ☐ A. I thought about slapping you.
- ☐ B. I'm thinking about slapping you.
- ☐ C. I will be thinking about slapping you.
- ☐ D. All of the above
- ☐ E. None of the above

The correct answer is option [B]

QUESTION NO: 26

Choose the correct option.

The verb tense and aspect of the sentence "Heather will be attending the conference for chairs" is _____.

- ☐ A. future progressive
- ☐ B. future perfect
- ☐ C. future perfect progressive
- ☐ D. present perfect progressive
- ☐ E. present progressive

The correct answer is option [A]

QUESTION NO: 27

Fill in the blank space with the correct option.

In the sentence "Olu PASSED the last stage of the examination last year," the capitalized word is an example of a _____.

- ☐ A. simple past tense
- ☐ B. past continuous tense
- ☐ C. past perfect tense
- ☐ D. past perfect continuous tense
- ☐ E. simple past continuous tense

The correct answer is option [A]

QUESTION NO: 28

Choose the correct option.

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In the sentence "The milk TASTES spoilt", the capitalised word is an example of ____.

- ☐ A. a transitive verb
- ☐ B. an infinite verb
- ☐ C. an auxiliary verb
- ☐ D. a linking verb
- ☐ E. a finite verb

The correct answer is option [A]

A transitive verb is a verb that requires an object in order to be gramatical

QUESTION NO: 29

Choose the correct option.

The teacher asked the noisy students to ____ talking.

- ☐ A. give up
- ☐ B. leave
- ☐ C. quit
- ☐ D. abandon
- ☐ E. prevent

The correct answer is option [C]

QUESTION NO: 30

Choose the correct option.

My best friend ____ me in a time of need.

- ☐ A. deserted
- ☐ B. utilized
- ☐ C. adapted
- ☐ D. resigned
- ☐ E. disguised

The correct answer is option [A]

QUESTION NO: 31

Choose the correct option.

Which of the following is a function of an adverb?

- ☐ A. It modifies verbs.
- ☐ B. It modifies adjectives.
- ☐ C. It modifies other adverbs.

☐ D. All of the above.

☐ E. None of the above.

The correct answer is option [D]

QUESTION NO: 32

Choose the correct option.

The sentence, "They had already graded your exam", indicates that ____.

- ☐ A. event time precedes relevance time
- ☐ B. event time follows relevance time
- ☐ C. event time and relevance time are the same
- ☐ D. relevance time precedes event time
- ☐ E. None of the above

The correct answer is option [A]

QUESTION NO: 33

Choose the correct option.

For our Sunday lunch, mother always cooked a ____.

- ☐ A. large pot of thick, spicy groundnut soup
- ☐ B. large, thick, spicy pot of groundnut soup
- ☐ C. large, spicy, thick groundnut pot of soup
- ☐ D. large, spicy pot of thick groundnut soup
- ☐ E. large groundnut pot of thick, spicy soup

The correct answer is option [A].

QUESTION NO: 34

Choose the correct option.

Identify the sentence in which the subject and verb do not agree.

- ☐ A. Not the robbers, but the policeman was responsible for the theft.
- ☐ B. Chemistry, as well as Physics is compulsory.
- ☐ C. Bread and butter is delicious.
- ☐ D. Neither the chairman nor his councillors has a sense of direction.
- ☐ E. Everyone, but you is happy.

The correct answer is option [D]

QUESTION NO: 35

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ENGLISH LANGUAGE-

Choose from the options lettered A-E, the option that most appropriately completes the sentence.

I wish I _____ his name.

- ☐ A. am knowing
- ☐ B. knew
- ☐ C. know
- ☐ D. have known
- ☐ E. knows

The correct answer is option [B]

QUESTION NO: 36

Choose from the options lettered A-E, the option that most appropriately completes the sentence.

The boy is _____ than his father.

- ☐ A. more taller
- ☐ B. most taller
- ☐ C. much taller
- ☐ D. more taller
- ☐ E. so taller

The correct answer is option [C]

QUESTION NO: 37

From the options lettered A-E, choose the word that best completes the sentence.

The principal, together with the staff, _____ visited the sick student.

- ☐ A. have
- ☐ B. were
- ☐ C. could
- ☐ D. has
- ☐ E. would

The correct answer is option [A]

QUESTION NO: 38

From the options lettered A-E, choose the word that best completes the sentence.

Our bus headed _____ Kaduna immediately.

- ☐ A. to
- ☐ B. from
- ☐ C. through
- ☐ D. for
- ☐ E. at

The correct answer is option [D]

QUESTION NO: 39

From the options lettered A-E, choose the word that best completes the sentence.

Neither Fatima nor Jennifer _____ in the house when the storm ripped off our roof.

- ☐ A. were
- ☐ B. are
- ☐ C. is
- ☐ D. was
- ☐ E. where

The correct answer is option [D]

QUESTION NO: 40

From the options lettered A-E, choose the word that best completes the sentence.

That luggage is for the _____ soldier.

- ☐ A. tall ECOMOG black
- ☐ B. tall black ECOMOG
- ☐ C. ECOMOG tall black
- ☐ D. black tall ECOMOG
- ☐ E. black ECOMOG tall

The correct answer is option [B]

QUESTION NO: 41

From the options lettered A-E, choose the word that best completes the sentence.

We are worried by the _____ existing between the two factions of the party.

- ☐ A. distraction
- ☐ B. commotion
- ☐ C. confusion

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ENGLISH LANGUAGE-

- ☐ D. rivalry
- ☐ E. storm

The correct answer is option [D]

QUESTION NO: 42

From the options lettered A-E, choose the word that best completes the sentence.

The signature on the document lacked ____; so it was rejected.

- ☐ A. clarity
- ☐ B. authenticity
- ☐ C. formality
- ☐ D. simplicity
- ☐ E. faults

The correct answer is option [B]

QUESTION NO: 43

From the words lettered A-E, choose the word that best completes the sentence.

We shall not ____ WASSCE next May.

- ☐ A. sit in
- ☐ B. sit at
- ☐ C. sit
- ☐ D. sit to
- ☐ E. sit with

The correct answer is option [B]

QUESTION NO: 44

From the words lettered A-E, choose the correct option that best completes the sentence.

The cook should have ____ the pepper and the tomatoes together.

- ☐ A. ground
- ☐ B. grind
- ☐ C. grings
- ☐ D. grounded
- ☐ E. grinding

The correct answer is option [D]

QUESTION NO: 45

From the options lettered A-E, choose the word that best completes the sentence.

The tenant speaks well about his landlord ____ is uniquely kind hearted.

- ☐ A. which
- ☐ B. who
- ☐ C. whom
- ☐ D. who's
- ☐ E. whose

The correct answer is option [B]

QUESTION NO: 46

From the options lettered A-E, choose the word that best completes the sentence.

The statement, "The policeman persuaded him to leave", re-written in the passive form becomes, He ____ persuaded by the policeman to leave.

- ☐ A. has been
- ☐ B. is
- ☐ C. is being
- ☐ D. was
- ☐ E. had being

The correct answer is option [D]

QUESTION NO: 47

Choose from the options lettered A-E, the one that best completes the sentence.

My uncles are successful medical practitioners, ____ of them ____ a clinic.

- ☐ A. all, owned
- ☐ B. both, owns
- ☐ C. every, owns
- ☐ D. each, owns
- ☐ E. all, owns

The correct answer is option [D]

QUESTION NO: 48

From the options lettered A-E, choose the word that best completes the sentence.

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ENGLISH LANGUAGE-

He left the town early this morning ____ he arrived very late.

- ☐ A. although
- ☐ B. but
- ☐ C. despite
- ☐ D. even
- ☐ E. than

The correct answer is option [B]

QUESTION NO: 49

Choose from the options lettered A -E, the one that best completes the sentence.

I was ____ by the girl's story.

- ☐ A. taken away
- ☐ B. taken about
- ☐ C. taken off
- ☐ D. taken up
- ☐ E. taken with

The correct answer is option [A]

QUESTION NO: 50

From the options lettered A - E, choose the word that contains the same sound as the capital letters in the word below:

splaSH

- ☐ A. Measure
- ☐ B. Buzz
- ☐ C. Boss
- ☐ D. Bash

The correct answer is Option [D].

QUESTION NO: 51

From the options lettered A - E, choose the word that BEST RHYMES with the given word.

Head

- ☐ A. Said
- ☐ B. Heard
- ☐ C. Sad

- ☐ D. Bead
- ☐ E. Heed

The correct answer is option [A].

QUESTION NO: 52

Choose the correct option.

Which of the following words has the STRESS on the FIRST SYLLABLE?

- ☐ A. Resist
- ☐ B. Drawer
- ☐ C. Confirm
- ☐ D. Intact
- ☐ E. Misread

The correct answer is option [B].

QUESTION NO: 53

From the options lettered A - E, choose the word that BEST RHYMES with the given word.

Quicken

- ☐ A. Queen
- ☐ B. Kitten
- ☐ C. Kitchen
- ☐ D. Chicken
- ☐ E. Hasten

The correct answer is option [D].

QUESTION NO: 54

Choose from options lettered A - D the one that contains the sound segment represented by the given phonetic symbol.

/ θ /

- ☐ A. rough
- ☐ B. that
- ☐ C. them
- ☐ D. thought

The correct answer is option [D]

QUESTION NO: 55

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ENGLISH LANGUAGE-

From the words lettered A-E, choose the word that has the same consonant sound(s) as the one represented by the letter(s) underlined.

propose

- ☐ A. pneumonia
- ☐ B. psyche
- ☐ C. psalms
- ☐ D. rupture
- ☐ E. phenomenon

The correct answer is option [D]

QUESTION NO: 56

From the options lettered A to D, choose the one that has the correct stress pattern.

parochial

- ☐ A. PA-ro-chi-al
- ☐ B. pa-RO-chi-al
- ☐ C. pa-ro-CHI-al
- ☐ D. pa-ro-chi-AL

The correct answer is option [A]

QUESTION NO: 57

Choose from the options lettered A to E, the one that has the sound represented by the given phonetic symbol.

/ 3: /

- ☐ A. attorney
- ☐ B. surprising
- ☐ C. wonderful
- ☐ D. abduction
- ☐ E. price

The correct answer is option [B]

QUESTION NO: 58

Choose from the options lettered A - E, the one that has the same consonant sound as the sound represented by the underlined letter.

joke

- ☐ A. cheer
- ☐ B. chin
- ☐ C. gear
- ☐ D. feather
- ☐ E. sing

The correct answer is option [C]

QUESTION NO: 59

Choose from the options lettered A - E, the one that has the same consonant sound as the sound represented by the underlined letter.

exact

- ☐ A. exceed
- ☐ B. excel
- ☐ C. exhaust
- ☐ D. except
- ☐ E. expel

The correct answer is option [C]

QUESTION NO: 60

From the options lettered A to E, choose the word that rhymes with the given word.

share

- ☐ A. air
- ☐ B. beard
- ☐ C. fierce
- ☐ D. sure
- ☐ E. shoe

The correct answer is option [A]

QUESTION NO: 61

Choose the word that has the same vowel sound as the one represented by the underlined letters.

head

- ☐ A. heed
- ☐ B. ingrate
- ☐ C. job
- ☐ D. red

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ENGLISH LANGUAGE-

- ☐ E. hear

The correct answer is option [D]

QUESTION NO: 62

Choose the word that has the same vowel sound as the one represented by the underlined letter.

wolf

- ☐ A. wood
☐ B. golf
☐ C. woe
☐ D. dove
☐ E. dive

The correct answer is option [A]

QUESTION NO: 62

Choose the word that has the same vowel sound as the one represented by the underlined letter.

wolf

- ☐ A. wood
☐ B. golf
☐ C. woe
☐ D. dove
☐ E. dive

The correct answer is option [A]

QUESTION NO: 64

From the options lettered A – D, choose the one that shows the correct stress pattern of the given word.

incontrovertible

- ☐ A. Incontrovertible
☐ B. inCONtrovertible
☐ C. inconTROvertible
☐ D. incontroVERTible

The correct answer is option [D]

QUESTION NO: 65

Choose the correct option.

All of the following words have the same stress pattern except _____.

- ☐ A. deviate
☐ B. devout
☐ C. festive
☐ D. humour

The correct answer is option [B]

QUESTION NO: 66

From the options lettered A to E, choose the word that rhymes with the given word.

fork

- ☐ A. hawk
☐ B. rot
☐ C. work
☐ D. murk
☐ E. house

The correct answer is option [A]

QUESTION NO: 67

The word written in capital letters has an EMPHATIC STRESS. Choose the option that best fits the sentence.

Few Nigerian politicians are ALTRUISTIC.

- ☐ A. Are many Nigerian politicians altruistic
☐ B. Are few Ghanaian politicians altruistic?
☐ C. Are few Nigerian businessmen altruistic?
☐ D. Are few Nigerian politicians selfish?
☐ E. Are many Nigerian senators altruistic?

The correct answer is option [D]

QUESTION NO: 68

From the options lettered A to E, choose the word that has the sound represented by the given phonetic symbol.

/j/

- ☐ A. June
☐ B. dew
☐ C. grew

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ENGLISH LANGUAGE-

- ☐ D. blue
- ☐ E. engine

The correct answer is option [A]

QUESTION NO: 69

From the options lettered A to E, choose the word that has the sound represented by the given phonetic symbol.

/i/

- ☐ A. bird
- ☐ B. feed
- ☐ C. rhyme
- ☐ D. women
- ☐ E. stir

The correct answer is option [C]

QUESTION NO: 70

From the options lettered A - E, choose the one that has the same vowel sound as the sound represented by the underlined letter.

bet

- ☐ A. days
- ☐ B. says
- ☐ C. legal
- ☐ D. senile
- ☐ E. here

The correct answer is option [D]

QUESTION NO: 71

From the options lettered A - E, choose the one that has the same vowel sound as the sound represented by the underlined letter.

hut

- ☐ A. crop
- ☐ B. fun
- ☐ C. hop
- ☐ D. tube
- ☐ E. put

The correct answer is option [B]

QUESTION NO: 72

From the options lettered A - E, choose the one that has the same vowel sound as the sound represented by the underlined letter.

gate

- ☐ A. ant
- ☐ B. brass
- ☐ C. cap
- ☐ D. pray
- ☐ E. fear

The correct answer is option [D]

QUESTION NO: 73

From the options lettered A - E, choose the one that has the same consonant sound as the sound represented by the underlined letter.

June

- ☐ A. figure
- ☐ B. gear
- ☐ C. gist
- ☐ D. dagger
- ☐ E. guide

The correct answer is option [C]

QUESTION NO: 74

From the options lettered A - E, choose the one that has the same consonant sound as the sound represented by the underlined letter.

shout

- ☐ A. moustache
- ☐ B. match
- ☐ C. witch
- ☐ D. chemist
- ☐ E. cheat

The correct answer is option [A]

QUESTION NO: 75

From the options lettered A - E, choose the one that has the same consonant sound as the sound represented by the underlined letter.

ENGLISH LANGUAGE-

converge

- ☐ A. please
- ☐ B. seize
- ☐ C. advice
- ☐ D. phase
- ☐ E. fuse

The correct answer is option [C

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MATHEMATICS -

QUESTION NO: 1

Choose the correct option.

To arrive on schedule, a train is to cover a distance of 60 km at 72 km/hr. If it starts 10 minutes late, at what speed must it move to arrive on schedule?

- ☐ A. 60 km/hr
- ☐ B. 80 km/hr
- ☐ C. 90 km/hr
- ☐ D. 108 km/hr

The correct answer is option [A].

QUESTION NO: 2

Choose the correct option.

Factorise $6^{2x+1} + 7(6^x) - 5$.

- ☐ A. $1a_2$ or $-3a_5$
- ☐ B. $1a_2$ or $-5a_3$
- ☐ C. 2 or $-5a_3$
- ☐ D. $1a_2$ or $5a_3$

The correct answer is option [B].

$$6^1 \times (6^x)^2 + 7(6^x) - 5$$

Let y represent 6^x

$$\Rightarrow 6y^2 + 7y - 5 = 0$$

$$6y^2 + 10y - 3y - 5 = 0$$

$$2y(3y + 5) - 1(3y + 5) = 0$$

$$(2y - 1)(3y + 5) = 0; y = \frac{1}{2} \text{ or } -\frac{5}{3}$$

Since $y = 6^x$, then $6^x = \frac{1}{2}$ and $6^x = -\frac{5}{3}$.

Therefore, $x = -\frac{5}{3}$ or $\frac{1}{2}$

QUESTION NO: 3

Choose the correct option.

If $\sqrt{x^2 + 9} = x + 1$, solve for x.

- ☐ A. 5
- ☐ B. 4
- ☐ C. 3
- ☐ D. 1

The correct answer is option [B]

$$x^2 + 9 = (x + 1)^2 \Rightarrow x^2 + 9 = x^2 + 2x + 1, \text{ therefore } 2x = 8; x = \frac{8}{2} = 4.$$

QUESTION NO: 4

Choose the correct option.

Which of the following is in descending order?

- ☐ A. $\frac{9}{10}, \frac{4}{5}, \frac{3}{4}, \frac{17}{10}$
- ☐ B. $\frac{4}{5}, \frac{9}{10}, \frac{3}{4}, \frac{17}{20}$
- ☐ C. $\frac{9}{10}, \frac{17}{20}, \frac{4}{5}, \frac{3}{4}$
- ☐ D. $\frac{4}{5}, \frac{9}{10}, \frac{17}{10}, \frac{3}{4}$

The correct answer is option [C].

$$\frac{9}{10} = 0.9, \frac{17}{20} = 0.85, \frac{4}{5} = 0.8, \frac{3}{4} = 0.75$$

The descending order is $\frac{9}{10}, \frac{17}{20}, \frac{4}{5}, \frac{3}{4}$

QUESTION NO: 5

Choose the correct option.

The first and last term of an A.P. are 10 and 90, find the number of terms in the A.P. if the sum of term is 750.

- ☐ A. 22
- ☐ B. 35
- ☐ C. 15
- ☐ D. 18

The correct answer is option [C]. Solution:

$S_n = 750$, $a = 10$, $L = 90$. Using the equation

$$S_n = \frac{n(a + L)}{2} \Rightarrow 2S_n = n[a + L], \text{ then, } n = \frac{2S_n}{a + L}$$

$$n = \frac{2 \times 750}{10 + 90} = \frac{1500}{100} = 15.$$

QUESTION NO: 6

Choose the correct option.

The angle of elevation of a storey building from a point X on the ground is j° and the distance from the point X to the foot of the building is 80cm. If the height of the building is 70m, find j correct to 1 decimal place.

- ☐ A. 90.9°
- ☐ B. 81.3°
- ☐ C. 41.2°

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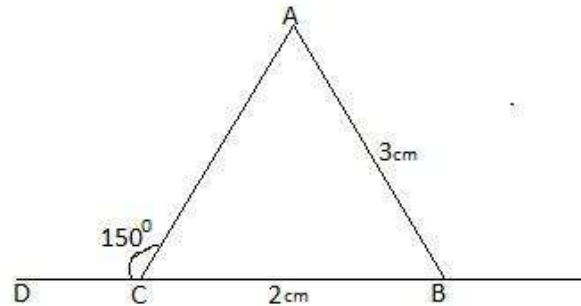
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☐ D. 39.1°

The correct answer is option [C].

QUESTION NO: 7

Use the diagram to answer the question.



In the diagram, $|BC| = 2\text{cm}$, $|AB| = 3\text{cm}$ and $\angle ACD = 150^\circ$, what is the value of $\sin A$?

- ☐ A. $\frac{1}{3}$
- ☐ B. $\sqrt{3}$
- ☐ C. $\sqrt{4}$
- ☐ D. 2

The correct answer is option [A].

QUESTION NO: 8

Choose the correct option.

Find the coordinates of the midpoint of the line joining the points $[4, -6]$ and $[-3, 7]$.

- ☐ A. $[-\frac{1}{2}, 2]$
- ☐ B. $[2, 5]$
- ☐ C. $[-\frac{1}{2}, -\frac{1}{2}]$
- ☐ D. $[2, 3]$

The correct answer is option [C]. Solution:

Hint [Apply the formula]; $x_2 + x_1/2, y_2 + y_1/2 = -3 + 4/2, -6 + 7/2 = [-1/2, -1/2]$

QUESTION NO: 9

Choose the correct option.

If $x - 2$ is a factor of $x^3 + 4x^2 + kx + 4$. What is the value of k ?

- ☐ A. 12
- ☐ B. 28
- ☐ C. -14

☐ D. 14

The correct answer is option [C]. Solution:

$f[x - 2] = 0$; $x - 2 = 0$, therefore, $x = 2$,

substitute the value of x into the equation

$x^3 + 4x^2 + kx + 4$; $[2]^3 + 4[2]^2 + k[2] + 4 = 0$;

$8 + 16 + 4 + 2k = 0$; $2k + 28 = 0$, therefore,

$k = -28/2 = -14$.

QUESTION NO: 10

Choose the correct option.

A pentagon has 3 of its angles equal if the size of the fifth angle is 90° . Find the size of each of the three equal angles.

- ☐ A. 180°
- ☐ B. 150°
- ☐ C. 135°
- ☐ D. 90°

The correct answer is option [C]. Solution:

Hint [A pentagon has 5 sides]. $[2n - 4] \times 90^\circ$, where $n = 5$.

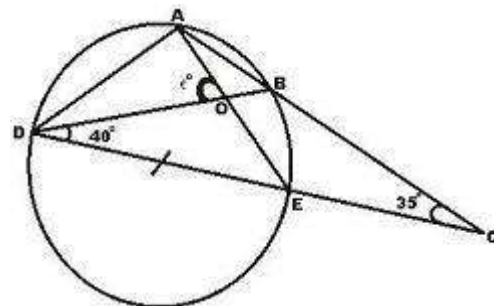
Then let the number of each of the angle be y . 3 have equal angles $= 3y$ and the fourth angle is $180 - y$.

Therefore, $3y + 180 - y + 90 = [2(5) -$

$4] \times 90$; $2y + 270 = 540$, then $y = [540 - 270]/2 = 135^\circ$.

QUESTION NO: 11

Choose the correct option.



Obtain the value of c in the figure drawn.

- ☐ A. 135°
- ☐ B. 115°

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- ☐ C. 65°
☐ D. 75°

The correct answer is option [B].

Solution: $\angle DBA = 75^\circ$ [sum of interior angles]; $\angle EDB = \angle EAB = 40^\circ$ [angles at the circumference are equal];

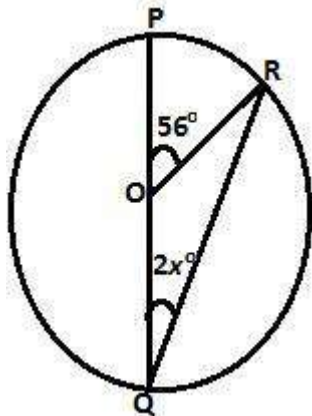
$$\angle AOB = 180 - [75 + 40] = 180 - 115 = 65^\circ;$$

$\angle DEA = \angle DBA = 75^\circ$ [angles at the circumference are equal];

$$\begin{aligned} \angle DOE &= 180 - [75 + 40] = 65^\circ; \angle CEA = 180 - 75 = 105^\circ; \\ \angle DOE &= 360 - [105 + 105 + 35] = 115^\circ \text{ or } \angle ACD = 360 - [65 + 65 + 115] = 115^\circ. \end{aligned}$$

QUESTION NO: 12

Use the diagram to answer the question.



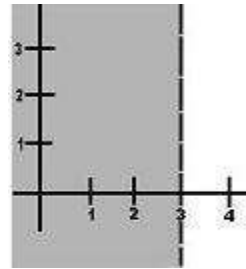
In the diagram, O is the centre of the circle. Find the value of x.

- ☐ A. 34
☐ B. 31
☐ C. 17
☐ D. 14

The correct answer is option [D].

QUESTION NO: 13

Choose the correct option.



From the given diagram drawn, what is the inequality equation?

- ☐ A. $x > -3$
☐ B. $x \geq 3$
☐ C. $x > 3$
☐ D. $x \geq 3$

The correct answer is option [C]. Solution:

The broken lines = $<$ or $>$ while the unbroken lines = $\leq$ or $\geq$

The unshaded portion is the required region.

QUESTION NO: 14

Choose the correct option.

Factorise $a^2 - b^2 + ap - bq + bq + aq$.

- ☐ A. $(a - b)(a - b + p - q)$
☐ B. $(a + b)(a - b + p - q)$
☐ C. $(b + p)(a - b + p - q)$
☐ D. $(p - q)(a - b + p - q)$

The correct answer is option [B]

Grouping;

$$\begin{aligned} (a^2 - b^2) + ap - aq + bp - bq \\ = (a^2 - b^2) + (ap - aq) + (bp - bq) \\ = (a + b)(a - b) + a(p - q) + b(p - q) \end{aligned}$$

Finding the common factor;

$$\begin{aligned} = (a + b)[(a - b) + (p - q)] \\ = (a + b)(a - b + p - q) \end{aligned}$$

QUESTION NO: 15

Choose the correct option.

In an election there were four candidates, $\frac{5}{16}$ of the electors voted for the winner. The runner-up received $\frac{4}{16}$ of the remaining votes. The third candidates received twice the votes of the fourth

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candidates. What fraction of the electors voted for the third candidate?

- ☐ A. $\frac{1}{42}$
☐ B. $\frac{1}{21}$
☐ C. $\frac{1}{14}$
☐ D. $\frac{41}{42}$

The correct answer is option [B]. Solution:
 Let the fraction of the fourth candidate be x

$$\frac{5}{6} + \left(\frac{1}{6} \times \frac{4}{7}\right) + 2x + x = 1$$

$$70 + 8 + 168x + 84x = 84$$

$$252x = 6$$

$$x = \frac{6}{252} = \frac{1}{42}$$

The fraction of the third candidate is twice the fourth = $\frac{1}{21}$.

QUESTION NO: 16

Choose the correct option.

A straight line makes an angle of 30° (with the positive x -axis and cuts the y -axis at $y = 5$. Find the equation of the straight line.

- ☐ A. $y = \frac{1}{\sqrt{3}}x + 5$
☐ B. $y = x + 5$
☐ C. $\sqrt{3}y = -x + 5\sqrt{3}$
☐ D. $\sqrt{3}y = x + 5\sqrt{3}$

The correct answer is option [D].

$$\text{Slope } M = \tan \theta \Rightarrow M = \tan 30^\circ = \frac{1}{\sqrt{3}}$$

The equation of a straight line is given as $y = mx + c$
 Where m is the slope of the line, and c is the intercept on the y -axis.
 $\Rightarrow y = \frac{1}{\sqrt{3}}x + 5 = \sqrt{3}y = x + 5\sqrt{3}$

QUESTION NO: 17

Choose the correct option.

The difference between the length and width of a rectangle is 6 cm and the area is 135 cm^2 . What is the length?

- ☐ A. 25cm
☐ B. 18cm
☐ C. 15cm
☐ D. 24cm

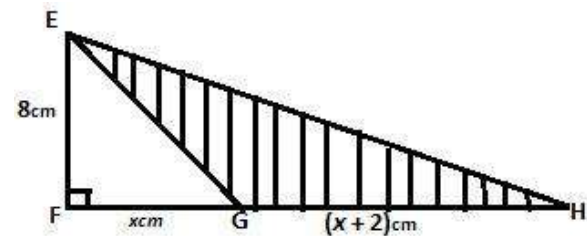
The correct answer is option [C].
 Area of rectangle = length $\times$ width, But

length - width = 6 (length = 6 + width)
 (Area = $135 = (6 + \text{width}) \times \text{width}$, Let
 length = l and width = w

$$135 = 6w + w^2;$$

QUESTION NO: 18

Use the diagram to answer the question



In the diagram, $EF = 8 \text{ cm}$, $FG = x \text{ cm}$, $GH = (x + 2) \text{ cm}$, $\angle EFG = 90^\circ$. If the area of the shaded portion is 40 cm^2 , find the area of $\triangle EFG$.

- ☐ A. 128 cm^2
☐ B. 72 cm^2
☐ C. 64 cm^2
☐ D. 32 cm^2

xeera.ng The correct answer is option [D].

QUESTION NO: 19

Choose the correct option.

A measuring cylinder of radius 3.5cm contains water to a height of 56cm. If this water is poured into a similar cylinder of radius 14cm, what will be the height of the water column?

- ☐ A. 3.5cm
☐ B. 14cm
☐ C. 1.75cm
☐ D. 5.3cm

The correct answer is option [A]. Solution:

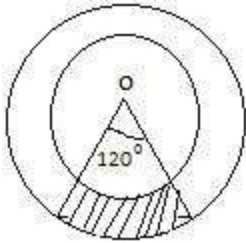
Volume of cylinder = $\pi r^2 H = \pi R^2 h$,
 where $r = 3.5 \text{ cm}$, $H = 56 \text{ cm}$, $R = 14 \text{ cm}$, $h = ?$

$$h = \frac{\pi \cdot 3.5^2 \cdot 56}{\pi \cdot 14^2} = 3.5 \text{ cm}.$$

QUESTION NO: 20

Use the diagram to answer the question.

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In the diagram O is the centre of two concentric circles of radius 11cm and 14cm. Calculate the area of the shaded part of the sector with an angle, of 120° at the centre.

- ☐ A. 205.33cm^2
- ☐ B. 126.76cm^2
- ☐ C. 78.57cm^2
- ☐ D. 35.62cm^2

The correct answer is option [C].

QUESTION NO: 21

Choose the correct option.

Find the values of x for which the function

$$y = \frac{2x + 4}{x^2 - 5x + 6} \text{ is undefined}$$

- ☐ A. [3 or 2]
- ☐ B. [-3 or -1]
- ☐ C. [-3 or 2]
- ☐ D. [-2 or 3]

The correct answer is option [A].

Solution: Hint [Factorise the denominator]; $x^2 - 5x + 6$; $x[x - 2] - 3[x - 2]$; $[x - 3][x - 2]$. Therefore, $x = 3$ or $x = 2$.

QUESTION NO: 22

Choose the correct option.

Calculate the interest paid on a fixed deposit of ₦48,000, which was invested for a period of 7 years at an annual compound interest rate of 14%.

- ☐ A. ₦82,480.12
- ☐ B. ₦77,841.21
- ☐ C. ₦72,108.90
- ☐ D. ₦92,180.31

The correct answer is option [C]. Solution:

$$A = \text{Amount} = P[1 + \frac{r}{100}]^n,$$

where $P = \text{Principal} = \text{₦}48,000$, $\text{Rate} = r = 14\%$, $\text{Time} = n = 7 \text{ years}$.

$$A = \text{₦}48,000[1 + \frac{14}{100}]^7 = \text{₦}48,000[1.14]^7 = \text{₦}120,108.902.$$

$$\text{Interest} = I = A - P = \text{₦}120,108.902 -$$

$$\text{₦}48,000.000 = \text{₦}72,108.902 \approx \text{₦}72,108.90.$$

QUESTION NO: 23

Choose the correct option.

Two cars X and Y start at the same point and travel towards a point P which is 120 km away. If the average speed of Y is 60km per hour and X arrives at P 30 minutes earlier than Y. What is the average speed of X?

- ☐ A. 48km/hr
- ☐ B. 80km/hr
- ☐ C. 84km/hr
- ☐ D. 40km/hr

The correct answer is option [B]. Solution:

$$\text{Average Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Car Y's Time} = \frac{\text{Distance}}{\text{Average Speed}}$$

where Distance = 120km, Time = ?,

Average Speed = 60 km/hr

then Car Y's time = $\frac{120}{60} = 2\text{hrs}$

Car X arrives 30 minutes earlier than car Y

this $\frac{30}{60} = \frac{1}{2}$ in hour

Car X's Time = $2 - \frac{1}{2} = 1\frac{1}{2}$

Therefore, car X's average speed

$$= \frac{\text{distance}}{\text{time}} = \frac{120}{1\frac{1}{2}} = 80\text{km/hr}.$$

QUESTION NO: 24

Choose the correct option.

Evaluate $\frac{[x^3 + x - 3]}{[3x + x - 4]}$, when $x = -3$.

- ☐ A. $-\frac{33}{20}$
- ☐ B. $\frac{26}{33}$
- ☐ C. $-\frac{33}{26}$
- ☐ D. $\frac{23}{43}$

The correct answer is option [A]. Solution:

Hint [Substitute the value of x into the equation directly].

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QUESTION NO: 25

Choose the correct option.

Find the value of the equation $\frac{[25x^2]}{64} + \frac{35x}{25} - \frac{[16x^3]}{9}$, given that $x = \frac{1}{2}$.

- ☐ A. $\frac{6629}{11520}$
- ☐ B. $\frac{2597}{5760}$
- ☐ C. $\frac{2597}{11520}$
- ☐ D. $\frac{1869}{5760}$

The correct answer is option [A]. Solution:
Put the value of x directly into the equation and solve.

QUESTION NO: 26

Choose the correct option.

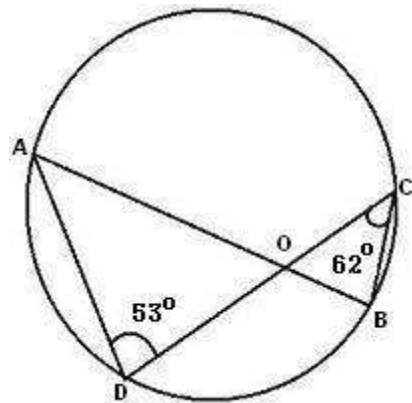
Evaluate $85.476^2 - 69.935^2$ and leave your answer correct to 3 s.f.

- ☐ A. 241
- ☐ B. 242
- ☐ C. 243
- ☐ D. 240

The correct answer is option [B]. Solution:
 $85.476^2 - 69.935^2 = [85.476 - 69.935][85.476 + 69.935] = [15.541][155.411] = 2415.42 \approx 242$.

QUESTION NO: 28

Choose the correct option.



The diagram drawn, $\angle DCB = 62^\circ$ and $\angle ADC = 53^\circ$. Find $\angle COB$.

- ☐ A. 65°
- ☐ B. 53°
- ☐ C. 115°
- ☐ D. 128°

The correct answer is option [A]. Solution:
 $\angle CBO = \angle ADC = 53^\circ$ [Angle at the circumference is equal]

$$\angle COB = 180 - [62 + 53] = 180 - 115 = 65^\circ.$$

QUESTION NO: 29

Choose the correct option.

The examination marks of 50 students are as follows:
65, 58, 51, 36, 23, 40, 53, 59, 70, 51, 46, 59, 50, 67, 46, 39, 61, 62, 73, 60, 71, 51, 47, 32, 48, 40, 40, 51, 58, 67, 60, 69, 43, 52, 37, 26, 38, 50, 59, 40, 44, 54, 42, 47, 68, 74, 45, 39, 48, 55. Calculate the mean deviation.

- ☐ A. 50.7.
- ☐ B. 1.8.
- ☐ C. 35.31.
- ☐ D. 10.59.

The correct answer is option [D].

CLASS INTERVAL	MID-CLASS x	FREQUENCY f	fx	$x' - m$	$ x' - m $	$f x' - m $
21-30	25.5	2	51	-25.2	25.2	50.4
31-40	35.5	10	355	-15.2	15.2	152
41-50	45.5	12	546	-5.2	5.2	62.4
51-60	55.5	15	832.5	4.8	4.8	72
61-70	65.5	8	524	14.8	14.8	118.4
71-80	75.5	3	226.5	24.8	24.8	74.4

Solution: The mean of the distribution $\bar{X} = \frac{\sum fx}{\sum f} = \frac{2535}{50} = 50.7$

The mean deviation: $\frac{\sum f|x' - m|}{\sum f} = \frac{529.6}{50} = 10.592 \approx 10.59$

QUESTION NO: 30

Choose the correct option.

Ofure drives for 6 hours at a certain speed, she then triples her speed and drove for another 5 hours. Altogether she covered 1470 kilometres. At what speed did she drive for the last 5 hours?

- ☐ A. 140km/hr

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- ☐ B. $1470/11$ km/hr
☐ C. 70 km/hr
☐ D. 280 km/hr

The correct answer is option [C]. Solution:

Let the speed be x . The total distance covered is = 1470 km;

$$6x + 3[5x] = 1470 \Rightarrow 6x + 15x =$$

$$1470 \Rightarrow 21x = 1470, \text{ therefore, } x = 1470/21 = 70 \text{ km/hr.}$$

QUESTION NO: 31

Choose the correct option.

Tolu bought a piece of land for ₦150,000.00 and later sold it for ₦500,000.00. What is the percentage gain correct to 3 significant figures?

- ☐ A. 333.33%
☐ B. 333.00%
☐ C. 233.33%
☐ D. 233.00%

The correct answer is option [C].

QUESTION NO: 32

Choose the correct option.

A sales girl gets a commission of 8% of the value of the things she sells. Find her commission for selling 3 keyboards at ₦25,000.00 each and 5 calculators at ₦600.00 each.

- ☐ A. ₦2,048.00
☐ B. ₦3,200.00
☐ C. ₦5,740.00
☐ D. ₦6,240.00

The correct answer is option [D].

QUESTION NO: 33

Choose the correct option.

Make f the subject of the formula $f = \frac{v}{\left(\frac{3}{2} + \frac{1}{g}\right)}$

- ☐ A. $\frac{p^2 - t^2}{p^2 + t^2}$
☐ B. $\frac{p^2}{p^2 - t^2}$

- ☐ C. $\frac{p^2}{p^2 - t^2}$
☐ D. $\frac{p^2}{t^2 - p^2}$

The correct answer is option [B].

$$t^2 = v / \left[\left(\frac{1}{f} \right) + \left(\frac{1}{g} \right) \right] = v / \left[\left(\frac{f+g}{fg} \right) \right] = \frac{vfg}{(g+f)}$$

$$t^2(g+f) = vfg$$

$$gt^2 + ft^2 = vfg$$

$$gt^2 = vfg - ft^2$$

$$gt^2 = f(gv - t^2)$$

$$f = \frac{gt^2}{(gv - t^2)}$$

QUESTION NO: 34

Choose the correct option.

The size of a quantity first doubles then increases by a further 16%. After a short time, its size decreases by 16%. What is the net increase in size of the quantity?

- ☐ A. $59300/625\%$
☐ B. $50900/625\%$
☐ C. 200%
☐ D. 100%

The correct answer is option [C]. Initial quantity = X

After doubling, quantity = $2X$

Increment by 16% = $2X + 0.16X$

After a short period, decrement = $(2X + 0.16X - 0.16X)\% = (2X)\%$ Net increment in size of the quantity = $(2X)\% = (2 \times 100\%) = 200\%$

QUESTION NO: 35

Choose the correct option.

Correct 0.002473 to 3 significant figures.

- ☐ A. 0.002
☐ B. 0.0024
☐ C. 0.00247
☐ D. 0.0025

The correct answer is option [C].

QUESTION NO: 36

Choose the correct option.

Add 345_5 and 543_5 in base 6.

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- ☐ A. 1273_6
- ☐ B. 4235_6
- ☐ C. 1012_6
- ☐ D. 1052_6

The correct answer is option [D].

Solution: Hint [Convert to base 10 first]

$$345_5 = [3 \times 5^2] + [4 \times 5^1] + [5 \times 5^0] = 75 + 20 + 5 = 100_{10}$$

$$543_5 = [5 \times 5^2] + [4 \times 5^1] + [3 \times 5^0] = 125 + 20 + 3 = 148_{10}$$

$$100_{10} + 148_{10} = 248_{10}$$

6	248	
6	41 R 2	
6	6 R 5	
6	1 R 0	
	0 R 1	Answer = 1052_6

QUESTION NO: 37

Choose the correct answer.

The length of a pole is measured as 5m to the nearest meter. What is the range of its actual length? Calculate the percentage error.

- ☐ A. $\pm 15\%$
- ☐ B. $\pm 25\%$
- ☐ C. $\pm 12\%$
- ☐ D. $\pm 10\%$

The correct answer is option [D]

Since the measurement is given to the nearest meter, the actual length of the pole will be between 4.5m and 5.5m.

$$\text{Absolute error} = \pm 0.5\text{m}$$

$$\% \text{ error} = \frac{\pm 0.5\text{m}}{5\text{m}} \times 100\% = \pm 10\%$$

QUESTION NO: 38

Choose the correct option.

Calculate the probability of obtaining a score of 6 when two dice are thrown.

- ☐ A. $\frac{5}{36}$
- ☐ B. $\frac{6}{11}$
- ☐ C. $\frac{11}{35}$
- ☐ D. $\frac{35}{36}$

The correct answer is option [A]. Solution:

Hint [Total outcome of two dice thrown = 36]. $P[\text{total score of 6}] = [1,5], [2,4], [3,3], [4,2], [5,1] = \frac{5}{36}$.

QUESTION NO: 39

Choose the correct option.

A rectangular piece of cardboard measures 17cm by 14cm. Strips of equal width are cut off one side and one end. The area of the remaining piece is 108cm^2 . Find the width of the strips removed.

- ☐ A. 26cm
- ☐ B. 17cm
- ☐ C. 5cm
- ☐ D. 17cm

The correct answer is option [C]. Solution:

Let the width of the strip be y;

$$[17 - y][14 - y] = 108$$

$$238 - 31y + y^2 = 108;$$

$$y^2 - 31y + 130 = 0$$

$$y^2 - 26y - 5y + 130 = 0;$$

$$y[y - 26] - 5[y - 26] = 0;$$

The width of the strip removed is 5cm.

QUESTION NO: 40

Choose the correct option.

Find two consecutive numbers whose product is 156.

- ☐ A. 17,18
- ☐ B. 8,9
- ☐ C. 27,28
- ☐ D. 12,13

The correct answer is option [D]. Solution:

Let the number be x;

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$$[x + 2][x + 3] = 156$$

$$x^2 + 5x + 6 = 156;$$

$$x^2 + 5x - 150 = 0$$

$$x^2 + 15x - 10x - 150 = 0;$$

$$x[x + 15] - 10[x + 15] = 0 [x + 15][x - 10]$$

therefore, $x = 10$ or -15

The number is 10

then the consecutive numbers is 12,13.

QUESTION NO: 41

Choose the correct option.

Given that $U = [3, 4, 5, 6, 7, 8]$; $A = [6, 7, 8]$, $B = [3, 5, 6]$ and $C = [5, 6, 7]$. From the information given, find $[A \setminus B]' \cap C$.

- ☐ A. $[3, 5, 6, 7]$
- ☐ B. $[3, 4, 6, 7]$
- ☐ C. $[4, 5, 6, 7]$
- ☐ D. $[4, 5, 6, 8]$

The correct answer is option [C]. Solution: $[A \setminus B]' = [4]$ since $A = [6, 7, 8]$ and $B = [3, 5, 6]$, then $A \setminus B = [3, 5, 6, 7, 8]$ from $U = [3, 4, 5, 6, 7, 8]$. $C = [5, 6, 7]$. Therefore $[A \setminus B]' \cap C = [4, 5, 6, 7]$.

QUESTION NO: 42

Choose the correct option.

$U = [25, 26, 27, 28, \dots, 50]$, $D = [x : x \leq 42]$, and $E = [x : x \text{ prime number}]$. Find $D \cap E$.

- ☐ A. $[29, 31, 37, 41]$
- ☐ B. $[29, 30, 31, 41]$
- ☐ C. $[29, 31, 32, 41]$
- ☐ D. $[29, 33, 37, 41]$

The correct answer is option [A]. Solution: $D = [25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37,$

QUESTION NO: 42

Choose the correct option.

$U = [25, 26, 27, 28, \dots, 50]$, $D = [x : x \leq 42]$, and $E = [x : x \text{ prime number}]$. Find $D \cap E$.

- ☐ A. $[29, 31, 37, 41]$
- ☐ B. $[29, 30, 31, 41]$

- ☐ C. $[29, 31, 32, 41]$
- ☐ D. $[29, 33, 37, 41]$

The correct answer is option [A]. Solution:

$D = [25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42]$ and $E = [29, 31, 37, 41]$. Therefore, $D \cap E = [29, 31, 37, 41]$.

QUESTION NO: 43

Choose the correct option.

Two dice are thrown at the same time. What is the probability that the total shown on them will be 7?

- ☐ A. $\frac{3}{5}$
- ☐ B. $\frac{4}{7}$
- ☐ C. $\frac{2}{3}$
- ☐ D. $\frac{1}{6}$

The correct answer is option [D].

	1	2	3	4	5	6
1	1,1	1,2	1,3	1,4	1,5	1,6
2	2,1	2,2	2,3	2,4	2,5	2,6
3	3,1	3,2	3,3	3,4	3,5	3,6
4	4,1	4,2	4,3	4,4	4,5	4,6
5	5,1	5,2	5,3	5,4	5,5	5,6
6	6,1	6,2	6,3	6,4	6,5	6,6

$P[\text{Total thrown is 7}] = \frac{[1,6], [2,5], [3,4], [4,3], [5,2], [6,1]}{[1,1], [1,2], [1,3], [1,4], [1,5], [1,6], [2,1], [2,2], [2,3], [2,4], [2,5], [2,6], [3,1], [3,2], [3,3], [3,4], [3,5], [3,6], [4,1], [4,2], [4,3], [4,4], [4,5], [4,6], [5,1], [5,2], [5,3], [5,4], [5,5], [5,6], [6,1], [6,2], [6,3], [6,4], [6,5], [6,6]}$

Probability = $\frac{[\text{Number of Outcome of Event}]}{[\text{Total number of outcome of event}]}$

$P[\text{Total thrown is 7}] = \frac{6}{36} = \frac{1}{6}$.

QUESTION NO: 44

Choose the correct option.

Item	Quantity Remaining
A	115
B	202
C	88
D	65
E	74
F	46

MATHEMATICS -

An accountant cross checked his stock of six items and tabulated it as shown, find the percentage of item E.

- ☐ A. 14.5%
- ☐ B. 11.5%
- ☐ C. 12.5%
- ☐ D. 18.5%

The correct answer is option [C]. Solution:

$$\text{Percentage of item E} = \frac{\text{quantity of item E}}{\text{total quantity of items}} \times 100 = \frac{74}{590} \times 100 = 12.5\%.$$

QUESTION NO: 45

Choose the correct option.

x	3	4	7	9
f	6	z	5	4
fx	18	4z	35	36

From the frequency table drawn, the mean 5.5. Find the value of z.

- ☐ A. 2.65
- ☐ B. 3.64
- ☐ C. 4.33
- ☐ D. 3.33

The correct answer is option [C]. Solution:

$$\begin{aligned} \text{Mean} &= 5.5; \frac{5.5}{1} = \frac{[18+4z+35+36]}{[6+z+5+4]} \quad \text{①} \quad \frac{5.5}{1} \\ &= \frac{[89+4z]}{[15+z]} \quad \text{②} \quad 5.5[15+z] = 89 + 4z; 82.5 + 5.5z \\ &= 89 + 4z \end{aligned}$$

$$\begin{aligned} 5.5z - 4z &= 89 - 82.5 \quad \text{③} \quad 1.5z = 6.5, \text{ therefore,} \\ z &= \frac{6.5}{1.5} = 4.33. \end{aligned}$$

QUESTION NO: 46

Choose the correct answer.

Evaluate $Ö32 + 3Ö8$.

- ☐ A. $4Ö2$
- ☐ B. $10Ö2$
- ☐ C. $2Ö8$
- ☐ D. $5Ö6$

The correct answer is option [B]

$$\begin{aligned} &= 3\sqrt{4 \times 2} + \sqrt{16 \times 2} \\ &= (\sqrt{16 \times 2}) + (3 \times \sqrt{4 \times 2}) \\ &= 4\sqrt{2} + 3 \times 2\sqrt{2} \\ &= 4\sqrt{2} + 6\sqrt{2} \\ &= 10\sqrt{2} \end{aligned}$$

QUESTION NO: 47

Choose the correct answer.

Simplify $Ö45 \times Ö28$.

- ☐ A. $4Ö7$
- ☐ B. $3Ö15$
- ☐ C. $5Ö7$
- ☐ D. $6Ö35$

The correct answer is option [D]

$$\begin{aligned} &= \sqrt{9 \times 5} \times \sqrt{4 \times 7} \\ &= 3\sqrt{5} \times 2\sqrt{7} \\ &= 3 \times 2 \times \sqrt{5} \times \sqrt{7} \\ &= 6\sqrt{35} \end{aligned}$$

QUESTION NO: 48

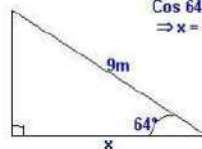
Choose the correct option.

A ladder 9m long leans against a vertical wall, making an angle of 64° with the horizontal ground. Calculate, correct to one decimal place, how far the foot of the ladder is from the wall.

- ☐ A. 4.0m
- ☐ B. 5.8m
- ☐ C. 7.1m
- ☐ D. 8.1m

The correct answer is option [A].

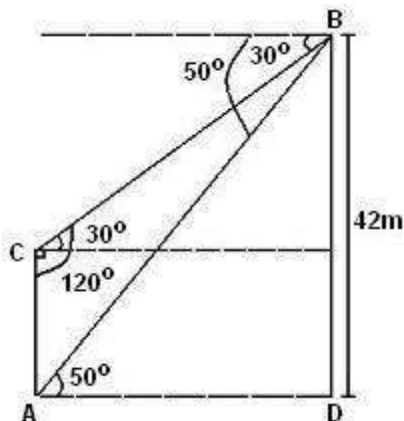
$$\begin{aligned} \cos 64^\circ &= \frac{\text{adj}}{\text{hyp}} = \frac{x}{9} \\ \Rightarrow x &= 9 \cos 64^\circ = 3.94 \approx 4.0 \end{aligned}$$



QUESTION NO: 49

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Choose the correct option.



The top of a building 42m high is observed from the top and from the bottom of a vertical tree. The angles of depression are found to be 30° and 50° respectively. Find the height of the tree.

- ☐ A. 54.83m
- ☐ B. 65.34m
- ☐ C. 25.80m
- ☐ D. 21.65m

The correct answer is option [D]. Solution: [xeera.ng](http://www.xeera.ng)

$$\sin 50^\circ = \frac{42}{AB}; AB = \frac{42}{\sin 50^\circ} = 54.83\text{m}; \frac{CA}{\sin 20^\circ} = \frac{54.83}{\sin 120^\circ}; CA = \frac{54.83 \cdot \sin 20^\circ}{\sin 120^\circ} = 21.65\text{m}.$$

QUESTION NO: 50

Choose the correct option.

If $(x + 3)$ varies directly as y and $x = 3$ when $y = 12$, what is the value of x when $y = 8$?

- ☐ A. 1
- ☐ B. $\frac{1}{2}$
- ☐ C. $-\frac{1}{2}$
- ☐ D. -1

The correct answer is option [A]

QUESTION NO: 51

Choose the correct option.

If $h(m + n) = m(h + r)$ find h in terms of m , n and r .

- ☐ A. $h = \frac{mr}{2m + r}$
- ☐ B. $h = \frac{mr}{n - m}$

- ☐ C. $h = \frac{m + n}{mr}$
- ☐ D. $h = \frac{mr}{n}$

The correct answer is option [D].

$$h(m + n) = m(h + r)$$

$$h(m + n) = mh + mr. \text{ Taking like terms gives; } h(m + n) - mh = mr$$

$$h(m + n - m) = mr \Rightarrow h = \frac{mr}{n}$$

$$h(m + n - m) = mr \Rightarrow h = \frac{mr}{n}$$

QUESTION NO: 52

Choose the correct option.

A student travelled for x hours at 5km/hr and for y hours at 10km/hr. The journey was 35km altogether, find x and y if the average speed for the journey was 7 km/hr.

- ☐ A. 3hrs
- ☐ B. 3hrs
- ☐ C. 1hrs
- ☐ D. 2hrs

3hrs

The correct answer is option [B]. Solution:

Let the number of hours be x and y ® time

$$\text{for the journey} = \frac{\text{Distance}}{\text{Average speed}}$$

$$= \frac{35}{7} \text{ hours; } x + y = 5 \text{ ---- [i]; } 5x + 10y = 35 -$$

--- [ii] ® make x subject from equation

$$[i]; x = 5 - y \text{ ---- [iii] ® substitute into}$$

$$\text{equation [ii]; } 5[5 - y] + 10y = 35;$$

$$25 - 5y + 10y = 35 \text{ ® } 5y = 10; y = \frac{10}{5} = 2\text{hrs}$$

substitute the value of y into equation

$$[iii] \text{ ® } x = 5 - y = 5 - 2 = 3\text{hrs. The answer} =$$

3hrs

2hrs.

QUESTION NO: 53

Choose the correct option.

Solve the equation $7y^2 = 3y$.

- ☐ A. $y = 3$ or 7

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- ☐ B. $y = 0$ or 7
☐ C. $y = 0$ or $\frac{3}{7}$
☐ D. $y = 0$ or 9

The correct answer is option [C].

$$7y^2 - 3y = 0 \Rightarrow y(7y - 3) = 0$$

$$\Rightarrow y = 0 \text{ or } \frac{3}{7}$$

QUESTION NO: 54

Choose the correct option.

Seven books and eight pens cost ₹ 1750. Eight books and seven pens cost ₹ 1700. Calculate the cost of a book and a pen.

- ☐ A. ₹ 210; ₹ 90
☐ B. ₹ 140; ₹ 80
☐ C. ₹ 210; ₹ 80
☐ D. ₹ 140; ₹ 90

The correct answer is option [D]. Solution:

Let the cost of a book be n and the cost of a pen be m ; $7n + 8m = ₹ 1750$ ----- [i]; $8n + 7m = ₹ 1700$ ----- [ii] ® Multiply equation [i] by 8 and equation [ii] by 7 ® $56n + 64m = ₹ 14,000$ ----- [iii]; $56n + 49m = ₹ 11,900$ ----- [iv] ® subtract equation [iv] from [iii]; $15m = ₹ 2100$ ® $m = \frac{₹ 2100}{15} = ₹ 140$. Substitute the value of m into equation [ii] and solve for n ; $8n + 7[140] = 1700$ ® $8n = 1700 - 980$; $8n = 720$ ® $n = \frac{₹ 720}{8} = ₹ 90$. The answer = ₹ 140; ₹ 90

QUESTION NO: 55

Choose the correct option.

Simplify $36^{\frac{1}{2}} \times 64^{-\frac{1}{3}} \times 5^0$.

- ☐ A. 0
☐ B. $\frac{1}{24}$
☐ C. $\frac{2}{3}$
☐ D. $1\frac{1}{2}$

The correct answer is option [D].

$$36^{\frac{1}{2}} = \sqrt{36} = 6$$

$$64^{-\frac{1}{3}} = \frac{1}{\sqrt[3]{64}} = \frac{1}{4}$$

$$5^0 = 1$$

$$\Rightarrow 36^{\frac{1}{2}} \times 64^{-\frac{1}{3}} \times 5^0$$

$$= 6 \times \frac{1}{4} \times 1 = 1\frac{1}{2}$$

QUESTION NO: 56

Use the table to answer the question.

x	0	2	4	6
y	1	2	3	4

The table is for the relation $y = mx + c$ where m and c are constants. What is the value of x when $y = 5$?

- ☐ A. 8
☐ B. 9
☐ C. 10
☐ D. 11

The correct answer is option [A].

QUESTION NO: 57

Choose the correct option.

Find the sum to infinity of G.P. whose first term is 24.75 and common ratio is 0.75.

- ☐ A. 99
☐ B. 49
☐ C. 68
☐ D. 88

The correct answer is option [A]. Solution:

Using the equation $S_{\infty} = \frac{a}{1-r}$, where $a = 24.75$, $r = 0.75$.

CHEMISTRY-

QUESTION NO: 1

Choose the correct option.

Acid anhydride is the same as _____

- ☐ A. dry acid.
- ☐ B. acid that increase its volume when exposed to air.
- ☐ C. acid made by drying the reactants first.
- ☐ D. acid made from oxides of non-metals.

The correct answer is option [D].

QUESTION NO: 2

Choose the correct option.

Which of the pollutants causes acid rain?

- ☐ A. oxides of carbon and oxides of sulphur.
- ☐ B. oxides of sulphur.
- ☐ C. oxides of nitrogen and oxides of carbon.
- ☐ D. oxides of nitrogen and oxides of sulphur.

The correct answer is option [D].

QUESTION NO: 3

Choose the correct option.

The following statements explains burning *except* _____

- ☐ A. burning is a oxidation process.
- ☐ B. burning must involve iron.
- ☐ C. burning gives out large amount of heat.
- ☐ D. burning is an active rapid process.

The correct answer is option [B].

QUESTION NO: 4

Choose the correct option.

When the energy needed to break up bonds is less than energy liberated on hydration of ions in an ionic compound, the compound is _____

- ☐ A. Soluble.
- ☐ B. Insoluble.
- ☐ C. Hydrated.

- ☐ D. None of the above.

The correct answer is option [A].

QUESTION NO: 5

Choose the correct option.

In the atomic notation x_yA , _____

- ☐ A. x is the atomic number of the element.
- ☐ B. y is the atomic number of the element.
- ☐ C. x is the number of protons in the element.
- ☐ D. x is the number of electrons in the element.

The correct answer is option [B].

QUESTION NO: 6

Choose the correct option.

Which of the following elements has the highest electronegativity?

- ☐ A. Chlorine.
- ☐ B. Fluorine.
- ☐ C. Nitrogen.
- ☐ D. Oxygen.

The correct answer is option [A].

QUESTION NO: 7

Choose the correct option.

The number of times the average mass of one atom of that element is heavier than one-twelfth the mass of one atom of carbon-12 is known as _____

- ☐ A. relative molecular weight.
- ☐ B. relative atomic weight.
- ☐ C. relative molecular mass.
- ☐ D. relative atomic mass.

The correct answer is option [D].

QUESTION NO: 8

Choose the correct answer.

The ion that is isoelectronic (same number of electrons) with CO is _____.

- ☐ A. CN^-

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- ☐ B. O^{2+}
☐ C. O^{2-}
☐ D. N^{2+}

The correct answer is option [A].

Isoelectronic means same number of electrons

QUESTION NO: 9

Choose the correct answer.

_____ and _____ are the types of bonds present in $CuSO_4 \cdot 5H_2O$.

- ☐ A. electrovalent and covalent
☐ B. electrovalent and coordinate covalent
☐ C. electrovalent, covalent and coordinate covalent
☐ D. covalent and coordinate covalent

The correct answer is option [B]

QUESTION NO: 10

Choose the correct answer.

The bonds present in N_2O_5 are _____

- ☐ A. only ionic
☐ B. covalent and coordinate
☐ C. only covalent
☐ D. covalent and ionic

The correct answer is option [B]

QUESTION NO: 11

Choose the correct answer.

The solar atmosphere is composed of a lower layer called _____ and higher layer called _____.

- ☐ A. chromosphere, photosphere
☐ B. corona, chromosphere
☐ C. chromosphere, corona
☐ D. photosphere, corona

The correct answer is option [C]

QUESTION NO: 12

Choose the correct answer.

_____ is observed when emitted light passes through a material that partially absorbs it before it is dispersed.

- ☐ A. Adsorption spectra
☐ B. Emission spectra
☐ C. Absorption spectra
☐ D. Thermionic spectra

The correct answer is option [C]

QUESTION NO: 13

Choose the correct option.

The following are heavy chemicals *except* _____.

- ☐ A. *tetraoxosulphate (vi) acid*
☐ B. *dyes*
☐ C. *sodium trioxocarbonate (iv)*
☐ D. *ethene*

The correct answer is option [B].

QUESTION NO: 14

Choose the correct answer.

White lead is a pigment with formula _____.

- ☐ A. $PbCO_3$
☐ B. $Pb(OH)_2$
☐ C. $Pb(OH)_2 \cdot 2PbCO_3$
☐ D. Pb_3O_4

The correct answer is option [C]

QUESTION NO: 15

Choose the correct answer.

The hydrophobic part of detergent molecule is _____.

- ☐ A. *water attracting*
☐ B. *water repelling*
☐ C. *both A & B*
☐ D. *none of the above*

The correct answer is option [B]

QUESTION NO: 17

Choose the correct option.

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What quantity of electricity is consumed when 15 amperes was consumed in $1\frac{1}{4}$ hrs during electrolysis?

- ☐ A. 67.5 coulomb.
- ☐ B. 675 coulomb.
- ☐ C. 67.5 kilocoulomb.
- ☐ D. 6750 coulomb.

The correct answer is option [C].

Solution: $Q = It$, where $I = 15A$, $t = 1\frac{1}{4}$ hrs is equivalent to 75 mins; $Q = 15 \times 75 \times 60 = 67\,500$ coulomb = 67.5 kilocoulomb.

QUESTION NO: 18

Choose the correct option.

The internal energy, U , of a chemical system is equal to the sum of _____

- ☐ A. chemical energy and bond energy.
- ☐ B. hydration energy and bond energy.
- ☐ C. hydration energy and lattice energy.
- ☐ D. lattice energy and bond energy.

The correct answer is option [A].

QUESTION NO: 19

Choose the correct option.

Which of the following decreases in a system when vapour condenses to a liquid?

- ☐ A. Activation energy.
- ☐ B. Enthalpy.
- ☐ C. Entropy.
- ☐ D. Number of molecules..

The correct answer is option [C].

QUESTION NO: 20

Choose the correct option.

Hydrogen is used in oxy-hydrogen flames for melting metals because it _____

- ☐ A. evolves a lot of heat when burnt.
- ☐ B. combines explosively with oxygen.
- ☐ C. is a very light gas.

- ☐ D. is a rocket fuel.

The correct answer is option [B].

QUESTION NO: 21

Choose the correct option.

Which of the following fractions of crude oil is likely to contain the hydrocarbon $C_{12}H_{26}$?

- ☐ A. Kerosene.
- ☐ B. Naptha.
- ☐ C. Gas oil.
- ☐ D. Fuel oil.

The correct answer is option [A].

Kerosine contains $C_{10} - C_{16}$ carbon atoms per molecule.

QUESTION NO: 22

Choose the correct option.

Which of the following substances decomposes when an electric current is passed through it?

- ☐ A. Glucose solution.
- ☐ B. Zinc rod.
- ☐ C. Hydrochloric acid.
- ☐ D. Tetrachloromethane.

The correct answer is option [C].

QUESTION NO: 23

Choose the correct option.

Which of the following options is the correct order by which metals displace hydrogen when reacting with acid?

- ☐ A. $Na > Ca > Mg > Zn$.
- ☐ B. $Na < Ca < Mg < Zn$.
- ☐ C. $Na < Ca > Mg < Zn$.
- ☐ D. $Na > Ca < Mg > Zn$.

The correct answer is option [A].

QUESTION NO: 24

Choose the correct option.

The vapour pressure of a liquid depends on _____

[i] the temperature

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[ii] the nature of the liquid

[iii] the type of liquid

- ☐ A. [i] and [iii] only.
- ☐ B. [i] only.
- ☐ C. [i] and [ii] only.
- ☐ D. [i], [ii] and [iii]

The correct answer is option [C].

QUESTION NO: 25

Choose the correct option.

Kelvin temperature can be converted into celsius temperature by _____

- ☐ A. $^{\circ}\text{C} = \text{K} - 273$.
- ☐ B. $^{\circ}\text{C} = \text{K} + 273$.
- ☐ C. $^{\circ}\text{C} + 273/\text{K}$.
- ☐ D. $\text{K} + 273/^{\circ}\text{C}$

The correct answer is option [A].

Solution: $\text{K} = ^{\circ}\text{C} + 273$, therefore, $^{\circ}\text{C} = \text{K} - 273$.

QUESTION NO: 26

Choose the correct option.

The **main** function of limestone in the blast furnace is to _____

- ☐ A. act as a reducing agent.
- ☐ B. act as a catalyst.
- ☐ C. remove impurities.
- ☐ D. supply carbon (IV) oxide.

The correct answer is option [C].

QUESTION NO: 27

Choose the correct option.

To test if a chemical compound contains hydrazine _____ is introduced and _____ is formed on the glass.

- ☐ A. silver trioxocarbonate (IV) and nothing
- ☐ B. silver tetraoxosulphate (VI) and silver mirror
- ☐ C. silver chloride and silver mirror
- ☐ D. silver trioxonitrate (V) and silver mirror

The correct answer is option [D].

QUESTION NO: 28

Choose the correct option.

Which of the following statements is not true?

- ☐ A. Carbon exhibits allotropy
- ☐ B. Sulphur exhibits allotropy
- ☐ C. Chlorine exhibits allotropy
- ☐ D. Nitrogen is a gas

The correct answer is option [C].

QUESTION NO: 30

Choose the correct option.

Aromatic and aliphatic hydrocarbons can be distinguished from each other by _____

- ☐ A. action of bromine.
- ☐ B. use of polymerization reaction.
- ☐ C. action of heat.
- ☐ D. use of oxidation reaction.

The correct answer is option [C].

QUESTION NO: 31

Choose the correct option.

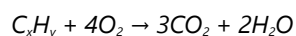
What is the product of the reaction between ethanol and excess acidified KMnO_4 solution?

- ☐ A. $\text{CH}_2 = \text{CH}_2$.
- ☐ B. CH_3COOH .
- ☐ C. $\text{CH}_3\text{-CH}_3$.
- ☐ D. $\text{CH}_3\text{-OCH}_3$.

The correct answer is option [B].

QUESTION NO: 32

Choose the correct option.



The hydrocarbon C_xH_y in the reaction above is _____

- ☐ A. propyne.
- ☐ B. propanone.
- ☐ C. propene.

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☐ D. propyl.

The correct answer is option [A].

QUESTION NO: 33

Choose the correct option.

The elements in group 1 are called _____

- ☐ A. alkali non-metals.
- ☐ B. alkali-earth metals.
- ☐ C. alkali metals.
- ☐ D. acids.

The correct answer is option [C].

QUESTION NO: 34

Choose the correct option.

Elements in the same group may be said to belong to _____

- ☐ A. a family.
- ☐ B. a group trend.
- ☐ C. a triad.
- ☐ D. a period trend.

The correct answer is option [A].

QUESTION NO: 35

Choose the correct option.

The periodic law states that _____

- ☐ A. the physical properties of the elements are a Periodic Table of their atomic numbers.
- ☐ B. the physical and chemical properties of the elements are a Periodic Function of their atomic numbers.
- ☐ C. the physical and chemical properties of the elements are a Periodic Table of their atomic numbers.
- ☐ D. the physical and chemical properties of the elements are a Periodic Function of the relative atomic mass.

The correct answer is option [B].

QUESTION NO: 36

Choose the correct option.

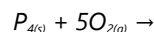
_____ discovered the method of arrangement of elements according to their atomic mass.

- ☐ A. Mendeleev
- ☐ B. Dalton
- ☐ C. Chadwick
- ☐ D. Niels Bohr

The correct answer is option [A].

QUESTION NO: 37

Choose the correct option.



The product of the given reaction above is _____

- ☐ A. $P_4O_{8(g)}$.
- ☐ B. $P_4O_{6(g)}$.
- ☐ C. $P_4O_{10(g)}$.
- ☐ D. $P_4O_{12(g)}$.

The correct answer is option [C].

QUESTION NO: 38

Choose the correct option.

The low ignition temperature of white phosphorus is _____

- ☐ A. 250°C .
- ☐ B. 100°C .
- ☐ C. 44°C .
- ☐ D. 35°C .

The correct answer is option [D].

QUESTION NO: 39

Choose the correct option.

Lime soda glass is made from the mixture of _____

- ☐ A. silicon, washing soda and limestone.
- ☐ B. metallic trioxosilicates (IV), silica and limestone.
- ☐ C. silica, caustic soda and limestone.
- ☐ D. silica, washing soda and limestone.

The correct answer is option [D].

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QUESTION NO: 40

Choose the correct option.

The mass of a radioactive element is 346 grams after 2 hours the mass is 246 grams find the decay constant?

- ☐ A. 0.5 hour.
- ☐ B. 0.171 hour.
- ☐ C. 0.117 hour.
- ☐ D. 2 hours.

The correct answer is option [B].

Solution: Using the equation: $N = N_0 e^{(-\lambda t)}$, where N = final mass = 246 grams, N_0 = original mass = 346 grams, t = time of decay = 2 hours. Therefore decay constant $\lambda = \ln \frac{(246/346)}{2} = 0.171$ hour.

QUESTION NO: 41

Choose the correct option.

Rate of chemical reaction depends on the following factors except _____

- ☐ A. rate at which gas is evolved.
- ☐ B. rate at which products are formed.
- ☐ C. rate at which the colour of reactions change.
- ☐ D. rate at which the reactants diminish.

The correct answer is option [C].

QUESTION NO: 42

Choose the correct option.

"The rate of a reaction is proportional to the number of effective collisions occurring per second between the reactants."

This statement is associated with the _____

- ☐ A. kinetic theory.
- ☐ B. atomic theory.
- ☐ C. collision theory.
- ☐ D. gas laws.

The correct answer is option [C].

QUESTION NO: 43

Choose the correct option.

A sample of orange juice is suspected to have been contaminated with a yellow dye. Which of the following methods can be used to detect the dye?

- ☐ A. Chromatography.
- ☐ B. Decantation.
- ☐ C. Distillation.
- ☐ D. Evaporation.

The correct answer is option [A].

QUESTION NO: 44

Choose the correct option.

The bonds in crystalline ammonium chloride are _____

- ☐ A. covalent and dative.
- ☐ B. ionic and covalent.
- ☐ C. ionic, covalent and dative.
- ☐ D. ionic, covalent and hydrogen bond.

The correct answer is option [A].

QUESTION NO: 45

Choose the correct option.

The valence shell of water molecule contains _____

- ☐ A. one lone pair and two unpaired electrons.
- ☐ B. two lone pairs and two unpaired electrons.
- ☐ C. two lone pairs and a single unpaired electrons.
- ☐ D. single lone pair and a single unpaired electrons.

The correct answer is option [B].

QUESTION NO: 46

Choose the correct option.

The most suitable method used when separating an insoluble solid from a liquid is _____

- ☐ A. evaporation..
- ☐ B. filtration.
- ☐ C. magnetization.
- ☐ D. sublimation..

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The correct answer is option [B].

QUESTION NO: 47

Choose the correct option.

At a given temperature and pressure a gas, A, diffuses twice as fast as a gas, B. It follows that _____

- (I) gas B is heavier than gas A.
- (II) gas B is four times as heavy as gas A.
- (III) gas B is monoatomic.
- (IV) gas A is diatomic.

- ☐ A. I & II.
- ☐ B. III & IV.
- ☐ C. I, II & III.
- ☐ D. I, II, III & IV.

The correct answer is option [A].

QUESTION NO: 48

Choose the correct option.

Which of the following pairs of elements would be expected to form an ionic compound when they combine?

- ☐ A. Sulphur and oxygen.
- ☐ B. Phosphorus and oxygen.
- ☐ C. Magnesium and aluminium.
- ☐ D. Magnesium and sulphur.

The correct answer is option [D].

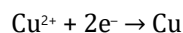
QUESTION NO: 49

Choose the correct option.

What mass of copper would be deposited by a current of 1.0 amperes passing for 965 seconds through copper (II) tetraoxosulphate (VI) solution?
[Cu = 63.5, 1F = 96,500 C]

- ☐ A. 0.318 g.
- ☐ B. 0.635 g.
- ☐ C. 3.18 g.
- ☐ D. 6.35 g.

The correct answer is option [A].



2F will liberate 63.5 g of Cu.

$$Q = It$$

$$Q = 1.0 \times 965$$

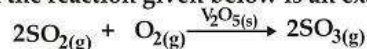
$$(1.0 \times 965)C \text{ will liberate } \frac{1.0 \times 965 \times 63.5}{96500 \times 2}$$

$$\frac{61277.5}{19300} = 0.318g$$

QUESTION NO: 50

Choose the correct option.

In the reaction given below is an example of _____



- ☐ A. homogeneous catalysis.
- ☐ B. heterogeneous catalysis.
- ☐ C. inert catalysis.
- ☐ D. contact catalysis.

The correct answer is option [B].

QUESTION NO: 1

Choose the correct option.

When a metallic oxide reacts with both acids and bases, the oxide is said to be _____

- ☐ A. acidic.
- ☐ B. amphoteric.
- ☐ C. basic.
- ☐ D. complex.

The correct answer is option [B].

QUESTION NO: 51

Choose the correct option.

When a metallic oxide reacts with both acids and bases, the oxide is said to be _____

- ☐ A. acidic.
- ☐ B. amphoteric.
- ☐ C. basic.
- ☐ D. complex.

The correct answer is option [B].

QUESTION NO: 52

Choose the correct option.

The following substances are all normal salts with the exception of _____

- ☐ A. $\text{Al}(\text{NO}_3)_3$.

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- ☐ B. FeSO_4 .
- ☐ C. $\text{Mg}(\text{OH})\text{NO}_3$.
- ☐ D. NaCl .

The correct answer is option [C]

QUESTION NO: 53

Choose the correct option.

Which of the following is correct about the zones identified by a non-luminous flame?

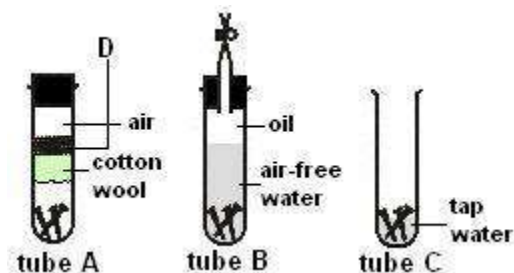
- (i) the unburnt gas zone.
- (ii) the luminous zone.
- (iii) the outermost non-luminous zone.

- ☐ A. (iii) only.
- ☐ B. (i) and (iii).
- ☐ C. (ii) only.
- ☐ D. (i), (ii) and (iii).

The correct answer is option [D].

QUESTION NO: 54

Choose the correct option.



From the diagram drawn, tube B contains ____

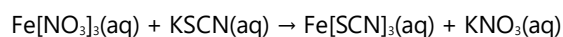
- ☐ A. water alone.
- ☐ B. air alone.
- ☐ C. air and water.
- ☐ D. oil alone.

The correct answer is option [A]

QUESTION NO: 55

Choose the correct option.

How many moles of potassium is needed to balance the given equation below?



- ☐ A. 2.
- ☐ B. 4.
- ☐ C. 1.
- ☐ D. 3.

The correct answer is option [D].

QUESTION NO: 56

Choose the correct option.

A substance containing as many elementary entities as the number of atoms in exactly 12 grams of carbon-12 is called ____

- ☐ A. mole.
- ☐ B. molecule.
- ☐ C. atomic mass unit.
- ☐ D. avogadro's number.

The correct answer is option [A].

QUESTION NO: 57

Choose the correct option.

Which of the following statements is true?

- ☐ A. H_2O has a greater dipole moment than H_2S .
- ☐ B. H_2O is polar, but H_2S is non-polar.
- ☐ C. The molecules H_2S and H_2O are both linear.
- ☐ D. The molecules H_2S and H_2O both have zero dipole moment.

The correct answer is option [A].

QUESTION NO: 58

Choose the correct answer.

All molecules with polar bonds have dipole moment.

- ☐ A. False
- ☐ B. True

The correct answer is option [A].

Symmetrical molecules will have zero dipole moment.

Also If symmetrical arrangement of atoms is there, there is no dipole moment. Example CCl_4 .

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QUESTION NO: 1

Choose the correct option

If a current of 17A pass through a coil such that the magnetic flux set up is 40Weber, determine the self inductance in the coil.

- ☐ A. 3.45 H
- ☐ B. 1.73 H
- ☐ C. 2.35 H
- ☐ D. 6.35 H

The correct answer is option [C].

$I = 7A$ magnetic flux = 40wb

Let L = self inductance $L = \frac{\phi}{I} = \frac{40}{17} = 2.35 H$

QUESTION NO: 2

Choose the correct option.

An electron moves with a speed of $2.0 \times 10^6 \text{ms}^{-1}$ in a straight line. Find the wavelength of the electron wave.

[mass of an electron = $9.1 \times 10^{-31} \text{kg}$, planck's constant = $6.6 \times 10^{-34} \text{Js}$].

- ☐ A. $3.63 \times 10^{-10} \text{m}$
- ☐ B. $6.51 \times 10^{-9} \text{m}$
- ☐ C. $4.24 \times 10^{-8} \text{m}$
- ☐ D. $7.25 \times 10^{-8} \text{m}$

The correct answer is option [A].

Using the equation:

$$\lambda = \frac{h}{mv}$$

QUESTION NO: 3

Choose the correct option.

When an alternating current given by $I = 10\sin(120\omega)t$ passes through a 12Ω resistor, the power dissipated in the resistor is ____.

- ☐ A. 120W
- ☐ B. 30W
- ☐ C. 600W
- ☐ D. 1200W

The correct answer is option [D].

$I = 10\sin(120\pi)t = I_0 \sin\omega t$

$$I_0 = 10A, R = 12\Omega$$

$$P = I_0^2 R$$

QUESTION NO: 4

Choose the correct option.

The function of granulated carbon mixed with manganese [IV] oxide in a leclanche cell is to ____.

- ☐ A. prevent cell polarisation
- ☐ B. local action in the cell
- ☐ C. increase the e.m.f. of the cell to 2.15V
- ☐ D. make the cell a perfect radiator

The correct answer is option [A].

QUESTION NO: 5

Choose the correct option.

The terminal p.d. of a battery is 15V when an external resistance of 25Ω is connected and 18V when an external resistance of 40Ω is connected. Find the internal resistance of the battery.

- ☐ A. 25Ω .
- ☐ B. 20Ω .
- ☐ C. 35Ω .
- ☐ D. 15Ω .

The correct answer is option [B].

Hint: $I_1 = \frac{V_1}{R_1} = \frac{E}{R_1 + r}$, and $I_2 = \frac{V_2}{R_2} = \frac{E}{R_2 + r}$, where $I_1 = I_2 = I$, $E_1 = E_2 = E$, $V_1 = 15V$, $V_2 = 18V$, $R_1 = 25\Omega$, and $R_2 = 40\Omega$.

QUESTION NO: 6

Choose the correct option.

Which of the option is not a method of limitation of ohms law?

- ☐ A. The temperature of the conducting wire must vary
- ☐ B. The wire must not be under tension
- ☐ C. It must have uniform cross-sectional area
- ☐ D. It must be of same material from one end to the other end

The correct answer is option [A].

QUESTION NO: 7

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Choose the correct answer.

A real image, equal in size to the object is obtained when the object is placed at the centre of curvature in front of a _____.

- ☐ A. plane mirror
- ☐ B. concave mirror
- ☐ C. convex mirror
- ☐ D. either convex or concave mirror

The correct answer is option [B]

QUESTION NO: 8

[Specific latent heat of vaporization of water = $2.3 \times 10^6 \text{ J Kg}^{-1}$]

A heating coil rated at 1000W is used to boil off 0.5kg of boiling water. The time taken to boil off the water is _____.

- ☐ A. $1.59 \times 10^9 \text{ s}$
- ☐ B. $1.15 \times 10^7 \text{ s}$
- ☐ C. $1.15 \times 10^5 \text{ s}$
- ☐ D. $1.15 \times 10^3 \text{ s}$

The correct answer is option [D].

$P = 1000 \text{ W}$, $m = 0.5 \text{ Kg}$, $L_v = 2.3 \times 10^6 \text{ J Kg}^{-1}$

$$Pt = mL_v \Rightarrow t = \frac{mL_v}{P} = \frac{0.5 \times 2.3 \times 10^6}{1000} = 1150 \text{ s}$$

QUESTION NO: 9

Choose the correct option.

An immersion heater is rated 100W. How long does it take the heater to raise the temperature of 2.5kg of water by 20°C ?

[assume heat lost to the surrounding is negligible and specific heat capacity of water = 4200 J/kg/K].

- ☐ A. 58.0 minutes
- ☐ B. 70.0 minutes
- ☐ C. 75.0 minutes
- ☐ D. 35.0 minutes

The correct answer is option [D].

$$I \cdot RT = \theta(mc + H)$$

$$\text{Heat lost negligible} = 100 \text{ Wt} = 20 \times (2.5 \times$$

4200)

$$t = \frac{210000}{100} = 2100 \text{ since } 1 \text{ m} \rightarrow 60 \text{ s, } \frac{2100}{60} = 35.0 \text{ m}$$

QUESTION NO: 10

Choose the correct option.

A machine with an input power of 2 kilowatts uses 80% of this power. If all the remaining energy appears as heat, and heats 40kg of iron, what will be the rise of temperature of this iron in 2min?

(Specific heat capacity of iron = 0.5 Jg K or 500 J/kg K).

- ☐ A. 9.6°C
- ☐ B. 2.4°C
- ☐ C. 24°C
- ☐ D. 12°C

The correct answer is option [B].

QUESTION NO: 11

Choose the correct option.

The ability of an object to regain its original shape after an external force, which deformed it, has been removed is called _____.

- ☐ A. dislocation
- ☐ B. distortion
- ☐ C. elasticity
- ☐ D. restoration

The correct answer is option [C].

QUESTION NO: 12

Choose the correct answer.

Figure-out the odd point in the following.

- ☐ A. Proportional limit
- ☐ B. Elastic limit
- ☐ C. Yield point
- ☐ D. Fracture point

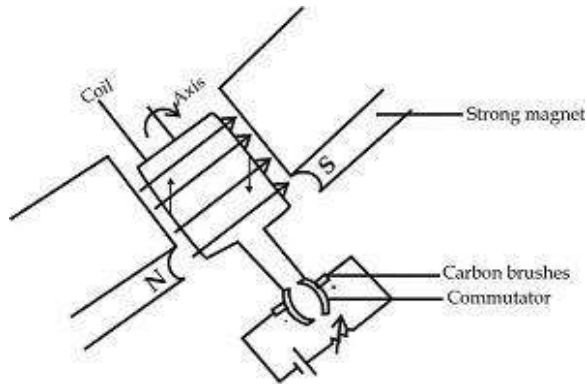
The correct answer is option [D]

QUESTION NO: 13

Choose the correct option.

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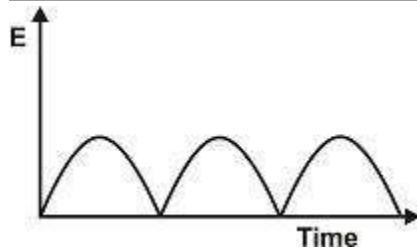
The diagram drawn is a simple electric motor that consist of the following parts EXCEPT ____.

- ☐ A. a power magnetic field in which the coil turns
- ☐ B. weak hair springs so as to give a small rotational control
- ☐ C. a commutator which consist of split copper ring with their two halves insulated from each other
- ☐ D. rectangular coil of wire known as the armature about an axis

The correct answer is option [B].

QUESTION NO: 14

Choose the correct option.



When a coil rotates in a magnetic field, the induced emf E at the brushes varies as shown in the diagram drawn, then ____.

- ☐ A. the speed of rotation varies
- ☐ B. the magnetic field has damaged easily
- ☐ C. the magnetic field becomes zero twice per revolution
- ☐ D. the ends of the coil are connected to a split-ring commutator

The correct answer is option [A].

QUESTION NO: 15

Choose the correct option.

A transformer is rated 240V. If the primary coil is 4000 turns and secondary voltage is 12V, determine the number of turns in the secondary coil.

- ☐ A. 100
- ☐ B. 150
- ☐ C. 200
- ☐ D. 250

The correct answer is option [C].

Using the formula
$$\frac{E_s}{E_p} = \frac{N_s}{N_p}$$

where N_s = number of turns in the secondary

N_p = Number of turns in the primary

E_s = Voltage in the secondary

E_p = voltage in primary

QUESTION NO: 16

Choose the correct answer.

Which color of the visible light spectrum has the greatest wavelength?

- ☐ A. Violet waves
- ☐ B. Red waves
- ☐ C. Infrared waves
- ☐ D. Radio waves

The correct answer is option [B]

QUESTION NO: 17

Choose the correct option.

The equations in the options represents Einstein photoelectric equation EXCEPT ____.

- ☐ A. $E_{\max} = hf - W_o$.
- ☐ B. $hf = E_{\max} + W_o$.
- ☐ C. $\frac{1}{2}m_e v_m^2 = hf - W_o$.
- ☐ D. $E_{\max} = hf + W_o$.

The correct answer is option [D].

Hint: $E_{\max}$ = maximum energy of electron, $\frac{1}{2}[m_e v_m^2]$ = maximum kinetic

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energy of electron, h = plank constant, W_0 = work function, f = frequency of electron, m_e = electron mass, v_m = speed of electron emitted.

QUESTION NO: 18

Choose the correct option.

Which of the following is not a nuclear reactor?

- ☐ A. Nuclear core
- ☐ B. Graphite moderation
- ☐ C. Several neutrons
- ☐ D. Boron or cadimium rods

The correct answer is option [C].

QUESTION NO: 19

Choose the correct option.

Which of the following is the law which indicates how the pressure of a fixed mass of air varies with its temperature as recorded on a mercury thermometer, when the volume remains constant?

- ☐ A. Charles' law
- ☐ B. Pressure law
- ☐ C. Boyle's law
- ☐ D. Ideal gas law

The correct answer is option [B].

QUESTION NO: 20

Choose the correct option.

The pressure of two moles of an ideal gas at temperature of 27°C and volume 10^{-2}m^3 is _____.
[$R = 8.313\text{Jmol}^{-1}\text{K}^{-1}$]

- ☐ A. $4.99 \times 10^{-5}\text{Nm}^{-2}$
- ☐ B. $9.80 \times 10^{-5}\text{Nm}^{-2}$
- ☐ C. $4.98 \times 10^{-5}\text{Nm}^{-2}$
- ☐ D. $9.80 \times 10^{-5}\text{Nm}^{-2}$

The correct answer is option [A].

$$PV = nRT$$

$$P = \frac{nRT}{V} = \frac{2 \times 8.313 \times 300}{10^{-2}} = 498780 = 4.99 \times 10^{-5}\text{Nm}^{-2}$$

QUESTION NO: 21

Choose the correct option.

In a moving coil loud speaker current enters it at the coil through ____.

- ☐ A. the soft iron core
- ☐ B. soft iron core plates
- ☐ C. the leads
- ☐ D. the paper cone

The correct answer is option [C].

QUESTION NO: 22

Choose the correct option.

The moving coil galvanometer is used to measure ____.

- ☐ A. small values of current
- ☐ B. large values of current
- ☐ C. current of about 100A
- ☐ D. only A and C

The correct answer is option [A].

Hint: Galvanometer measures current in millimeters.

QUESTION NO: 23

Choose the correct option.

If the mass of the earth is $6.0 \times 10^{24}\text{kg}$ of radius $6.4 \times 10^4\text{m}$. Find the force per unit mass of the earth surface.

$$[G = 6.7 \times 10^{-11}\text{Nm}^2\text{kg}^{-2}].$$

- ☐ A. 10426m s^{-2} .
- ☐ B. 190854m s^{-2} .
- ☐ C. 98144.5m s^{-2} .
- ☐ D. 286411m s^{-2} .

The correct answer is option [C].

Hint: Use the equation $g = \frac{GM}{r^2} = \frac{[6.7 \times 10^{-11} \times 6 \times 10^{24}]}{[(6.4 \times 10^4)^2]}$

QUESTION NO: 24

Choose the correct option.

A thin wire with heavy weights attached to both ends is hung over a block of ice resting on two supports. If the wire cuts through the ice block while the block

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remains solid behind the wire, the process is called _____.

- ☐ A. Fusion
- ☐ B. Sublimation
- ☐ C. Condensation
- ☐ D. Regelation

The correct answer is option [D].

QUESTION NO: 25

Choose the correct option.

Specific heat capacity $26.4 \text{ J kg}^{-1} \text{ K}^{-1}$ of a body means that when 26.4J of heat energy is supplied to a body of _____.

- ☐ A. mass 1000kg, the temperature rises by 1k
- ☐ B. mass 1kg, the temperature rises by 1000k
- ☐ C. mass 1kg, the temperature rises by 1k
- ☐ D. mass 1000kg, the temperature rises by 1000k.

The correct answer is option [C].

QUESTION NO: 26

Use the information to answer the question.

A train slows down from a velocity of 108km/h with a uniform deceleration of 5 m/s^2 .

Find the total distance covered by the train after 5secs.

- ☐ A. 27.5m.
- ☐ B. 87m.
- ☐ C. 87.5m.
- ☐ D. 212.5m.

The correct answer is option [C].

Hint: Use the equation $s = ut + \frac{1}{2}at^2$.

QUESTION NO: 27

Choose the correct option.

The instantaneous response of an object to the force that acts on it is known as _____.

- ☐ A. momentum
- ☐ B. impulse

- ☐ C. inelastic collision
- ☐ D. elastic collision

The correct answer is option [B].

QUESTION NO: 28

Choose the correct option.

An object, A, of mass 16kg moving with a velocity of 10m/s collides with another body, B, of mass 10kg moving in the opposite direction with a velocity of 12m/s, the common velocity in the direction of body A, after collision is _____.

- ☐ A. 5.2m/s
- ☐ B. 1.45m/s
- ☐ C. 1.33m/s
- ☐ D. 0.45m/s

The correct answer is option [C].

$$U_A = 10 \text{ m/s}$$

$$U_B = 12 \text{ m/s}$$

$$\text{mass of body } M_A = 16 \text{ kg}$$

$$M_B = 10 \text{ kg}$$

$$M_A \times U_A + M_B \times U_B = (M_A + M_B)V$$

$$(16 \times 10) + (-10 \times 12) = (16 + 10)V$$

$$160 - 120 = 26V$$

$$40 = 26V$$

$$\therefore V = \frac{40}{26} = 1.54 \text{ m/s}$$

QUESTION NO: 29

Choose the correct option.

Mechanical advantage equals velocity ratio in any machine when _____.

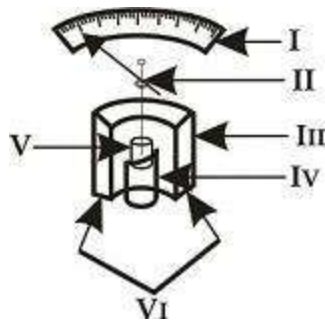
- ☐ A. effort = load
- ☐ B. efficiency = 0
- ☐ C. velocity ratio = 1
- ☐ D. friction in the machine = 0

The correct answer is option [D].

QUESTION NO: 30

Choose the correct option.

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From the diagram drawn I and IV are ____.

- ☐ A. solenoid and spring to contact angle of deflected
- ☐ B. scale and current in and out
- ☐ C. moveable soft iron and fixed soft iron
- ☐ D. scale and moveable soft iron

The correct answer is option [B].

QUESTION NO: 31

Choose the correct option.

Which of the following is a unit of mass?

- ☐ A. $\text{N m}^{-2} \text{s}^{-2}$.
- ☐ B. $\text{Ns}^2 \text{m}^{-1}$.
- ☐ C. Pa/Volume .
- ☐ D. Acceleration meter square.

The correct answer is option [B].

QUESTION NO: 32

[$g = 10 \text{ms}^{-2}$]

Determine the magnitude of the force required to just move a 20kg object along a horizontal surface if the coefficient of friction is 0.2.

- ☐ A. 400.0N
- ☐ B. 40.0N
- ☐ C. 4.0N
- ☐ D. 0.4N

The correct answer is option [B].

$\mu = \frac{F}{R}$ but $R = mg = 20 \times 10 = 200\text{N}$

Hence $F = \mu R = 0.2 \times 200 = 40\text{N}$

QUESTION NO: 33

Choose the correct option.

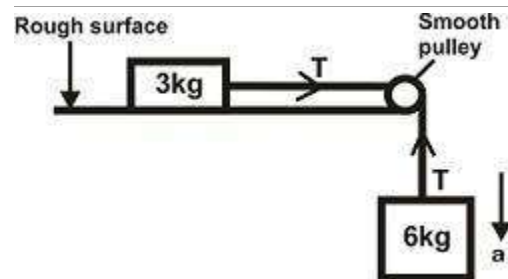
Which of the following statements about static friction is correct?

- ☐ A. It is independent of nature of surface in contact
- ☐ B. Depends on the area of surface in contact
- ☐ C. Depends on weight of the moving body
- ☐ D. Depends on the relative motion between the surface contact

The correct answer is option [B].

QUESTION NO: 34

Choose the correct option.



In the figure beside the coefficient of static friction is 0.5. If the tension in the string is T, the acceleration of the system in motion is ____.
[$g = 10 \text{ms}^{-2}$].

- ☐ A. 3ms^{-2}
- ☐ B. 5ms^{-2}
- ☐ C. 9ms^{-2}
- ☐ D. 15ms^{-2}

The correct answer is option [B].

$T - \mu_s mg = m_1 a$

$T - 0.5 \times 3 \times 10 = 3a$

$T - 15 = 3a \dots \dots \dots (I)$

$m_2 g - T = m_2 a$

$6 \times 10 - T = 6a$

$60 - T = 6a \dots \dots \dots (II)$

(I) + (II)

$T - 15 = 3a \dots \dots \dots (I) + 60 - T =$

$6a \dots \dots \dots (II)$

$45 = 9a$

$a = \frac{45}{9} = 5 \text{m/s}^2$

QUESTION NO: 35

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Choose the correct answer.

The physical quantity describing motion and whose measure is the product of distance travelled and the time taken to travel that distance is _____.

- ☐ A. mass
- ☐ B. speed
- ☐ C. weight
- ☐ D. displacement

The correct answer is option [B]

QUESTION NO: 36

Choose the correct option.

A man exerts a pressure of $2.8 \times 10^3 \text{ Nm}^{-2}$ on the ground and has $4 \times 10^{-2} \text{ m}^2$ of his feet in contact with the ground. The weight of the man is _____.

- ☐ A. 70N
- ☐ B. 102N
- ☐ C. 112N
- ☐ D. 140N

The correct answer is option [C].

$$P = F/A$$

$$W = F = P \times A = 2.8 \times 10^3 \times 4 \times 10^{-2} = 11.2 \times 10^1 = 112\text{N}$$

QUESTION NO: 37

Choose the correct option.

What is the disadvantage of the pin-hole camera when in use?

- ☐ A. The object distance is definite and the hole must be small.
- ☐ B. The image distance is definite and the hole must be large.
- ☐ C. The object distance is definite and the hole must be large.
- ☐ D. None of the above.

The correct answer is option [A].

QUESTION NO: 38

Choose the correct option.

Which of the following is a vector quantity?

- ☐ A. Displacement.
- ☐ B. Energy.
- ☐ C. Temperature.
- ☐ D. Mass.

The correct answer is option [A].

QUESTION NO: 39

Choose the correct option.

If the source of sound is moving, a stationary listener will hear a sound of different frequency. This is called _____.

- ☐ A. doppler effect
- ☐ B. resonance
- ☐ C. ultrasound
- ☐ D. diffraction of sound

The correct answer is Option [A].

QUESTION NO: 40

Choose the correct option.

A string stretched firmly between two point 52cm apart at its centre. What is the number of vibration made by the string if one of the wave produced is 280m/s?

- ☐ A. 380Hz.
- ☐ B. 269.2Hz.
- ☐ C. 420Hz.
- ☐ D. 180.23Hz.

The correct answer is option [B].

Hint: $\lambda = 2 \times 52 = 104\text{cm} = 1.04\text{m}$,
therefore, $f = v/\lambda = 280/1.04 = 269.2\text{Hz}$.

QUESTION NO: 41

Choose the correct option.

In which of the following material media would sound travel fastest?

- ☐ A. Gas
- ☐ B. Water

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- ☐ C. Oil
- ☐ D. Metal

The correct answer is option [D].

QUESTION NO: 42

Choose the correct option.

A dynamic equilibrium exists between the liquid molecules and the vapour molecules at a given temperature is called _____.

- ☐ A. atmospheric pressure
- ☐ B. saturated vapour pressure
- ☐ C. gas pressure
- ☐ D. vapour pressure

The correct answer is option [B].

N/B: whenever saturation is mentioned, the first thing that should come to a student's mind should be equilibrium.

QUESTION NO: 43

Choose the correct option.

If a room is saturated with water vapour, the temperature of the room must be _____.

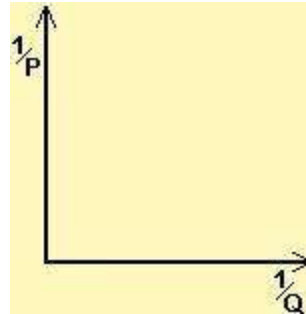
- ☐ A. At 0°C
- ☐ B. Above the dew point
- ☐ C. At 100°C
- ☐ D. Below or at the dew point

The correct answer is Option [C].

If a room is saturated with water vapour, the temperature of the room must be at 100°C . The polished kettle cools down more quickly by the process of conduction.

QUESTION NO: 44

Choose the correct option.



If P represent an object distance measured $\frac{1}{P}$ and plotted against image distance $\frac{1}{Q}$. Hence determine the focal length f from the graph.

- ☐ A. $f = \frac{1}{\text{slope}}$.
- ☐ B. $f = \frac{1}{\text{intercept}}$.
- ☐ C. f is the reciprocal of the slope.
- ☐ D. f is the reciprocal of the intercept on both sides.

The correct answer is option [D].

QUESTION NO: 45

Choose the correct option.

The crest of a rocked boat is 120m apart and the velocity is 28m/s. Find the interval the wave crest reaches the boat.

- ☐ A. 3.16secs.
- ☐ B. 13secs.
- ☐ C. 4.28secs.
- ☐ D. 42.01secs.

The correct answer is option [C].

$$\text{Velocity} = \frac{d}{t}$$

$$t = \frac{d}{v} = \frac{120}{28} = 4.28\text{secs.}$$

QUESTION NO: 46

Choose the correct option.

The ability of a wave to spread around corners is called _____.

- ☐ A. polarisation
- ☐ B. dispersion
- ☐ C. diffraction
- ☐ D. reflection

The correct answer is option [C].

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QUESTION NO: 47

Choose the correct option.

A pump lifts a 500kg of water across a height of 4m in 5secs. Find the power of the pump.
[Take $g = 10\text{m/s}^2$].

- ☐ A. 400W.
- ☐ B. 4KW.
- ☐ C. 3.5W.
- ☐ D. 2KW.

The correct answer is option [B].

Hint: Using the equation Power, P

$$= \frac{\text{Force} \times \text{distance}}{\text{time}}$$

QUESTION NO: 48

Choose the correct option.

What is the average power of a dog weighing 700N climbing up a flight of stairs to a height of 12m in 4secs?

- ☐ A. 234W.
- ☐ B. 165W.
- ☐ C. 144W.
- ☐ D. 194.4W.

The correct answer is option [D].

Hint: Power, $P = \frac{\text{Force} \times \text{distance}}{\text{time}}$

QUESTION NO: 49

Choose the correct option.

If a mass 50,000g has a velocity of 36km/h. Find its Kinetic energy.

- ☐ A. 2500J.
- ☐ B. 3500J.
- ☐ C. 2800J.
- ☐ D. 3000J.

The correct answer is option [A].

Hint: Use the equation $K.E. = \frac{1}{2} \times [mv^2]$ but
 $50,000\text{g} = 50\text{kg}$ and $36\text{km/h} = 10\text{m/s}$
 $\rightarrow K.E. = \frac{1}{2} \times 50 \times 10^2 = 25 \times 100 = 2500\text{J}.$

QUESTION NO: 50

Choose the correct option.

At what point does potential energy of a free falling stone becomes zero?

- ☐ A. In the air.
- ☐ B. On the ground.
- ☐ C. When it penetrates the ground.
- ☐ D. None of the above.

The correct answer is option [B].

QUESTION NO: 51

Choose the correct option.

In a reverse biased junction diode, current flows in by _____.

- ☐ A. majority carriers
- ☐ B. minority carriers
- ☐ C. positive holes alone
- ☐ D. electrons alone

The correct answer is option [A].

QUESTION NO: 52

Choose the correct option.

A wire of length 100cm and cross-sectional area $2.0 \times 10^{-3}\text{cm}^2$ has a resistance of 0.1Ω , its electrical conductivity is _____.

- ☐ A. $2.0 \times 10^{-6}\Omega^{-1}\text{cm}^{-1}$
- ☐ B. $5.0 \times 10^7\Omega^{-1}\text{cm}^{-1}$
- ☐ C. $6.0 \times 10^{-6}\Omega^{-1}\text{cm}^{-1}$
- ☐ D. $5.0 \times 10^5\Omega^{-1}\text{cm}^{-1}$

The correct answer is option [D].

QUESTION NO: 53

Choose the correct option.

Which of the following is a disadvantage of parallel cells?

- ☐ A. The cell is not easily used up
- ☐ B. The cell can not be left together undischarged

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- ☐ C. No exhaustion of cells can occur
☐ D. Voltage strength increases

The correct answer is option [B].

QUESTION NO: 54

Choose the correct option.

The period of a simple pendulum is 2secs and swings through an amplitude of 5cm. What is the maximum magnitude of the velocity of the bob?

- ☐ A. $\pm 28\text{cm/s}$
☐ B. $\pm 14\text{cm/s}$
☐ C. $\pm 16\text{cm/s}$
☐ D. $\pm 32\text{cm/s}$

The correct answer is option [C].

$$\omega = \frac{2\pi}{T} = \frac{2\pi}{2} = \pi \text{secs}$$

$$v = \pm \omega \ddot{O}r^2 - x^2 = \pm \pi \ddot{O}5^2 = \pm 16\text{cm/s}$$

QUESTION NO: 55

Choose the correct option.

In circular motion a force acting in a direction towards the centre of the circle is called _____.

- ☐ A. contact force
☐ B. non contact force
☐ C. centripetal force
☐ D. friction force

The correct answer is option [C].

QUESTION NO: 66

Choose the correct option.

A pendulum bob of mass 4kg attached to a string 1m in length is made to swing in a horizontal circle of radius 5cm, find the period of the motion.

- ☐ A. 1.0s
☐ B. 2.0s
☐ C. 4.0s
☐ D. 6.0s

The correct answer is option [B].

Using the formula $T = 2\pi \times \ddot{O}[\frac{L \cos \theta}{g}]$

where $\cos \theta = \ddot{O}[1 - \sin^2 \theta]$

$\sin \theta = \frac{r}{L}$

QUESTION NO: 57

Choose the correct option.

An oscillating pendulum bob has a mass 0.1kg. Its amplitude is 0.01m and its period 2s, the constant ω in the acceleration formula is _____.

- ☐ A. 31.42 rad/s
☐ B. 0.3142 rad/s
☐ C. 314.2 rad/s
☐ D. 3.142 rad/s

The correct answer is option [D].

QUESTION NO: 58

Choose the correct option.

The mass of a specific gravity bottle is 15.2g when it is empty. It is 24.8g when filled with kerosene and 27.2g when filled with distilled water. Calculate the relative density of kerosene.

- ☐ A. 1.25
☐ B. 1.10
☐ C. 0.90
☐ D. 0.80

The correct answer is option [D].

Weight of kerosene = $24.8 - 15.2$, weight of water = $27.2 - 15.2$

But R.D = $\frac{\text{mass of kerosene}}{\text{mass of water}} = \frac{9.6}{12} = 0.8$

QUESTION NO: 59

Choose the correct option.

Given that the specific heat capacity c_w of water is 4180J/kg/K, how long will it take to heat 3kg of water from 28°C to 88°C in an electric kettle taking 6A from a 220V supply?

- ☐ A. 9½mins.
☐ B. 2mins.
☐ C. 20mins.
☐ D. 4620mins.

The correct answer is option [A].

QUESTION NO: 60

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PHYSICS-

Choose the correct option.

An electric filament lamp is marked 6V and 0.4A. Find the rate at which energy is used by the lamp when it is connected to a 6V supply.

- ☐ A. 0.07W
- ☐ B. 1.00W
- ☐ C. 2.40W
- ☐ D. 15.00W

The correct answer is option [C].

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BIOLOGY-

QUESTION NO: 1

Choose the correct option.

Scurvy is a deficiency disease caused by lack of vitamin ____.

- ☐ A. B
- ☐ B. C
- ☐ C. D
- ☐ D. A

The correct answer is option [B]

QUESTION NO: 2

Choose the correct option.

The nitrifying bacteria, nitrosomonas converts ammonia to ____.

- ☐ A. nitrates
- ☐ B. nitric acid
- ☐ C. nitrites
- ☐ D. nitrous oxide

The correct answer is option [C]

QUESTION NO: 3

Choose the correct option.

What is ecology?

- ☐ A. It is the study of plants and animals in relation to their environment.
- ☐ B. It is the study of the human digestive system in relation to the environment.
- ☐ C. It is the study of plants.
- ☐ D. It is the study of plants and animal harvesting.

The correct Answer is option [A].

QUESTION NO: 4

Choose the correct option.

The four bases of the DNA chain are held together by ____ bonds.

- ☐ A. hydrogen
- ☐ B. oxygen

- ☐ C. chlorine
- ☐ D. helium

The correct answer is option [A].

QUESTION NO: 5

Choose the correct option.

In the structure of RNA, uracil pairs with ____.

- ☐ A. cytosine
- ☐ B. thymine
- ☐ C. guanine
- ☐ D. adenine

The correct answer is option [D].

QUESTION NO: 6

Choose the correct option.

In Mendel's experiments, it was discovered that the F_1 generation of a monohybrid cross between a brown cock and a white hen were all brown because the gene for the ____.

- ☐ A. brown colour was recessive
- ☐ B. white colour was dominant
- ☐ C. brown colour was dominant
- ☐ D. white colour did not combine

The correct answer is option [C]

In a monohybrid cross, the dominant form of the character masks the recessive form in the F_1 generation.

QUESTION NO: 7

Choose the correct option.

The organ which is sensitive to light in *Euglena* is the ____.

- ☐ A. gullet
- ☐ B. chloroplast
- ☐ C. eyespot
- ☐ D. contractile vacuole

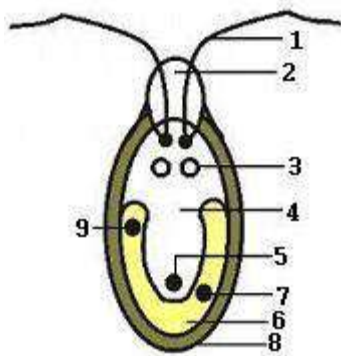
The correct answer is option [C]

QUESTION NO: 8

Choose the correct option.

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BIOLOGY-



The diagram is that of a _____.

- ☐ A. *Euglena*
- ☐ B. *Spirogyra*
- ☐ C. *Chlamydomonas*
- ☐ D. *Volvox*

The correct answer is option [C]

QUESTION NO: 9

Choose the correct option.

Physiological dependence exists between cells in _____ organisms.

- ☐ A. colonial
- ☐ B. filamentous
- ☐ C. free living
- ☐ D. none of the above

The correct answer is option [A]

QUESTION NO: 10

Choose the correct option.

All except _____ are examples of organisms that have no locomotive structures.

- ☐ A. *Zygnema*
- ☐ B. *Ulothrix*
- ☐ C. *Spirogyra*
- ☐ D. *Pandorina*

The correct answer is option [D]

QUESTION NO: 11

Choose the correct option.

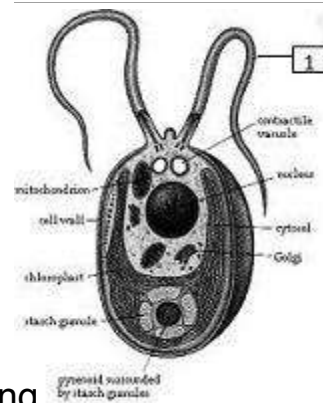
In what year did Robert Hooke discover the honey comb?

- ☐ A. 1985
- ☐ B. 1988
- ☐ C. 1986
- ☐ D. 1665

The correct Answer is option [D].

QUESTION NO: 12

Examine the diagram carefully and answer the question.



What is the name of the part labelled 1?

- ☐ A. Flagellum
- ☐ B. Proboscis
- ☐ C. Villi
- ☐ D. Pseudopodia

The correct answer is option [A]

QUESTION NO: 13

Choose the correct option.

The organelle responsible for protein synthesis in cells is called _____.

- ☐ A. ribosome
- ☐ B. mitochondria
- ☐ C. DNA
- ☐ D. nucleolus

The correct answer is option [A]

QUESTION NO: 14

Choose the correct option.

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BIOLOGY-

All are examples of annelida except _____.

- ☐ A. earthworm
- ☐ B. leech
- ☐ C. tube worms
- ☐ D. tapeworms

The correct answer is option [D]

Tapeworms are in the phylum platyhelminthes.

QUESTION NO: 15

Choose the correct option.

Phyla is to animals as ____ is to plants.

- ☐ A. kingdom
- ☐ B. genera
- ☐ C. species
- ☐ D. division

The correct answer is option [D]

QUESTION NO: 16

Choose the correct option.

The Greek word 'logos' means _____.

- ☐ A. life
- ☐ B. help
- ☐ C. word
- ☐ D. study

The correct answer is option [D]

QUESTION NO: 17

Look at the diagram carefully and answer the question correctly.



What is the name of this animal?

- ☐ A. Egg
- ☐ B. Snail
- ☐ C. Snailing
- ☐ D. Snake

The correct Answer is option [B].

QUESTION NO: 18

Choose the correct option.

The following agencies are responsible for conservation in Nigeria except _____.

- ☐ A. Forestry Departments
- ☐ B. Nigerian Conservation Society
- ☐ C. Games Reserve Authority
- ☐ D. Red Cross Society

The correct answer is option [D]

QUESTION NO: 19

Choose the correct option.

_____ are resources which when exhausted cannot be replaced or recovered.

- ☐ A. Non-renewable resources
- ☐ B. Renewable
- ☐ C. Conserved
- ☐ D. Recycled

The correct answer is option [A]

QUESTION NO: 20

Choose the correct option.

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BIOLOGY-

The conservation of natural resources can be achieved by the following except _____.

- ☐ A. creation of national parks
- ☐ B. formation of conservation societies and agencies
- ☐ C. establishment of game reserves
- ☐ D. deregulated harvesting

The correct answer is option [D]

QUESTION NO: 21

Choose the correct option.

Which of the following represents the evolutionary sequence in these plants? 1. Flowering plants; 2. Ferns; 3. Mosses; 4. Algae; 5. Conifers.

- ☐ A. 2 -> 1 -> 4 -> 3 -> 5
- ☐ B. 5 -> 4 -> 3 -> 2 -> 1
- ☐ C. 2 -> 4 -> 5 -> 1 -> 3
- ☐ D. 4 -> 3 -> 2 -> 5 -> 1

The correct answer is option [D]

QUESTION NO: 22

Choose the correct option.

The nature of the mouth parts of dragonfly is _____.

- ☐ A. probosis
- ☐ B. mandibulate
- ☐ C. rostrum
- ☐ D. cilliate

The correct answer is option [B].

QUESTION NO: 23

Choose the correct option.

Variations in _____ pressure changes the shapes of the guard cells.

- ☐ A. turgor
- ☐ B. elastic

- ☐ C. thickness
- ☐ D. all of the above

The correct answer is option [A].

QUESTION NO: 24

Choose the correct option.

Water moves by _____ from the guard cells to the adjacent epidermal cells.

- ☐ A. diffusion
- ☐ B. osmosis
- ☐ C. force
- ☐ D. pressure

The correct answer is option [B].

QUESTION NO: 25

Look at the diagram carefully and answer the question that follows.



What is the name of this structure shown below?

- ☐ A. Flame cell
- ☐ B. Worm
- ☐ C. Spirogyra
- ☐ D. Euglena

The correct Answer is option [A].

QUESTION NO: 26

Choose the correct option.

In plants, hormones are manufactured in the following except _____.

- ☐ A. apical meristems of roots and shoots
- ☐ B. young growing leaves
- ☐ C. developing seeds or fruits
- ☐ D. bright coloured flowers

The correct answer is option [D].

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BIOLOGY-

QUESTION NO: 27

Choose the correct option.

_____ is not a plant hormone.

- ☐ A. Auxin
- ☐ B. Parathormone
- ☐ C. Gibberellins
- ☐ D. Cytokinins

The correct answer is option [B].

QUESTION NO: 28

Choose the correct option.

What organ is located just below the diaphragm?

- ☐ A. Kidney
- ☐ B. Liver
- ☐ C. Stomach
- ☐ D. Heart

The correct Answer is option [B].

QUESTION NO: 29

Choose the correct option.

Reading the verdict of a case by a judge or magistrate is an example of _____.

- ☐ A. a reflex action
- ☐ B. an instinct
- ☐ C. a conditioned reflex
- ☐ D. a voluntary action

The correct answer is option [D]

QUESTION NO: 30

Choose the correct option.

The abbreviation ANS in biology stands for _____.

- ☐ A. Anterior nerves site
- ☐ B. automatic nerve system
- ☐ C. autonomic nervous system

- ☐ D. autonomous nerve systems

The correct Answer is option [C].

QUESTION NO: 31

Choose the correct option.

In the biuret's test, some protein was mixed with sodium hydroxide solution. Which of the following chemicals should be added to the mixture for positive results?

- ☐ A. Mercurous nitrate
- ☐ B. Copper sulphate
- ☐ C. Mercuric nitrate
- ☐ D. Sodium carbonate

The correct answer is option [B]

QUESTION NO: 32

Choose the correct option.

Which of these is the terminal portion of the alimentary canal of a mammal?

- ☐ A. Oesophagus
- ☐ B. Stomach
- ☐ C. Rectum
- ☐ D. Colon

The correct answer is option [C]

QUESTION NO: 33

Choose the correct option.

In the body, dietary vitamins plays the role of _____.

- ☐ A. supplying carbohydrates and fats
- ☐ B. influencing certain chemical processes
- ☐ C. stimulating the muscles of the alimentary canal
- ☐ D. digesting proteins

The correct answer is option [B]

QUESTION NO: 34

Choose the correct option.

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BIOLOGY-

Which of the following pairs of organisms are photosynthetic?

- ☐ A. Amoeba and Paramecium
- ☐ B. Volvox and Rhizopus
- ☐ C. Chlamydomonas and Euglena
- ☐ D. Nostoc and Plasmodium

The correct answer is option [C]

QUESTION NO: 35

Choose the correct option.

The following are the main waste products in animals except

- ☐ A. sweat
- ☐ B. water
- ☐ C. carbon (iv) oxide
- ☐ D. nitrogenous compounds

The correct answer is option [A].

Sweat is the water excreted from the skin. xeera.ng

QUESTION NO: 36

Choose the correct option.

Plants reproduce asexually through the following ways except ____.

- ☐ A. fragmentation
- ☐ B. budding
- ☐ C. multifussion
- ☐ D. vegetative propagation

The correct answer is option [C].

QUESTION NO: 37

Choose the correct option.

During mitosis, at what stage do the two daughter chromosomes separate completely?

- ☐ A. Early prophase
- ☐ B. Telophase

☐ C. Anaphase

☐ D. Metaphase

The correct answer is option [C]

QUESTION NO: 38

Choose the correct option.

Reduction of cholesterol intake is a remedy for ____.

- ☐ A. cancer
- ☐ B. gall stones
- ☐ C. kwashiorkor
- ☐ D. ricket

The correct answer is option [B].

QUESTION NO: 39

Choose the correct option.

A drupe consists of _____ layers.

- ☐ A. 2
- ☐ B. 4
- ☐ C. 5
- ☐ D. 3

The correct answer is option [D].

QUESTION NO: 40

Choose the correct option.

The ____ and ____ form the respiratory structure.

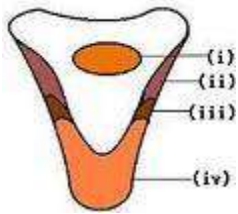
- ☐ A. trachea and lungs
- ☐ B. nostrils and nose
- ☐ C. ear and nostrils
- ☐ D. nose and nostrils

The correct Answer is option [A].

QUESTION NO: 41

Choose the correct option.

BIOLOGY-



The diagram shown is that of the ____.

- ☐ A. teeth
- ☐ B. tongue
- ☐ C. ear
- ☐ D. nose

The correct answer is option [B].

QUESTION NO: 42

Choose the correct option.

What is haemolysis?

- ☐ A. The bursting of erythrocytes causing the release of haemoglobin into the surrounding fluid.
- ☐ B. The bursting of the body cell causing the release of cytoplasmic contents into the surrounding fluid.
- ☐ C. The bursting of leucocytes causing the release of haemoglobin into the surrounding fluid.
- ☐ D. It is the opening of the cytoplasm to release cells.

The correct Answer is option [A].

QUESTION NO: 43

Choose the correct option.

Which of the following groups carry out similar functions in living things?

- ☐ A. Vertebral column, chitin and guard cells
- ☐ B. Sclerenchyma, cartilage and chitin
- ☐ C. Tendon, chitin and neuron
- ☐ D. Collenchyma, intercellular spaces and blood vessels

The correct answer is option [B]

Sclerenchyma, cartilage and chitin are supporting tissues

QUESTION NO: 44

Choose the correct option.

The hardest substance in the body of man is the ____.

- ☐ A. tooth
- ☐ B. bone
- ☐ C. all of the above
- ☐ D. none of the above

The correct answer is option [A].

QUESTION NO: 45

Choose the correct option.

_____ is formed in the skeleton of complex vertebrates.

- ☐ A. Chitin
- ☐ B. Fibre
- ☐ C. Cartilage
- ☐ D. Bones

The correct Answer is option [C].

QUESTION NO: 46

Choose the correct option.

The process by which cartilage tissues harden into bone due to the addition of minerals is described as ____.

- ☐ A. hydrogenation
- ☐ B. ossification
- ☐ C. mineralisation
- ☐ D. regeneration

The correct Answer is option [B].

QUESTION NO: 47

Choose the correct option.

Auxins in plants and animals are carried from the site of production to target tissues by ____.

BIOLOGY-

- ☐ A. respiratory system
- ☐ B. excretory system
- ☐ C. reproductive system
- ☐ D. transport system

The correct answer is option [D].

QUESTION NO: 48

Choose the correct option.

An example of morphological variation is _____.

- ☐ A. blood group
- ☐ B. height
- ☐ C. ability to roll the tongue
- ☐ D. behavioural pattern

The correct answer is option [B].

QUESTION NO: 49

Choose the correct option.

A variation where there are sharp differences between the various forms of a given feature is called _____.

- ☐ A. continuous variation
- ☐ B. discontinuous variation
- ☐ C. stable variation
- ☐ D. unstable variation

The correct Answer is option [B].

QUESTION NO: 50

Choose the correct option.

The major types of man's fingerprints do not include _____.

- ☐ A. arch
- ☐ B. whorl
- ☐ C. simple
- ☐ D. loop

The correct answer is option [C]

QUESTION NO: 51

Choose the correct option.

Which of the following is *not* an example of a monosaccharide?

- ☐ A. Glucose
- ☐ B. Lactose
- ☐ C. Fructose
- ☐ D. Ribose

The correct answer is option [B].

QUESTION NO: 52

Choose the correct option.

Mucus is composed of _____.

- ☐ A. protein, carbohydrate and sulphur
- ☐ B. salt and fibre
- ☐ C. fibre and carbohydrate
- ☐ D. muchin, cells, water and inorganic salts

The Correct Answer is option [D].

QUESTION NO: 53

Choose the correct option.

Animals that feed only on plants are called _____.

- ☐ A. carnivores
- ☐ B. herbivores
- ☐ C. carnivorous animals
- ☐ D. fresh animals

The Correct Answer is option [B].

QUESTION NO: 54

Choose the correct option.

_____ is an organic catalyst that promotes or speeds up chemical changes in living cells.

- ☐ A. A promoter
- ☐ B. A chemical

BIOLOGY-

- ☐ C. An enzyme
- ☐ D. A parasite

The Correct Answer is option [C].

QUESTION NO: 55

Choose the correct option.

Lack of ____ in the body causes pellagra.

- ☐ A. iodine
- ☐ B. vitamin C
- ☐ C. protein
- ☐ D. niacin

The correct answer is option [D]. Niacin is also known as vitamin B₃.

QUESTION NO: 56

Choose the correct option.

Bacteria and _____ are commonly responsible for the decay of dead plants and animals.

- ☐ A. viruses
- ☐ B. fungi
- ☐ C. earthworms
- ☐ D. yeasts

The correct answer is option [B].

QUESTION NO: 57

Choose the correct option.

Which of the following instrument is used to measure the speed of a stream?

- ☐ A. Simple float
- ☐ B. Secchi disc
- ☐ C. Quadrant frame
- ☐ D. Rain gauge

The correct answer is option [A]

QUESTION NO: 58

Choose the correct option.

Which of the following resources is non-renewable?

- ☐ A. Forest
- ☐ B. Wildlife
- ☐ C. Mineral deposits
- ☐ D. Water

The correct answer is option [C]

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CURRENT AFFAIRS-
CURRENT AFFAIRS for Rivers State University
POST UTME

#1. Who formed the first political party in Nigeria?

Answer: **Herbert Macaulay**

#2. What was the first political party in Nigeria?

Answer: **Nigerian National Democratic Party (NNDP)**

#3. Who is the current president of Nigeria?

Answer: **Bola Ahmed Tinubu**

#4. Who is the current vice president of Nigeria?

Answer: **Kashim Shettima**

#5. What does the eagle in the Nigerian coat of arms represent?

Answer: **Strength**

#6. What do the two horses on the Nigerian coat of arms represent?

Answer: **Dignity**

#7. What does the black shield in the Nigerian coat of arms stand for?

Answer: **Nigeria's fertile soil**

#8. What does the white color in the Nigerian flag stand for?

Answer: **Peace**

#9. What does the green color in the Nigerian flag represent?

Answer: **Forests and abundant natural wealth of Nigeria**

#10. Nigeria is divided into how many geopolitical zones?

Answer: **Six (6) geopolitical zones**

#11. What was the first capital city in Nigeria?

Answer: **Calabar**

#12. What is the capital of Nigeria now?

Answer: **Abuja**

#13. Who is the current Nigerian Deputy Senate president?

Answer: **Senator Barau Jibrin**

#14. What is the name of the Nigerian senior national team in football?

Answer: **Super Eagles**

#15. When did Nigerian Golden Eaglets win the world under-17 FIFA World Cup?

Answer: **1985, 1993, 2007, 2013, 2015**

#16. Who was the first female vice-chancellor of a Nigerian university?

Answer: **Grace Alele Williams**

#17. Who gave Nigeria her name?

CURRENT AFFAIRS-

Answer: **Flora Shaw**

#18. Who designed the Nigerian flag?

Answer: **Michael Taiwo Akinkunmi**

#19. Who was the first man to buy a car in Nigeria?

Answer: **Bob Jensen**

#20. Who was the first woman to buy a car in Nigeria?

Answer: **Funmilayo Ransome Kuti**

#21. Who was the first woman to drive a car in Nigeria?

Answer: **Funmilayo Ransome Kuti**

#22. What is the first TV station in Nigeria?

Answer: **Western Nigerian Government Broadcasting Corporation (WNTV) in 1959**

#23. When was Nigeria formed?

Answer: **1914**

#24. Where was crude oil first discovered in Nigeria?

Answer: **Oloibiri Oilfield, located in Oloibiri in Ogbia LGA of Bayelsa State**

#25. Who was the first Nigerian to become a Noble Laureate?

Answer: **Wole Soyinka**

#26. Who is the Nigerian current speaker of the house of Assembly?

Answer: **Hon. Tajudeen Abbast**

#27. What is the premier university in Nigeria?

Answer: **University of Ibadan**

#28. Who is the minister of education in Nigeria?

Answer: **Prof. Tahir Mamman**

#29. Who is the current chief justice of Nigeria?

Answer: **Olukayode Ariwoola**

#30. When did Nigeria have her independent?

Answer: **1st October 1960**

#31. When did Nigeria become a republic?

Answer: **1st October 1963**

#32. When was the first military coup carried out in Nigeria?

Answer: **1966**

#33. How many local Government do we have in Nigeria?

Answer: **774**

#34. Who is the first Nigerian president?

Answer: **Dr Nnamdi Azikiwe**

CURRENT AFFAIRS-

#35. Who was Nigerian first executive president?

Answer: **Alhaji Shehu Aliyu Shagari**

#36. Who was the Nigerian first prime minister?

Answer: **Abubakar Tafawa Balewa**

#37. What is the largest continent in the world?

Answer: **ASIA with population of 4,700,000,000 while Australia & Oceania is the smallest continent**

#38. What are the five Oceans in the world?

Answer: **Pacific Ocean, Atlantic Ocean, Indian Ocean, Southern Ocean, Arctic Ocean**

#39. What is the full meaning of **UNICEF**?

Answer: **United Nations International Children's Emergency Fund**

#40. Who is the current Senate President in Nigeria?

Answer: **Sen. God'swill Afpabio**

#41. Which country's flag is called the Union Jack?

Answer: **Great Britain**

#42. When did Nigeria become a Republic?

Answer: **1963**

#43. What is centenary?

Answer: **100 years**

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#44. What is Nigeria?

Answer: **Nigeria officially the Federal Republic of Nigeria, is a federal constitutional republic comprising 36 states and its Federal Capital Territory, Abuja. Nigeria is located in West Africa and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north.**

#45. Who won the 2015 Nigerian presidential general election?

Answer: **General Muhammadu Buhari**

#46. Who is the current INEC chairman?

Answer: **Mahmood Yakubu**

#47. Who is the current NAFDAC Director General?

Answer: **Mojisola Christianah Adeyeye**

#48. Who is the current Inspector General of police?

Answer: **Kayode Egbetokun.**

#49. Current chairman of the African Union

Answer: **Mohamed Ould Ghazouani**

#50. Who is the secretary General of the united nations

Answer: **Antonio Guterres**

CURRENT AFFAIRS-

#51. Who is the current minister of education?

Answer: **Prof. Tahir Mamman**

ABOUT the First Primary school in Nigeria

The first educational system of Nigeria as a British colony started in Badagry where the first primary school was established by the Wesleyan mission (Methodist Church) in 1843 and named Nursery of Infant Church which later became St. Thomas' Anglican Nursery and Primary School, founded by Rev. Golmer of the Church Missionary Society (CMS) in 1845

THE first FEMALE Governor in Nigeria

Dame Virginia Ngozi Etiaba was the Governor of Anambra State, a state in south-east Nigeria, from November 2006 to February 2007. She is the first female governor in Nigeria's history. Her instatement came as the previous governor, **Peter Obi**, was impeached by the state legislature for alleged gross misconduct.

The first female president in the world

Sirimavo Ratwatte Dias Bandaranaike, who was elected Prime Minister of Sri Lanka in 1960 the first elected female head of state in Africa Ellen Johnson Sirleaf 2006. Liberia

The Nigeria civil War started and Ended when?

Answer: July 6, 1967 – January 15, 1970

ABOUT Football

FIFA Headquarters is located at?
Zürich, Switzerland

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2011 World Best Player

[Lionel Mess](#)

Host of FIFA world cup

Year	Host	Continent
2010	South Africa	Africa
2014	Brazil	South America
2018	Russia	Europe
2022	Qatar	Asia

OLYMPIC Game Host cities

1984 - Los Angeles, United States
1988 - Seoul, South Korea
1992 - Barcelona, Spain
1996 - Atlanta, United States
2000 - Sydney, Australia
2004 - Athens, Greece
2008 - Beijing, China
2012 - London, United Kingdom

CURRENT AFFAIRS-

2016 - Rio de Janeiro, Brazil

2020 - Tokyo, Japan

Which country hosted the first modern Day Olympic?

Answer: The first modern Olympic Games are held in Athens, **Greece**. On April 6, 1896

WHO is the Current IAAF chairman?

Answer: **Sebastian Coe**

IAAF--[International Association of Athletics Federations](#)

The First Civilian Governor of Rivers state

Answer: **Melford Okilo** October 1979

First Military Governor of Rivers state

Answer: **Alfred Diete-Spiff** 28 May 1967

When was Police established in Nigeria

Answer: 1820.

The first person to have the highest rank in all the police is commissioner general colonel KK.

In **1879** a **1,200**-member armed paramilitary Hausa Constabulary was formed.

In **1896** the Lagos Police was established. [xeera.ng](#)

What is the Biggest River in Africa

Answer: River Nile 4,258 miles

This 'Y' SYMBOL represent the two main rivers flowing through Nigeria:

which are the two popular rivers known as:

River Niger and River Benue.

The yellow flower at the base of the Coat of arms are Costus spectabilis, which is Nigeria's national flower.

The flag of Nigeria was designed in 1959 and first officially hoisted on 1st October 1960.(which is Nigeria National Independent Day)

The green bands represent the forests and abundant natural wealth of Nigeria while the White band stands for peace.

However, what you should know is that, the designer of the flag was a student from IBADAN, Micheal Taiwo Akinkunmi.

THE HISTORY AND PAST LEADERS IN NIGERIA.

Nigeria is a country which has the highest population in Africa continent.

Which is proved by the 21st to 25th March, 2006 population census.

Nigeria's population was estimated to be about 140,000,000 people.(One hundred and forty Million)

CURRENT AFFAIRS-

Currently, Nigeria is made up of 36 STATES and the Federal Capital Territory (FCT).
With 109 senatorial districts,
360 federal constituencies,
990 state constituencies,
774 local governments,
8810 wards.

This are the names of Nigeria former colonial masters.

They are,

Sir Frederick Lord Lugard,
who ruled from 1900 to 1919.

Sir Hugh Clifford,
Who ruled from 1919 to 1925.

Sir Creamer Thompson,
who ruled from 1925 to 1931.

Sir Donald Cameroon,
who ruled from 1931 to 1935.

Sir Bernard Bourdilion.
who ruled from 1935 to 1943.

Sir Anthony Richard.
Who ruled from 1943to 1948.

Sir John McPherson.
Who ruled from 1948 to 1958.

xeera.ng

Sir James Robertson.
Who ruled from 1958 to 1960.

The first military head of state in Nigeria is:
General Aguiyi Ironsi.

The first military president in Nigeria is:
General Ibrahim Babangida.

CURRENT AFFAIRS-

#1. Mention the new service chiefs in Nigeria

Answer: **Major General Chistopher Musa – Chief of Defence Staff (CDS)**

Major General Taoreed Lagbaja – Chief of Army Staff (CAOS)

Rear Admiral Emmanuel Ogalla – Chief of Naval Staff (CNS)

Air Vice Marshal Hassa Abubakar – Chief of Air Staff (CAS)

Major General Emmanuel Unudiandeye – Chief of Defence Intelligence

DIG Kayode Egbetokun – Acting Inspector – General of Police

Mallam Nuhu Ribadu – National Security Adviser

#8. Mention five rivers in Nigeria that share their names with a state.

Answer: **Rivers- Benue, Niger, Osun, Kaduna, Ogun, Sokoto, Cross River, Imo**

#13. Mention 5 past senate presidents of Nigeria.

Answer: **Dr Nnamdi Azikiwe, Evan Enwerem, Chuba Okadigbo, Anyim Pius Anyim, Adolphus Wabara, Ken Nnamani, David Mark**

#18. Who is the current minister of finance?

Answer: **Wale Edun**

#19. Who is the current minister of defence?

Answer: **Alhaji Mohammed Badaru Abubakar**

#22. Who is the current minister of FCT?

Answer: **Nyesom Wike** xeera.ng

#27. Which country won the last world cup?

Answer: **Argentina**

#31. Who is the current CBN Governor?

Answer: **Olayemi Cardoso**

#35. Who is the minister for petroleum resources in Nigeria?

Answer: **President Bola Ahmed Tinubu**

#37. When was the Nigerian Naira introduced?

Answer: **1st January 1973**