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University of Lagos (UNILAG)

Post-UTME

Past Questions & Answers

By

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What is a Post UTME Exam?

A Post UTME exam is a recognized exam that higher institutions in Nigeria conduct for students who apply for higher education admission in Nigeria.

Each university organizes and conducts her own post UTME exam but for a candidate to take part in this exam, the candidate must have applied to the university, wrote JAMB exam with a score equal to or above the general JAMB and university cut-off mark.

If a candidate fails to write post UTME exam, he or she will be denied admission irrespective of how high the candidate scored in JAMB exam.

Who Conducts a Post UTME Exam?

Post UTME exams are conducted by individual higher institutions in Nigeria. The institution must on their own plan for post UTME exam registration, exam conduct, release of results and many other essential requires for smooth conduct of post UTME in the university.

About UNILAG Post UTME Screening Exam

The prestigious University of Lagos popularly known as UNILAG is known for having a large number of applicants each year for admission into the school. For the 2015/2016 UNILAG post-utme screening, more 30,000 candidates have applied via JAMB for the Post UTME screening.

The first important thing to know about UNILAG's post-UTME screening examinations so far is that it is usually a Computer Based Test (CBT) that consists of three (3) subjects only for all students: Mathematics, English Language and General paper or Current Affairs.

UNILAG Post-UTME Screening Examination Format

The University of Lagos (UNILAG) usually sets questions on just three (3) subjects which are Mathematics, English Language and Current Affairs for all students irrespective of the course you have registered for in your JAMB and its subject combination.

The format of UNILAG post UTME exam (number of questions per subject) is as follows:

English Language = 20 Questions

Mathematics = 10 Questions

Current Affairs = 10 Questions

Total = 40 Questions

Time to take Test = 30 Minutes.

Total Post-UTME Score = 100 Marks

How to Calculate Your UNILAG Post-UTME Aggregate Score

In order to calculate your UNILAG post-UTME aggregate score, the formula adopted by the institution is the sum of your UTME SCORE divided by 8 and your POST UTME SCORE divided by 2.

For instance: If you scored 290 in UTME and went on to score 70 in POST UTME, your aggregate score will be calculated thus:

UTME Score = $290/8 = 36.25$

Post UTME Score = $70/2 = 35$

Aggregate Score = $36.25 + 35 = 71.25\%$

Don't get confused, it can be quite understood that the post UTME questions is 40. You might want to ask, how then is it possible for me to score 70 in post UTME?

This is the simple magic UNILAG performs; whatever you score in post UTME over 40 will be rounded up to 100, that is it will be rounded up to percentage. Let's say for example you score 20/40. It will be the same as 20/40 multiply by (*) 100/1 which is equal to 50/100.

Whatever is gotten over 100 is what will be divided by 2 to get your final post UTME score before combining to get the aggregate as described above.

Your aggregate score will be measured against the cut off mark of your chosen course. The cut off marks (required aggregate scores) for all courses will be published weeks after the post UTME exams.

Please note that the correct options are highlighted in red colour.

UNILAG Post-UTME Past Questions & Answers

English Language

1. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: The management has neither nor denied the rumour that is was going to lay of some workers.

(a) pronounced

(b) confirmed

(c) rejected

(d) advertised

2. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: Instead of the issue, the speaker digressed to unimportant matters.

(a) summarizing

(b) describing

(c) revealing

(d) addressing

3. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: The telephone booths were all.... and I had to wait for more than ten minutes for one to become vacant.

(a) locked

(b) busy

(c) occupied

(d) ringing

4. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: While the first battalion halted its march at nightfall, the second to the barracks

(a) returned

(b) set out

(c) proceeded

(d) turned up

5. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: His father is an driver but he is only a novice

(a) enlightened

(b) excellent

(c) poor

(d) experienced

6. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: The arrival of the police at the scene..... rather than mitigated tension

(a) provoked

(b) heightened

(c) created

(d) prolonged

7. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: Roses are common in May but.... in November.

(a) dead

(b) strange

(c) rare

(d) extinct

8. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: A bank clerk should be able to tell easily the difference between notes and counterfeit ones.

(a) crisp

(b) good

(c) correct

(d) genuine

9. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: Last night, Uncle Joe was blind drunk but this morning he is as as a judge

(a) alert

(b) saintly

(c) strong

(d) sober

10. From the list of words lettered A to D choose the one that is **most nearly opposite** in meaning to the underlined word and that will, at the same time, correctly fill the gap in the sentence: What I have is only a..... of the famous painting; the original is in the National Museum

(a) duplicate

(b) model

(c) fake

(d) drawing

11. From the words lettered A to D, choose the word that **best completes** the following sentence: If the jury's verdict is "not guilty," the defendant will be....

(a) acquitted

(b) indicted

(c) pardoned

(d) forgiven

12. From the words lettered A to D, choose the word that **best completes** the following sentence: When all the items on the agenda had been discussed, the meeting was

(a) adjourned

(b) dismissed

(c) postponed

(d) dissolved

13. From the words lettered A to D, choose the word that **best completes** the following sentence: Because the new venture was Many businessmen and women went into it.

(a) rich

(b) manageable

(c) lucrative

(d) satisfying

14. From the words lettered A to D, choose the word that **best completes** the following sentence: We save a..... of lions at the game reserve

(a) pride

(b) family

(c) band

(d) group

15. From the words lettered A to D, choose the word that **best completes** the following sentence: Many educationists feel that..... Punishment should still be retained in schools

(a) capital

(b) corporal

(c) corporate

(d) physical

16. From the words lettered A to D, choose the word that **best completes** the following sentence: Freedom of movement is a right of every citizen

(a) fundamental

(b) negotiated

(c) privileged

(d) respected

17. From the words lettered A to D, choose the word that **best completes** the following sentence: The river..... towards the sea

(a) meandered

(b) rolled

(c) ran

(d) trickled

18. From the words lettered A to D, choose the word that **best completes** the following sentence: I..... that our team will win the match tomorrow

(a) certify

(b) conclude

(c) announce

(d) predict

19. From the words lettered A to D, choose the word that **best completes** the following sentence: If found guilty, he will..... all the wealth he has amassed illegally.

(a) forgo

(b) abandon

(c) repay

(d) forfeit

20. From the words lettered A to D, choose the word that **best completes** the following sentence: At a..... of 200 kilometers an hour, the hurricane swept away everything in its path

(a) movement

(b) flow

(c) velocity

(d) drive

21. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: Ladies and gentlemen, the worst may be over, but we are not out of the woods yet. This means that we are

(a) still in the forest

(b) not yet ready to celebrate our success

(c) likely to encounter more difficulties

(d) not sure of ourselves

22. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: When I leave this country it will be for good. This means that I will

(a) never come back

(b) leave for better conditions elsewhere

(c) become an adventurer.

(d) improvement ways.

23. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: When she confronted her husband, he hung his head and didn't answer her questions. This means that he was

(a) defiant

(b) ashamed and embarrassed

(c) caught unawares

(d) angry with her

24. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: All our plans fell through at the last moment. This means that we

(a) were exposed

(b) delayed

(c) were abandoned

(d) failed

25. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: The police knew that the suspect was not being straight with them. This means that the suspect was

(a) not telling the truth

(b) not friendly

(c) afraid

(d) timid

26. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: After his prison experience. Etim decided to go straight. This means that he decided to.

(a) hold his head up and walk with defiance

(b) change his religion

(c) live an honest life

(d) stop using drugs

27. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: The teacher spoke with his tongue in his cheek when he said that lazy Ade was the best pupil. This means that the teacher

(a) did not mean what he said

(b) was disappointed

(c) was angry

(d) tried to encourage

28. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: They did not know what to expect and so decided to play it by it by ear. This means that they decided to

(a) listen attentively to everyone

(b) act according to circumstances

(c) pretend to be deaf

(d) prepare for the worst

29. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: Ojo decided that the best course of action was to play along with them for time being. This means that he decided to

(a) join their them temporarily

(b) entertain them for a while

(c) pretend to agree with them

(d) be playful with them.

30. From options A to D, choose the interpretation that you consider **most appropriate** for this sentence: The conference was attended by people from all walks of life. This means that conference was attended by people

(a) of all races

(b) who travelled widely

(c) from all professions

(d) from different parts of the world.

31. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: Amina is the one who initiated the quarrel, not Nike!

(a) started

(b) stopped

(c) settled

(d) fuelled

32. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: She was reprimanded by her boss for negligence

(a) sacked

(b) rebuked

(c) punished

(d) surcharged

33. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: Why should I retract my statement when it is nothing but the truth?

(a) alter

(b) deny

(c) withdraw

(d) condemn

34. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: The doctor diagnosed the tumour as malignant

(a) deadly

(b) painful

(c) trouble

(d) minor

35. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: In tropical; Africa, mosquitoes are ubiquitous

(a) dangerous

(b) harmful

(c) trouble

(d) everywhere

36. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: It soon became obvious that a confrontation was inevitable

(a) disastrous

(b) unavoidable

(c) desirable

(d) imminent

37. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: They insisted that the omission of my named had been inadvertent

(a) unintentional

(b) unconditional

(c) improper

(d) unfortunate

38. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: The police announced that they were yet to apprehend the criminals

(a) interrogated

(b) charge

(c) prosecute

(d) arrest

39. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: He is easily recognizable because of a conspicuous birthmark on his face

(a) dark

(b) beautiful

(c) prominent

(d) natural

40. From the words letter A to D, choose the word that is **nearest in meaning** to the underlined word as it is used in the sentence: The fishing boat was imperiled by high winds, but it management to reach port safely

(a) pushed

(b) endangered

(c) disturbed

(d) blown

41. From options A to D, choose the word or group of words that **best completes** the following sentence: Surprisingly, Musa turned the job offer

(a) away

(b) in

(c) out

(d) down

42. From options A to D, choose the word or group of words that **best completes** the following sentence: We have no choice.....to do what they demand.

(a) except

(b) than

(c) unless

(d) but

43. From options A to D, choose the word or group of words that **best completes** the following sentence: The committee has submitted its report..... the students

- (a) in
- (b) for
- (c) about
- (d) on**

44. From options A to D, choose the word or group of words that **best completes** the following sentence: The chairman told members that he was open suggestions

- (a) to**
- (b) for
- (c) about
- (d) on

45. From options A to D, choose the word or group of words that **best completes** the following sentence: The policeman shot the escaping robber the leg

- (a) on**
- (b) in
- (c) at
- (d) into

46. From options A to D, choose the word or group of words that **best completes** the following sentence: For the management, your remarks amount to a slap..... the face

- (a) on

(b) upon

(c) at

(d) in

47. From options A to D, choose the word or group of words that **best completes** the following sentence: She does not remember..... to anyone at the park

(a) to talk

(b) to be talking

(c) talking

(d) to have talked

48. From options A to D, choose the word or group of words that **best completes** the following sentence: This portion is to be shared between.....

(a) us and them

(b) we and them

(c) us and they

(d) we and they

49. Select the option that has a different consonant sound from the others.

(a) of

(b) enough

(c) fight

(d) life

50. Fill the gap with the appropriate option from the list of options. Sir, I'm not lying about the matter, I know nothing of it. If I knew, _____

(a) I would tell you

(b) I must tell you

(c) I can tell you

(d) I shall tell you

General Paper

1. Which of the following groups fall into the Civil Service?

- (a) The police, the army, and the air force
- (b) Employees of NEPA, NNPC and NRC
- (c) Employees of ministries of finance, education and transportation**
- (d) All of the above

2. The recruitment or appointment of the permanent secretary is one of the duties of:

- (a) The federal public service commission
- (b) The state civil service commission
- (c) The executive**
- (d) The National Assembly

3. In the organizational structure of the ministry or government department, offices and positions are:

- (a) Hierarchically arranged**
- (b) Diagonally arranged
- (c) Secretly arranged
- (d) Haphazardly arranged

4. The government maintains monopoly over certain services for:

- (a) Selfish reasons

(b) Security and strategic reasons

(c) Undisclosed reasons

(d) All of the above

5. Ministers of local government and chieftancy affairs were abolished in Nigeria by:

(a) General Yakubu Gowon

(b) General Murtala Mohammed

(c) President Ibrahim Babangida

(d) General Olusegun Obasanjo

6. Policy analysis, policy implementation and plan setting are some of the functions of:

(a) The legislature

(b) The executive

(c) The local government

(d) The civil service

7. Public corporations can be controlled through:

(a) Riots

(b) Public opinion

(c) Civil disobedience

(d) None of the above

8. The general supervision of a public corporation is carried out by the:

(a) Board of directors

(b) Board of trustees

(c) Managing director

(d) Secretary of the board

9. The local government in Nigeria is created to:

(a) Create more civil service jobs

(b) Encourage competition and rivalry among communities

(c) Bring the government nearer to the people

(d) Prevent the creation of more states

10. The Civil Service embraces all workers in:

(a) All private corporations

(b) Public and private companies

(c) Government ministries

(d) Public corporations

11. The effective operation of the Civil Service in Nigeria is mostly hampered by:

(a) Inadequate training of personnel

(b) Corruption and inefficiency

(c) Debt burden and redundancy

(d) Poor infrastructure

12. The Bureau of Public Enterprises is charged with the responsibility for:

- (a) Privatization and commercialization
- (b) Generating revenue
- (c) Eradicating poverty
- (d) Providing employment opportunities

13. Financial allocation to a local government by the Federal or a State government to supplement the cost of a project is called:

- (a) Revenue allocation
- (b) Reimbursement
- (c) Statutory allocation
- (d) Matching grant

14. A permanent Civil Service:

- (a) Makes continuity in government possible
- (b) Makes civil servants arrogant
- (c) Promotes ethnic domination
- (d) Is undemocratic

15. One form of control exercised over public corporations is the requirement that their annual reports be laid before:

- (a) Parliament for scrutiny
- (b) All the political parties

(c) All the local authorities in the country

(d) A joint committee of the executive and parliament

16. Anonymity of the Civil Service means that the Civil Servant must:

(a) Serve any government impartially

(b) Be politically neutral

(c) Have job security

(d) Not receive the credit or blame for any good or bad policy

17. The local government reforms of 1976 in Nigeria were designed to:

(a) Decentralize authority

(b) Enlist grass-root support

(c) Achieve even development

(d) All of the above

18. Bye-laws made by local authorities can be declared unconstitutional only by the:

(a) Local government service commission

(b) Ministry of local government and chieftaincy affairs

(c) Courts

(d) Attorney-General

19. Mass retrenchment of workers in the public and private sectors is most likely to result in:

- (a) Political stability
- (b) Economic survival
- (c) High rate of armed robbery, pilfering and political instability**
- (d) Electoral malpractices

20. Public Corporations are established to:

- (a) Look after the affairs of local authorities
- (b) Co-ordinate the activities of ministries
- (c) Give advice to the government on commerce
- (d) Provide essential services and amenities on commercial bases**

21. Which of the following is **not** a source of local government revenue:

- (a) State and federal government grants
- (b) Licensing of cars and lorries**
- (c) Market stall fees
- (d) Returns on investment

22. One of the major reasons for setting up public corporations is to:

- (a) Maximize profit
- (b) Compete with private companies
- (c) Provide essential services**
- (d) Encourage patronage

23. All of the following are functions of the civil service **except**:

- (a) Making laws**
- (b) Implementing policies
- (c) Preparing financial estimates
- (d) Implementing edicts

24. One factor which militates against the effective functioning of the Civil Service is:

- (a) Delegated legislation
- (b) Political interference**
- (c) Judicial inference
- (d) Political stability

25. Being the third tier of government, the local government is therefore:

- (a) Subordinate to state and federal government
- (b) Antagonistic to state and federal government
- (c) Co-ordinate to state and federal government**
- (d) All of the above

26. One major problem facing public corporations in Nigeria is:

- (a) Political parties
- (b) Excessive patriotism
- (c) Government interference**

(d) Judicial manipulation

27. Most of the reasons given for the establishment of public corporations in Nigeria are being contradicted by the current wave of:

(a) Privatization and commercialization

(b) Legalization and nationalization

(c) Judicial and legislative competence

(d) Rigging and electoral brouhaha

28. The recruitment, promotion and discipline of civil servants in Nigeria is the responsibility of:

(a) Board of Directors

(b) Civil Service Commission

(c) The president

(d) Ministry of Labour and Productivity

29. Engineers and architects in the Civil Service fall into the:

(a) Professional class

(b) Technical class

(c) Higher technical class

(d) The manipulative class

30. The main functions of the administrative class of the Civil Service include:

(a) Policy making

(b) Implementation of government policies

- (c) Enactment of laws for the ministries
- (d) All of the above

31. The relationship between staffs of the civil service in the discharge of their duties is expected to be:

- (a) Personal and unofficial

(b) Official and non-personal

- (c) Casual and inconsistent
- (d) Illogical and sporadic

32. The first local government system adopted in Nigeria by the regional government was:

- (a) The French prefectorial system
- (b) The Indian local government system
- (c) The Russian Socialist system

(d) The British Council system

33. The idea of making the local government the third tier of government was initiated by:

- (a) Abdusalam Abubakar regime
- (b) Alhaji Shehu Shagari regime

(c) Murtala/ Obasanjo regime

(d) Ibrahim Babangida regime

34. Before the 1976 local government reforms, one of the defective features of the local governments in Nigeria was that:

(a) They had no functions to perform

(b) They had no legal personality

(c) They had no chairmen to pilot their affairs

(d) They had no political aspiration

35. One of the major problems which spelt doom for Nigeria Airways was:

(a) Embezzlement of fund

(b) Corruption

(c) Lack of patriotism

(d) All of the above

36. The main cause of infrastructure decay in Nigeria is:

(a) Illiteracy

(b) Disobedience

(c) Lack of maintenance culture

(d) Political instability

37. One of the measures that will enhance the status of the local government as a third tier of government is:

(a) The creation of more local government areas

- (b) Up-grading the local government to statehood
- (c) Drafting of separate constitution for local government

(d) Deduction of local government share of federal allocation directly from source

38. To enhance the independence of the federal public service commission, members should:

- (a) Be elected from a national party
- (b) Take oath of celibacy

(c) Neither belong to the legislative nor executive branch of government

- (d) Be appointed by the non-aligned movement

39. To be promoted from one grade level to another, a staff must first:

- (a) Apply to the Nigeria export promotion council
- (b) Petition the civil service commission
- (c) Be in the president or governor's list

(d) Be recommended to the public service commission by his or her departmental head

40. To be entitled to pension in Nigeria, a staff must:

- (a) Work for 55 years
- (b) Work for at least 10 years consecutive years**
- (c) Work for 65 years
- (d) Attain the age of seventy

41. The dismissal of a staff in the ministry for official misconduct is the prerogative is:

- (a) The permanent secretary
- (b) The personnel manager
- (c) The minister
- (d) The Public Service Commission**

42. The greatest head-ache affecting revenue generation by NEPA is:

- (a) Debts owed it by government departments and officials**
- (b) Refusal of NEPA men to collect revenue
- (c) Its instability to employ accountants
- (d) None of the above

43. Public Corporations in Nigeria are subject to the control of:

- (a) The judiciary
- (b) The minister in charge
- (c) The parliament**
- (d) Public Service Commission

44. The public corporation is similar to the joint stock company because:

- (a) The chairmen is also the managing director
- (b) Their administrative centres are far from their main factories
- (c) The two are legal entities**

(d) They share the same market

45. Which of the following statements both describes a public corporation:

(a) It is an organ of government responsible for executing the policies of government

(b) It is a local body that renders services on a local basis

(c) It is a legal body established by an act of state to provide essential services

(d) It is a body owned by members of the public

46. 'Red tapism' can be explained as:

(a) The decentralized way of taking decision

(b) A flexible way by which government decisions are taken

(c) The rigid adherence to routines by civil servants

(d) Management by objectives

47. An institution which seeks to redress people's grievances against abuse of administrative power is the:

(a) Ombudsman

(b) Judiciary

(c) Directorate of Public Prosecution

(d) Judicial Service Commission

48. A statutory corporation is under the supervision of:

(a) The Chief Justice

(b) The commissioner of police

(c) A minister

(d) A local government chairman

49. To which class of the civil service does the casual or manual labour force belong:

(a) The technical class

(b) The casual class

(c) The manipulative class

(d) The higher technical class

50. The first person to develop the atomic bomb was:

(a) Albert Einstein

(b) Charles De Gaulle

(c) Thomas Jefferson

(d) T.S. Elliot

Mathematics

1. Which of the following points does not lie on the line $2y + 5x - 4 = 0$?

(a) (0.8, 0)

(b) (1, -0.5)

(c) (0, 2)

(d) (2, 3)

2. A straight line has the equation $10y = 3x + 15$. Which of the following is true?

(a) The gradient is 0.3 and the y-intercept is 1.5

(b) The gradient is 3 and the y-intercept is 1.5

(c) The gradient is 15 and the y-intercept is 3

(d) The gradient is 1.5 and the y-intercept is 0.3

3. P is the point (2, 7) and Q is the point (6, 3). What is the gradient of PQ?

(a) 1

(b) - 1

(c) 0.5

(d) -0.5

4. P is the point (3, 5). Q is the point (-1, 9). R is the midpoint of PQ. Which one of the following lines does R lie on?

(a) $y = x + 6$

(b) $y = x + 8$

(c) $y = x - 6$

(d) $y = x - 8$

5. A straight line has a gradient of -2 and passes through the point (4, 1). What is its equation?

(a) $y + 2x = 6$

(b) $y = 2x - 6$

(c) $y + 2x - 9 = 0$

(d) $2y = x - 2$

6. The line $y = 5x - 3$ and $y = 2x + 9$ intersects at P. what are the coordinates of P?

(a) (2, 7)

(b) (2, 13)

(c) (4, 17)

(d) (-4, -23)

7. A is the point (1, 5), B is the point (4, 7) and C is the point (5, 2). Triangle ABC is

(a) Right-angle

(b) Scalene with no right angle

(c) Equilateral

(d) Isosceles

8. If $u_n = 2, 6, 10, \dots$, the 12th term of the sequence is

(a) 46

(b) 50

(c) 48

(d) 44

9. If $u_n = 2, 6, 10, \dots$, the last term of the sequence is 90. The number of terms in the sequence is

(a) 20

(b) 22

(c) 24

(d) 23

10. If $u_n = 2, 6, 10, \dots$, the sum of the terms of the sequence above is

(a) 1104

(b) 1058

(c) 968

(d) 1012

11. In an arithmetic sequence with 25 terms, if the first term is 60 and last term is -12 the common difference is

(a) 3

(b) 2

(c) -3

(d) -2

12. In an arithmetic sequence with 25 terms, if the first term is 60 and last term is -12, the sum of the terms of the sequence is

(a) 600

(b) 2400

(c) 900

(d) 1800

13. In an arithmetic sequence whose 4th term is 14 and whose 11th term is 70, the first term and common difference are

(a) $a = -10, d = 8$

(b) $a = -7, d = 7$

(c) $a = 10, d = 8$

(d) $a = -14, d = 7$

14. In an arithmetic sequence whose 4th term is 14 and whose 11th term is 70, the sum of the first 12 terms of the sequence is

(a) 468

(b) 330

(c) 456

(d) 408

15. Ann goes swimming regularly. She wants to improve her fitness, so she decides to swim 10 lengths in the first session and increase the number of lengths

she swims by 2 every session. When she reaches 50 lengths in a session she will not increase the number any further. After how many sessions does Ann swim 50 lengths for the first time?

(a) 21

(b) 22

(c) 20

(d) 19

16. Ann goes swimming regularly. She wants to improve her fitness, so she decides to swim 10 lengths in the first session and increase the number of lengths she swims by 2 every session. When she reaches 50 lengths in a session she will not increase the number any further. Ann decides she will give herself a reward when she has swum a total of 400 lengths. After how many sessions does she get her reward?

(a) 15

(b) 25

(c) 16

(d) 24

17. Ann goes swimming regularly. She wants to improve her fitness, so she decides to swim 10 lengths in the first session and increase the number of lengths she swims by 2 every session. When she reaches 50 lengths in a session she will not increase the number any further. If Ann asks her friend Joy to come swimming with her, Joy starts coming at Sue's 8th session. Joy starts to swim 15 lengths and increases the number of the lengths by 5 each time. After how many of Joy's sessions does she swim the same number of lengths as Ann?

(a) 10

(b) 5

(c) 11

(d) 4

18. A dealer increased the price of an item by 20%, and then increased the price of the same item by 30%. If x is the original price, what is the price after the two increases?

(a) $1.5x$

(b) $1.56x$

(c) $x + 0.5$

(d) $x + 0.56$

(e) $x + 6$

19. Two dice are thrown. What is the probability that the sum of the two numbers obtained is greater than 10?

(a) $1/12$

(b) $1/36$

(c) $1/6$

(d) $1/4$

(e) $1/2$

20. If x and y are two real numbers such that $3x + 2y = 5$ and $5x + 4y = 9$, then $4x + 3y =$

(a) 0

(b) 2

(c) 5

(d) 6

(e) 7

21. If 35 is the median of the data set including 21, 7, 45, 33, 62 and x, then x =

(a) 3

(b) 14

(c) 37

(d) 33

(e) 48

22. The _____ is the value you calculate when you want the arithmetic average

(a) Mean

(b) Median

(c) Mode

(d) All of the above

23. The _____ is often the preferred measure of central tendency if the data are severely skewed

(a) Mean

(b) Median

(c) Mode

(d) Range

24. Which of the following is the formula for range?

(a) $H + L$

(b) $L \times H$

(c) $L - H$

(d) $H - L$

25 _____ are used when you want to visually examine the relationship between two quantitative variables.

(a) Bar graphs

(b) a Pie graphs

(c) a Line graphs

(d) a Scatterplots

26. As a general rule, the _____ is the best measure of central tendency because it is more precise

(a) Mean

(b) Median

(c) Mode

(d) Range

27. The most frequently occurring number in a set of values is called the _____.

(a) Mean

(b) Median

(c) Mode

(d) Range

28. A rectangular box with a square base and no top has a volume of 500 cm, the dimensions of the box that require the least amount of material are

(a) 10x10x5cm

(b) 4x5x25cm

(c) 50x5x2cm

(d) 25x10x2

(e) 10x50x1

29. The roof of a shelter is made from a piece of corrugated iron 2.3m long inclined at 18° to the horizontal. How far from the wall does the roof stick out?

(a) 0.7m

(b) 2.2m

(c) 1.1m

(d) 1.2m

(e) 2.1m

30. A ladder 20m long rests against a vertical wall so that the foot of the ladder 9m from the wall. The height (correct to 1 decimal place above the ground at which the upper end of the ladder touches the wall is

(a) 19.7m

(b) 18.1m

(c) 18.7m

(d) 17.1m

(e) 17.9m

31. A chord 6.6m long is 5.6m from the centre of a circle. The radius of the circle is

(a) 3.2m

(b) 6.3m

(c) 6.5m

(d) 1.6m

(e) 2.56m

32. The heights in cm, of 10 children are 145, 163, 159, 162, 167, 149, 150, 160, 170, and 155. The mean height of the children is

(a) 156cm

(b) 158cm

(c) 160cm

(d) 162cm

(e) 159cm

33. The heights in cm, of 10 children are 145, 163, 159, 162, 167, 149, 150, 160, 170, and 155. The standard deviation of the heights of the children is

(a) 5.5cm

(b) 5.7cm

(c) 6.5cm

(d) 6.7cm

(e) 7.7cm

34. A class of all possible subsets of space S is called

(a) Universal set

(b) alpha - field

(c) sample space

(d) probability space

(e) random space

35. One of these is a demerit of a sample

(a) It is cheaper to enumerate a sample

(b) It is faster to survey a sample

(c) Results obtained from sample are oftentimes as informative as those from a census

(d) All of the above

(e) None of the above

36. One of these is not a desirable feature of a good statistical table

(a) A table must reveal salient features of data

(b) A table must clearly communicate information in a neat and concise form

(c) A table must be self sufficient

(d) A table must be self explanatory

(e) None of the above

37. Which of these is a measure of location

(a) Mean

(b) Standard deviation

(c) Variance

(d) All of the above

(e) None of the above

38. Statistics is a set of tools whose proper use will the decision maker

(a) Completely fill the needs of

(b) Encumber

(c) Aid

(d) Confuse

(e) None of the above

39. The graph of cumulative frequency distribution is called

(a) Frequency polygon

(b) Frequency distribution curve

(c) Frequency curve

(d) Step function

(e) Ogive

40. A variation is one whose values convey the concept of attribute rather than number

(a) Quantitative

(b) Qualitative

(c) Discrete

(d) Continuous

(e) None of the above

41. A company employs 100 people, 65 of whom are men. 60 people including all the women are paid weekly. The number of the men that are paid weekly is

(a) 35

(b) 40

(c) 25

(d) 30

(e) None of the above

42. In a survey of villagers, it is found that 20% of the people have visited Kano and 25% have visited Port Harcourt. If 5% have been to both cities, then the percentage that have visited neither Kano nor Port Harcourt is

(a) 75%

(b) 65%

(c) 50%

(d) 60%

(e) 70%

43. The length of a rectangle is three times its width. If the perimeter is 72 cm, the width of the rectangle is

(a) 6cm

(b) 8cm

(c) 9cm

(d) 10cm

(e) 11cm

44. A frustum of a pyramid is 3cm square at the top and 6cm square at the bottom and is 5cm high. The volume in cm^3 of the frustum is

(a) 15

(b) 150

(c) 105

(d) 115

(e) 36

45. If $x = 2$, then $(x - 1)(2x - 3) =$

(a) 1

(b) 3

(c) -1

(d) 0

(e) -3

46. What is $\sin 30^\circ$?

(a) $\frac{1}{2}$

(b) $\frac{3}{2}$

(c) 0.866

(d) 1

(e) 2

47. Given the list of numbers {1, 6, 3, 9, 16, 11, 2, 9, 5, 7, 12, 13, 8}, what is the median?

(a) 7

(b) 8

(c) 9

(d) 11

(e) 6

48. What is the slope of the line that is perpendicular to $y - 2x = 1$?

(a) 2

(b) -2

(c) $\frac{1}{2}$

(d) $-\frac{1}{2}$

(e) 1

49. What is the sum of the first 40 even positive integers?

(a) 1,600

(b) 1,560

(c) 820

(d) 1,640

(e) 400

50. What is the length of an arc of a circle with a radius of 5 if it subtends an angle of 60° at the center?

(a) 3.14

(b) 5.24

(c) 10.48

(d) 2.62

(e) 4.85