

**MAHARAJA RANJIT SINGH ARMED FORCES PREPARATORY INSTITUTE**

**Entrance Test**

**Sample Question Paper- 1 (English)**

**Date:-30 Jan, 2011  
AM (90 minutes)**

**Time-10.30 AM to 12.00**

---

**Max Marks : 75**

---

**General Instructions:-**

- I. All questions are compulsory and carry equal marks.***
- II. There will be negative marking for incorrect answer. One fourth marks will be deducted from the total marks scored.***
- III. There is only one correct answer. Hence mark one choice only.***
- IV. Total number of questions is 75.***
- V. Answers are to be marked on O.M.R. Sheets only.***
- VI. Please remember this is a competitive Exam, so do not cheat or permit anybody to do so.***

1. Choose the word closest in meaning:- **Remedial**  
(a) punitive (b) stringent (c) corrective (d) strict
2. Choose the word closest in meaning:- **Revamp**  
(a) retreat (b) reconstruct (c) retrial (d) retrace
3. Choose the word closest in meaning:- **Stingy**  
(a) violent (b) miserly (c) cautious (d) quarrelsome
4. Choose the word closest in meaning:- **digress**  
(a) deviate (b) come back (c) slow down (d) remove
5. Choose the word closest in meaning:- **kindle**  
(a) show kindness (b) incite (c) helpful (d) vindicate
6. Choose the word furthest in meaning:- **superficial**  
(a) profound (b) difficult (c) secretive (d) mystical
7. Choose the word furthest in meaning:- **Coarse**  
(a) pleasing (b) rude (c) polished (d) soft
8. Choose the word furthest in meaning:- **Cite**  
(a) good (b) conceal (c) sight (d) place
9. Choose the word furthest in meaning:- **Vigilant**  
(a) careless (b) ignorant (c) irresponsible (d) innocent
10. Choose the word furthest in meaning:- **Catastrophe**  
(a) calamity (b) disaster (c) blessing (d) storm
11. Choose the misspelt word :-  
(a) over estimate (b) conceivable (c) euthanasia (d) disobediance
12. Choose the misspelt word :-  
(a) influenza (b) adolescense (c) galore (d) secularism

**13. Choose the misspelt word :-**

- (a) confiscate (b) seismology (c) pituitary (d) bonanza

**14. Choose the misspelt word :-**

- (a) heamoglobin (b) haemoglobin (c) hamoglobin (d) hemoglobin

**15. Choose the misspelt word :-**

- (a) anihilate (b) annilate (c) annhilate (d) annihilate

**16. Choose the most suitable word :-**

**A school boy who cuts classes frequently is a**

- (a) truant (b) delinquent (c) sycophant (d) martinet

**17. Choose the most suitable word :-**

**A place where bees are kept is called**

- (a) an apiary (b) an aviary (c) a hive (d) a sanctuary

**18. Choose the most suitable word :-**

**An imaginary name assumed by an author as disguise is a**

- (a) pseudonym (b) nickname (c) pet name (d) homonym

**19. Choose the most suitable word :-**

**A person who uses computers to gain unauthorized access to data**

- (a) nitwit (b) hacker (c) hawker (d) sneak

**20. Choose the most suitable word :-**

**Art of garden cultivation**

- (a) landscape (b) sericulture (c) horticulture (d) farming

**21. Read the passage and answer the question by choosing the right answer:-**

**Due to media and communication explosion and the effect of globalization, markets all over the world are going through a phase of metamorphosis. The visual media is regularly exposing a newer lifestyle, products and services to the fast-expanding netizen-driven society. Today, consumers have become quite concerned about health issues and are taking a great interest in food matters.**

**Environmental issues, greater segmentation and increased mobility are the added factors. Besides, the green movement supported by media coverage has been creating urge for natural food.**

**According to the passage, the major concern of the consumers is :**

- (a) Urge for natural food**
- (b) Environmental issues**
- (c) Health and food matters**
- (d) Support for the Green movement**

**22. Laws of nature are not commands but statement of acts. The use of the word 'law' in this context is rather unfortunate. It would be better to speak of uniformities of nature. This would do away with the elementary fallacy that a law implies a law of giver. If a piece of matter does not obey the laws of nature, it is not punished. On the contrary, we say that the law has been incorrectly stated.**

**According to the passage, the laws of nature based on observation are**

- (a) Conclusive about the nature of the universe**
- (b) True and unfalseable**
- (c) Figment of the observer's imagination**
- (d) Subject to change in the light of new facts.**

**23. Choose the most appropriate word:-**

**She has been living in the U.S. for nearly 10 years but still she \_\_\_\_\_ to the traditional Indian values.**

- (a) adhesive**
- (b) adheres**
- (c) adopts**
- (d) acknowledges**

**24. Choose the most appropriate word:-**

**I \_\_\_\_\_ that the door was locked properly when I left home**

- (a) Assured**
- (b) guaranteed**
- (c) ensured**
- (d) swore**

**25. Choose the most appropriate word:-**

**The accident was \_\_\_\_\_ because of the driver's presence of mind.**

**(b) Avoided (b) evaded (c) thwarted (d) averted**

**26. Choose the most appropriate word:-**

**We are now confident about the fact that meetings held on a weekly basis are most \_\_\_\_\_**

**(a) Correct (b) appropriate (c) right (d) clear**

**27. Choose the most appropriate word:-**

**The mother put \_\_\_\_\_ her work to attend to the baby who was crying**

**(a) a side (b) aside (c) away (d) off**

**28. Choose the meaning of the idiom: A big gun**

**(a) A cannon (b) anti-aircraft (c) an important person (d) a giant**

**29. Choose the meaning of the idiom: Second nature**

**(a) A firm habit (b) bad temper (c) wavering nature (d) super intelligence**

**30. Choose the meaning of the idiom: To eat humble pie**

**(a) A voracious eater (b) to behave insolently**

**(c) to accept humiliation (d) to face defeat**

**31. Choose the meaning of the idiom: To sow wild oats**

**(a) To do some mischief (b) to do some act of madness**

**(c) to indulge in youthful frivolities (d) to boast of oneself**

**32. Choose the meaning of the idiom: To flog a dead horse**

- (a) To waste one's energy (b) to waste one's money (c) to kill someone  
(d) to encourage

**33. Complete the sentence using a suitable choice:-**

**Sirius is related to star in the same way as Pluto is related to \_\_\_\_\_**

- (a) Planet (b) asteroid (c) earth (d) meteor

**34. Complete the sentence using a suitable choice:-**

**Palm is related to hand in the same way as sole is related to \_\_\_\_\_**

- (a) Leg (b) ankle (c) knee (d) foot

**35. Complete the sentence using a suitable choice:-**

**Statue is related to shape in the same way as song is related to \_\_\_\_\_**

- (a) Beauty (b) sing (c) tune (d) poetry

**36. Complete the sentence using a suitable choice :**

**Labourer is related to wages in the same way as entrepreneur is related to \_\_\_\_\_**

- (a) loan (b) interest (c) taxes (d) profit

**37. Complete the sentence using a suitable choice :**

**Kilometer is related to distance in the same way as poundal is related to \_\_\_\_\_**

- (a) density (b) acceleration (c) momentum (d) force

38. Complete the sentence by choosing the correct collective noun from the options :-

The hunter spotted a \_\_\_\_\_ near the lake

- (a) brace of game birds      (b) swarm of game –birds      (c) group of game birds

39. Complete the sentence by choosing the correct collective noun from the options :

The Rashtrapathy Bhawan has a \_\_\_\_\_

- (a) Collection of rooms      (b) suite of rooms      (c) gathering of rooms

40. Complete the sentence by choosing the correct collective noun from the options :

The police was called in to disperse a \_\_\_\_\_ who turned violent.

- (a) family of rioters      (b) crowd of rioters      (c) mob of rioters

41. Complete the sentence by choosing the correct collective noun from the options :

\_\_\_\_\_ was found to be damaged at the party.

- (a) A part of furniture      (b) An item of furniture      (c) A piece of furniture

42. Complete the sentence by choosing the correct collective noun from the options:

Many villagers in my native place have a \_\_\_\_\_ in their farm.

- (a) flock of chickens      (b) swamp of chickens      (c) brood of chickens

43. Choose the correct preposition :

President Saddam Hussain has lived \_\_\_\_\_ the gun all his life.

- (a) with      (b) for      (c) by      (d) on

44. Choose the correct preposition:

I am afraid she's not here \_\_\_\_\_ the moment.

(a) for (b) from (c) at (d) by

45. Choose the correct preposition:

Chris is getting married \_\_\_\_\_ this year.

(a) at (b) on (c) by (d) in

46. Choose the correct preposition :

I don't like traveling \_\_\_\_\_ night.

(a) by (b) at (c) in (d) on

47. Choose the correct preposition :

Hari is 63. He'll be retiring from his job \_\_\_\_\_ two years time.

(a) by (b) in (c) from (d) at

48. Each of the following sentence is divided in four parts (a,b,c,d) one of which might contain an

error. Spot the error and mark that part of the sentence as the answer.

Yesterday (a) / one of (b) / the teachers (c) / was called by the office (d)

49. Each of the following sentence is divided in four parts (a,b,c,d) one of which might contain an

error. Spot the error and mark that part of the sentence as the answer :

I never (a) / remember (b) / to have met (c) / this gentleman in Baroda (d).

50. Each of the following sentence is divided in four parts (a,b,c,d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer :

The timing (a) / of these strikes (b) / were (c) / poorly planned by the union (d)

51. Each of the following sentence is divided in four parts (a,b,c,d) one of which might contain an

error. Spot the error and mark that part of the sentence as the answer :



I (a) / watched (b) / him (c) / fell (d)

52. Each of the following sentence is divided in four parts (a,b,c,d) one of which might contain an

error. Spot the error and mark that part of the sentence as the answer :

Every (a) / man, woman and child are now (b) /aware of the (c) / terrible consequences of smoking (d)

53. Construct the correct sentence using the sentence fragments :

P – an interactive tool to.

Q – available via the World Wide Web.

R – a web search engine is.

S - help people locate information.

(a) RPSQ (b) RQSP (c) PSRQ (d) QRPS

54. Construct the correct sentence using the sentence structure :

He found the house and knocked at / without any difficulty / the door / twice

P Q R S

(a) PRSQ (b) QRSP (c) RPQS (c) RPQS (d) QPRS

55. Construct the correct sentence using the sentence structure :

P - with a place to type in

Q - to submit the request

R - a search string and a way

S - the interface presents the user

(a) SRQP (b) RQPS (c) PRQS (d) SPRQ

56. Construct the correct sentence using the sentence structure :

P is a disease

Q which is as

R common as common cold

S dental decay

- (a) RPSQ     (b) SQRP     (c) QRPS     (d) SPQR

57. Construct the correct sentence using the sentence structure :

Women / till the other day / who were content being house wives /

P                                      Q

about spending their time cooking / now sound apologetic

R                                      S

- (a) PQRS                      (b) RSPQ     (c) QPSR     (d) RQPS

58. Complete the following sentences using appropriate choice:

Besides being educated, he is intelligent. He is \_\_\_\_\_

- (a)                      not only intelligent but also educated  
(b) neither intelligent nor educated  
(c) either intelligent or educated  
(d) more intelligent and educated

59. Complete the following sentences using appropriate choice:

The man \_\_\_\_\_ will carry the trophy

- (a) who would score the maximum points  
(b) who the maximum points scores

(c) who will score the maximum points

(d) who scores the maximum points

60. Complete the following sentences using appropriate choice:

The teacher asked me \_\_\_\_\_

(a) what your name is

(b) what was my name

(c) what my name was

(d) what is your name

61. Complete the following sentences using appropriate choice:

They \_\_\_\_\_ of all the facts.

(a) are not beware

(b) are not aware of

(c) are not to be aware

(d) are not aware

62. Read the passage carefully and complete the fill ups by choosing the right option:

In the sixteenth century, an age of great marine and terrestrial exploration, Ferdinand Magellan led the first expedition to sail around the world. As a young Portuguese noble, he served the king of Portugal, but he became involved in the quagmire of political intrigue at court and lost the king's favor. After he was dismissed from service to the king of Portugal, he offered to serve the future Emperor Charles V of Spain.

A papal decree of 1493 had assigned all land in the New World west of 50 degrees W longitude to Spain and all the land east of that line to Portugal. Magellan offered to prove that the East Indies fell under Spanish authority. On September 20, 1519, Magellan set sail from Spain with five ships. More than a year later, one of these ships was exploring the topography of South America in search of a water route across the continent. This ship sank but the remaining four ships searched along the southern peninsula of South America. Finally they found the passage they sought near a latitude of 50 degrees S. Magellan named this passage the Strait of All Saints, but today we know it as the Strait of Magellan.

**One ship deserted while in this passage and returned to Spain , so fewer sailors were privileged to gaze at that first panorama of the Pacific Ocean. Those who remained crossed the meridian we now call the International Date Line in the early spring of 1521 after ninety-eight days on the Pacific Ocean. During those long days at sea, many of Magellan’s men died of starvation and disease.**

**Later Magellan became involved in an insular conflict in the Philippines and was killed in a tribal battle. Only one ship and seventeen sailors under the command of the Basque navigator Elcano survived to complete the westward journey to Spain and thus prove once and for all that the world is round, with no precipice at the edge.**

**The sixteenth century was an age of great \_\_\_\_\_ exploration**

- (a) cosmic**
- (b) land**
- (c) common man**
- (d) mental**
- (e) none of the above**

**63. Magellan lost the favor of the king of Portugal when he became involved in a political \_\_\_\_\_**

- (a) entanglement**
- (b) discussion**
- (c) negotiation**
- (d) problems**
- (e) none of the above**

**64. The Pope divided New World lands between Spain and Portugal according to their location on one side or the other of an imaginary geographical line 59 degrees west of Greenwich that extends in a \_\_\_\_\_ direction**

- (a) north and south**
- (b) crosswise**

- (c) south east
- (d) north and west
- (e) easterly

65. One of Magellan's ships explored the \_\_\_\_\_ of South America for a passage across the continent

- (a) coastline
- (b) mountain range
- (c) physical features
- (d) islands
- (e) none of the above

66. Four of the ships sought a passage along a southern \_\_\_\_\_

- (a) coast
- (b) island
- (c) body of land with water on three sides
- (d) border
- (e) answer not available

67. The passage was found near 50 degrees of \_\_\_\_\_

- (a) Greenwich
- (b) equator
- (c) Spain
- (d) Portugal
- (e) Madrid

68. In the spring of 1521, the ships crossed the \_\_\_\_\_ now called the international Date Line

- (a) imaginary circle passing through the poles
- (b) imaginary line parallel to the equator
- (c) area
- (d) land mass
- (e) answer not found in article

69. Read the passage carefully and complete the fill ups by choosing the right option:

Marie Curie was one of the most accomplished scientists in history. Together with her husband , Pierre, she discovered radium, an element widely used for treating cancer n, and studied uranium and other radioactive substances. Pierre and Marie’s amicable collaboration later helped to unlock the secrets of the atom.

Marie was born in 1867 in Warsaw, Poland , where her father was a professor of physics. At the early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she definitely left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master’s degree and doctorate in physics

Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse – drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress.

Curie’s feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Noble Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

The Curies’ \_\_\_\_\_ collaboration helped to unlock the secrets of the atom

- (a) friendly
- (b) competitive
- (c) courteous
- (d) industrious
- (e) chemistry

70. Marie had a bright mind and a \_\_\_\_\_ personality

- (a) strong
- (b) lighthearted
- (c) humorous
- (d) strange
- (e) envious

71. When she learned that she could not attend the university in Warsaw, she felt \_\_\_\_\_

- (a) hopeless
- (b) annoyed
- (c) depressed
- (d) worried
- (e) none of the above

72. Marie \_\_\_\_\_ by leaving Poland and traveling to France to enter the Sorbonne.

- (a) challenged authority
- (b) showed intelligence
- (c) behaved
- (d) was distressed
- (e) answer not available

73. \_\_\_\_\_ she remembered their joy together

- (a) dejectedly
- (b) worried
- (c) tearfully
- (d) happily
- (e) sorrowfully

74. Her \_\_\_\_\_ began to fade when she returned to the Sorbonne to succeed her husband

- (a) misfortune
- (b) anger
- (c) wretchedness
- (d) disappointment
- (e) ambition

75. Even though she became fatally ill from working with radium, Marie Curie was never \_\_\_\_\_

- (a) troubled
- (b) worried
- (c) disappointed
- (d) sorrowful
- (e) disturbed



**MAHARAJA RANJIT SINGH ARMED FORCES PREPARATORY INSTITUTE**

**Entrance Test**

**Sample Question Paper- 1 (English)**

**Date:-30 Jan, 2011  
AM (90 minutes)**

**Time-10.30 AM to 12.00**

---

**Max Marks : 75**

---

**General Instructions:-**

- I. All questions are compulsory and carry equal marks.***
- II. There will be negative marking for incorrect answer. One fourth marks will be deducted from the total marks scored.***
- III. There is only one correct answer. Hence mark one choice only.***
- IV. Total number of questions is 75.***
- V. Answers are to be marked on O.M.R. Sheets only.***
- VI. Please remember this is a competitive Exam, so do not cheat or permit anybody to do so.***

1. Choose the word closest in meaning : Robust  
(a) wear (b) useless (c) strong (d) stupid
2. Choose the word closest in meaning : Imposter  
(a) tyrant (b) lazy (c) cheat (d) painful
3. Choose the word closest in meaning : Omnipotent  
(a) all-knowing (b) all – powerful (c) ever – lasting (d) all - merciful
4. Choose the word closest in meaning : Planned.  
(a) assumed (b) created (c) guessed (d) calculated
5. Choose the word closest in meaning : Rendezvous  
(a) resort (b) public place (c) hiding place (d) meeting place
6. Choose the word furthest in meaning : Derogatory  
(a) charitable (b) honourable (c) creditable (d) reliable
7. Choose the word furthest in meaning : Obscure  
(a) famous (b) respectable (c) decent (d) affluent
8. Choose the word furthest in meaning : Initiated  
(a) complicated (b) damper (c) closed (d) confused
9. Choose the word furthest in meaning : Callous  
(a) capable (b) hardened (c) sentimental (d) confidence
10. Choose the word furthest in meaning : Mask  
(a) hit (b) expose (c) injure (d) deface
11. Choose the word that is spelt right :  
(a) psuedonym (b) pseudonym (c) pseudonim (d) psuedonim
12. Choose the word that is spelt right :  
(a) conscientious (b) conscientus (c) concientious (d) conscientous
13. Choose the word that is misspelt :

(a) interference (b) hypothesis (c) suppression (d) circumference

14. Choose the word that is spelt right :

(a) guerila (b) guerilla (c) gourilla (d) guarilla

15. Choose the word that is misspelt :

(a) hoary (b) niche (c) dilamma (d) boutique

16. Choose the most suitable word : Call upon god or any other power for help or protection :

(a) invocation (b) involution (c) grace (d) revocation

17. Choose the most suitable word : A person with a long experience of a profession :

(a) veteran (b) genius (c) novice (d) workaholic

18. Choose the most suitable word : One who has become dependent on something :

(a) drunkard (b) edict (c) addict (d) derelict

19. Choose the most suitable word : A book in its original handwritten form is called a :

(a) proof (b) script (c) galley (d) manuscript

20. Choose the most suitable word : Animals that can live both on land and in water are :

(a) amorphous (b) amphibians (c) frog (d) versatile

21. Read the passage and answer the question by choosing the right answer :-

The word 'hotel' means mansion in French, implying a high level of comfort, luxury and personal service. A hotel provides private accommodation, usually with food and beverage service on the same premises and maintains a full-time service staff. As automobiles and road travel became popular, motor hotels or motels became a prominent component of the travel and lodging industries. A motel provides ample parking space for automobiles.

Which of the statements is false?

(a) Mansion is a French equivalent of hotel in English.

(b) Motorists are not entertained in a hotel.

(c) A hotel usually serves food and beverages.

(d) Usually private accommodations are costly because these maintain a full-time service staff.

22. Read the passage and answer the question by choosing the right answer :

A French General was once conducting his army through a very difficult pass in a range of high mountains. He exhorted his soldiers to bear patiently the fatigue of the march. "It is easy for you to talk", muttered one of the soldiers near him to his companions; "you are mounted on a fine horse but we poor wretches have to tramp on foot." The general overheard the remark and insisted on the discontented soldier taking his place but scarcely had he mounted than a shot from the mountain side struck and killed him.

The passage describes:-

- (a) a revolt in the army    (b) an altercation with the general  
(c) quarrelling soldiers    (d) a fateful event

23. Choose the most appropriate word: The college affected a record number of \_\_\_\_\_ to the science course this year :

- (a) admittance    (b) entries    (c) admissions    (d) students

24. Choose the most appropriate word: The passengers were asked to \_\_\_\_\_ accepting eatables from co-passengers :

- (a) evade    (b) refuse    (c) avoid    (d) reject

25. Choose the most appropriate word: The boy \_\_\_\_\_ his mother that he would certainly do well in the

examination.

- (a) assured    (b) ensured    (c) guaranteed    (d) swore

26. Choose the most appropriate word: People were \_\_\_\_\_ with anger and fear by the series of bomb blasts.

- (a) roused    (b) filled    (c) aroused    (d) red

27. Choose the most appropriate word: The man was \_\_\_\_\_ by the sound of the alarm early in the morning.

- (a) woke up    (b) roused    (c) aroused    (d) arise

28. Choose the meaning of the idiom : To beat the air

- (a) to make angry gestures    (b) to swing a stick  
(c) to make a futile effort    (d) to do physical exercises

29. Choose the meaning of the idiom: To come round

- (a) to visit    (b) to move in circles    (c) to accept an agreement    (d) casual visit

30. Choose the meaning of the idiom: To make a clean breast of

(a) to have an elaborate bath (b) to clear one's throat before speaking

(c) to dress a chicken (c) to admit one's mistake unreservedly

31. Choose the meaning of the idiom: To rise like a phoenix

(a) to resemble a phoenix (b) to rise with a new life after an ordeal

(c) to rise with anger (d) to get up with the start

32. Choose the meaning of the idiom: To wrangle over an ass's shadow

(a) to act in a funny manner (b) to quarrel over trifles (c) to waste money (d) to struggle

33. Complete the sentence using a suitable choice : Infestation is related to food in the same way as infection is related to :-

(a) germs (b) diseases (c) body (d) microbes

34. Complete the sentence using a suitable choice : Victory is related to happiness in the same way as failure is related to :

(a) defeat (b) anger (c) frustration (d) sadness

35. Complete the sentence using a suitable choice: Wood is related to charcoal in the same way as coal is related to :-

(a) fire (b) smoke (c) coke (d) ash

36. Complete the sentence using a suitable choice. Proteins are related to growth in the same way as carbohydrates are related to :-

(a) energy (b) strength (c) resistance (d) diseases

37. Complete the sentence using a suitable choice: Command is related to order in the same way as confusion is related to:

(a) discipline (b) clarity (c) chaos (d) problem

38. Complete the sentence by choosing the correct collective noun from the options : There was a \_\_\_\_\_ following the assassination attempt on the Chief Ministers life :

(a) group of events (b) chain of events (c) collection of events

39. Complete the sentence by choosing the correct collective noun from the options: When I was writing my thesis, there was always a \_\_\_\_\_ lying on my table.

(a) group of books (b) series of books (c) heap of books (d) none of these

40. Complete the sentence by choosing the correct collective noun from the options:- The press reporters fired a \_\_\_\_\_ during the press conference at the minister.

- (a) volley of questions (b) group of questions (c) stock of questions (d) none of these

41. Complete the sentence by choosing the correct collective noun from the options: The museum in Madras features a \_\_\_\_\_ right from the Sangam period to the present age

- (a) groups of coins (b) collection of series (c) series of coins (d) none of these

42. Complete the sentence by choosing the correct collective noun from the options: During the festive season of Dushera, one can see a \_\_\_\_\_ in the temples

- (a) congregation of worshippers (b) crowd of worshippers (c) fleet of worshippers (d) none of these

43. Choose the correct preposition : The queen's speech is broadcast \_\_\_\_\_ Christmas Day.

- (a) at (b) on (c) in (d) around

Roll No \_\_\_\_\_

44. Choose the correct preposition:- It's a quarter \_\_\_\_\_ midnight; only fifteen minutes to go before the New Year.

- (a) at (b) to (c) for (d) since

45. Choose the correct preposition: I don't like travelling \_\_\_\_\_ night.

- (a) by (b) at (c) in (d) on

46. Choose the correct preposition: Finding myself short \_\_\_\_\_ money, I wrote to him for help

- (a) in (b) of (c) with (d) at

47. Choose the correct preposition: The rainfall in India varies from year \_\_\_\_\_ year

- (a) at (b) by (c) to (d) in

48. Each of the following sentences is divided in four parts (a, b, c, d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer.

He is (a) / senior (b) / than me (c)/in service (d).

49. The following sentence is divided in four parts (a, b, c, d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer.

A few (a) / windows (b) / in the main hall was broken (c) / by the demonstrators (d).

50. The following sentence is divided in four parts (a, b, c, d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer.

Don't worry (a) /I shall (b) /be back (c) /in a few minutes and join you (d).

51. The following sentence is divided in four parts (a, b, c, d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer.

One of the secret (a) /of success is (b) /to keep trying (c) and not give up(d).

52. The following sentence is divided in four parts (a, b, c, d) one of which might contain an error. Spot the error and mark that part of the sentence as the answer.

The campaign launched (a)/by the group of citizen (b)/was admired most (c)/by all the guests (d).

53. Construct the correct sentence using the sentence fragments :-

P – a dry environment surrounded by

Q – the lizard which lives in

R – lives in danger of desiccation

S – comparatively moist leaf – litter

(a) QSRP (b) PQSR (c) QPSR (d) SQPR

54. Construct the correct sentence using the sentence fragments :-

During hibernation they have lost a good deal of weight /the animals consume /and when they wake up again /

P Q R

the fats accumulated in the summer.

S

(a) RQSP (b) SQPR (c) PQRS (d) QSRP

55. Construct the correct sentence using the sentence fragments :-

The impact is to be seen / in the diverse changes in consumer habits

P Q

/of technological and industrial development /in cities, towns and even in village conglomerates.

R S

- (a) PSQR (b) RPQS (c) PQRS (d) RSPQ

56. Construct the correct sentence using the sentence fragments :-

It is not, therefore that I pay a tribute /to conductors as a class /

P Q

with any feeling of unfriendliness /to a particular member of that class.

R S

- (a) PQRS (b) RQPS (c) RSPQ (d) PSRQ

57. Construct the correct sentence using the sentence fragments :-

P – for viewers in their homes

Q – the most common use of

R – source of information and entertainment

S – television is as a

- (a) QRSP (b) QSRP (c) PSRQ (d) PSQR

58. Complete the following sentences using appropriate choice :-

Acquisition of certain specific skills \_\_\_\_\_ general awareness, education and exposure to novel situation :-

- (a) can be facilitated by (b) can be facilitated from (c) may facilitate through  
(d) can be facilitated with

59. Complete the following sentences using appropriate choice: This is the work of an artist \_\_\_\_\_

- (a) whom they think is a genius (b) that they believe to be genius  
(c) which they accept as a wonder (d) who they say is a genius

60. Complete the following sentences using appropriate choice: The violence \_\_\_\_\_ by the striking labourers resulted in \_\_\_\_\_ considerable damage to valuable factory machinery.

- (a) unleashed (b) shown (c) abetted (d) faced

Roll No \_\_\_\_\_



61. Complete the following sentences using appropriate choice: Mr Singh's last days were spent in London\_\_\_\_\_

- (a) where he worked for an advertising firm.
- (b) working for an advertising firm.
- (c) where he worked at a firm of advertisers.
- (d) working for a firm of advertising.

62. Complete the following sentences using appropriate choice: This is one of the most important\_\_\_\_\_

- (a) invention of this century
- (b) inventions of this century
- (c) invention of these centuries
- (d) inventions of centuries

63. Read the passage and complete the fill – ups by choosing the correct option :

Mount Vesuvius, a volcano located between the ancient Italian cities of Pompeii and

Herculaneum, has received much attention because of its frequent and destructive eruptions. The most famous of these eruption occurred in A.D.79.

The volcano had been inactive for centuries. There was little warning of the coming eruption, although one account unearthed by archaeologists says that a hard rain and a strong wind had disturbed the celestial calm during preceding night. Early the next morning, the volcano poured a huge river of molten rock down upon Herculaneum, completely burying the city and filling in the harbor with coagulated lava. Meanwhile, on the other side of the mountain, cinders, stone and ash rained down on Pompeii. Sparks from the burning ash ignited the combustible rooftops quickly. Large portions of the city were destroyed in the conflagration. Fire, however, was not the only cause of destruction. Poisonous sulphuric gases saturated the air. These heavy gases were not buoyant in the atmosphere and therefore sank toward the earth and suffocated people.

Over the years, excavations of Pompeii and Herculaneum have revealed a great deal about the behaviour of the volcano. By analyzing data, much as a zoologist dissects a specimen animal, scientist have concluded that the eruption changed large portions of the area's geography. For instance, it turned the Samo River from its course and raised the level of the beach along the Bay of Naples. Meteorologists studying these events have also concluded that Vesuvius caused a huge tidal wave that affected the world's climate. In addition to making these investigations, archaeologists have been able to study the skeletons of victims by using distilled water to wash away the volcanic ash. By strengthening the brittle bones with acrylic paint scientists have been able to examine the skeletons and draw conclusions about the diet and habits of the residents. Finally, the excavations at both Pompeii and Herculaneum have yielded many examples of classical art, such as jewelry made of bronze, which is an alloy of copper and tin.

The eruption of Mount Vesuvius and its tragic consequences have provided us with a wealth of data about the effects that volcanoes can have on the surrounding area. Today volcanologists can locate and predict eruptions, saving lives and preventing the destruction of cities and cultures.

Herculaneum and its harbor were buried under \_\_\_\_\_ lava.

- (a) liquid.
- (b) solid.
- (c) flowing.
- (d) gas.

64. The poisonous gases were not \_\_\_\_\_ in the air.

- (a) able to float.
- (b) visible.
- (c) able to evaporate.
- (d) invisible.

65. Scientists analyzed data about Vesuvius in the same way that a zoologist \_\_\_\_\_ a specimen.

- (a) describes in detail.
- (b) studies by cutting apart.
- (c) photographs.
- (d) answer not available.

66. \_\_\_\_\_ have concluded that the volcanic eruption caused a tidal wave.

- (a) scientist who study oceans.
- (b) scientist who study atmospheric conditions.
- (c) scientist who study ash.
- (d) scientist who study animal behaviour.

67. Scientist have used \_\_\_\_\_ water to wash away volcanic ash from the skeletons of victims.

- (a) bottled.
- (b) volcanic.
- (c) purified.
- (d) sea.

68. Read the passage and answer the questions by choosing the correct option :-

**Just as the growth of e-business encourages the development of new business models, it**

**also encourages the growth of new marketing ideas to promote the e-businesses based on those models. One of the most famous examples of an e-business whose business model successfully exploits the network effect by using an innovating marketing idea is Hotmail.**

**Hotmail, a wildly successful e-business that offers free e-mail services, almost didn't get**

**launched. As with many e-business startups, Hotmail's founders Sabeer Bhatia and Jack Smith had a problem interesting venture capitalists in their idea. When they met with Tim Draper, the founding partner of Draper Fisher Jurvetson(DGJ), Draper became interested in the idea of free e-mail but insisted that text be added to the bottom of each outgoing e-mail message, encouraging recipients to get their free e-mail at Hotmail. Draper wanted the text to be linked to the Hotmail site so that message recipients could click the link, view the Hotmail Website, and immediately sign up for the service. At first, Bhatia and Smith resisted the idea of adding the linked message, considering it too much like spam, which consists of commercial messages or advertisements blindly posted to a large number of unrelated and uninterested parties. At this time, the contents of e-mail were generally considered to be completely private. Finally, Bhatia and Smith agreed with Draper on the inclusion of the marketing message link.**

**Hotmail was quietly launched on 04 July 1996. Because of the holiday, the launch generated little press coverage; also, because of limited seed capital, only \$50,000 was set aside for promoting the project. Despite limited promotion, customers began signing up in droves. The first customers to sign up were at colleges and universities. A single user from a school would sign up and then, the next day, a hundred users from the same school would sign up, and by the end of the week there would be a thousand users from the same school. Next, information about Hotmail would spread to another school and the process would begin again.**

**Soon users from around the world began signing up. For example, within six weeks after the first user in India subscribed to the free e-mail service, Hotmail had 100,000 additional subscribers in India. In less than six months, one million users had subscribed to Hotmail's free e-mail services. Less than 18 months after its launch, Hotmail had 12 million subscribers. The network effect allowed Hotmail, the world's first free e-mail service, to spread like wildfire. Shortly after recording 12 million subscribers, Hotmail's founders sold the company to Microsoft for \$400 million in Microsoft stock.**

**Because of the astounding success of Hotmail, Steve Jurvetson and Tim Draper of DFJ began analyzing what was unique about Hotmail's success. They realized that Hotmail spread around the world like an epidemic. When current users sent messages to others containing the Hotmail link, they were "infecting" potential users, who in turn "infected" other potential users. Drawing an**

analogy to the effects of a sneeze in a crowd, they coined the phrase “viral marketing” to describe Hotmail’s innovative method of attracting new customers.

According to the passage, the new business model used by hotmail was called :

- (a) network effect                      (b) freebees
  - (c) seed-money effect                (d) innovative marketing
69. The meaning of ‘startup’ as used in the passage is the same as :-

- (a) e-business operation              (b) new business venture
- (c) to set out on a journey            (d) to be the first

70. What is ‘spam’?

- (a) commercial messages              (b) tightening of muscles
- (c) unsolicited e-mail                 (d) unsolicited advertisement

71. “Hotmail was launched on 04 July 1996. Because of the holiday, the launch generated little press coverage.” Which holiday is being referred to here?

- (a) World Literacy Day                 (b) Valentine’s Day
- (c) US Independence Day              (d) Sabeer Bhatia’s birthday

72. Which of the following has the same meaning to the word ‘epidemic’?

- (a) widespread disease                (b) infection
- (c) cure                                    (d) population

73. Which company bought Hotmail from its founders?

- (a) Draper Fisher Jurvetson(DFJ)    (b) Microsoft
- (c) Sabeer Bhatia Incorp                (d) DFJ.Com

74. Which of the following is not the same as ‘wildfire’ as used in the passage.

- (a) spread    (b) disperse    (c) scatter    (d) converge

75. The term ‘viral marketing’ is used because

- (a) it refers to an innovative method of marketing.
- (b) it infects and is contagious on users.

(c) it caused the effect of “sneeze in a crowd”.

(d) Hotmail spreads like an epidemic.

\*\*\*\*\*END OF PAPER\*\*\*\*\*

---

**MAHARAJA RANJIT SINGH ARMED FORCES PREPARATORY INSTITUTE**

**Entrance Test**

**Question Paper-Mathematics**

**Date:-30 Jan, 2011 Max Marks: 75 Time-1 PM to 2.30 PM (90 minutes)**

-----  
**General Instructions:-**

**I. All questions are compulsory and carry equal marks.**

**II. There will be negative marking for incorrect answer. One fourth marks will be deducted from the total marks scored.**

**III. There is only one correct answer. Hence mark one choice only.**

**IV. Use of calculator is not permitted.**

**V. Total number of questions is 75.**

**VI. Answers are to be marked on O.M.R Sheets only.**

**VII. Please remember this is a competitive Exam, so do not cheat or permit anybody to do so.**

-----

**1. The irrational number between 2 and 3 is:**

(a.) $\sqrt{2}$  (b.) $\sqrt{3}$  (c.) $\sqrt{5}$  (d.) $\sqrt{11}$

**2. If  $\tan A + \cot A = 4$  than  $\tan^4 A + \cot^4 A$  is equal to \_\_\_\_\_**

(a.) 196 (b.) 194 (c.) 192 (d.) 190

**3. A polynomial of the form  $ax^5 + bx^3 + cx^2 + dx + e$  has at most**

(a.) 3 zeros (b.) 5 zeros (c.) 7zeros (d.) 11 zeros

4. On Solving  $x - y = 1$ ,  $x + y = 5$  we get:

(a.)  $x = 4$ ,  $y = 6$  (b.)  $x = 6$ ,  $y = 4$  (c.)  $x = 8$ ,  $y = 6$  (d.) None of these

5. The ratio of the sum and product of roots of  $7x^2 - 12x + 18 = 0$  is

(a.)  $7 : 12$  (b.)  $2 : 3$  (c.)  $3 : 2$  (d.)  $7 : 18$

6. The equivalent rational form of 17.6 is

(a.)  $53/3$  (b.)  $88/5$  (c.)  $44/25$  (d.) None

7. If  $\sin \theta$  and  $\cos \theta$  are the roots of the equation  $ax^2 - bx + c = 0$  then,  $a$ ,  $b$ ,  $c$  satisfy the relation

\_\_\_\_\_

(a.)  $b^2 - a^2 = 2ac$  (b.)  $a^2 - b^2 = 2ac$  (c.)  $a^2 + b^2 + c^2$  (d.)  $a^2 + b^2 = 2ac$

8. If  $\sin \alpha = \frac{1}{2}$  and  $\alpha$  is acute, then  $(3\cos\alpha - 4\cos^2\alpha) = ?$

(a.) 0 (b.)  $\frac{1}{2}$  (c.)  $\frac{1}{6}$  (d.) -1

9. If  $7\sin^2\theta + 3\cos^2\theta = 4$  and  $0 < \theta < \pi$ , then the value of  $\tan \theta$  is:

(a.) 1/ (b.) 1/ (c.) (d.)

10. From a light house the angles of depression of two ships on opposite side of the light house are observed to be  $30^\circ$  and  $45^\circ$ . If height of the light house is  $h$  meters, the distance between the ships is:

(a.)  $(+1)h$  meters (b.)  $(-1)h$  meters

(c.)  $h$  meters (d.)  $1 + (1 + \frac{1}{\sqrt{3}})h$  meters

11.  $4^n$  where  $n$  is a natural number, does not end with digit:

(a.) 6 (b.) 4 (c.) 0 (d.) none

12. Which of the following system of equation has unique solution?

(a.)  $3x + y = 2$ ,  $6x + 2y = 3$  (b.)  $2x - 5y = 3$ ,  $6x - 15y = 9$

(c.)  $x - 2y = 3$ ,  $3x - 2y = 1$  (d.) None.

13. if  $x = 0$ ,  $x/2 = y^2$  and  $x/4 = 4y$  then 'x' equal to

(a.) 8 (b.) 16 (c.) 128 (d.) 64

14. The solution set of equation  $x + y = 126$  is:

(a.) (1, 2) (b.) (-1, 2) (c.) (1, -2) (d.) (-1, -2)

15. The sum of 'n' terms of the series  $a, 3a, 5a, \dots$  is

(a.)  $Na$  (b.)  $2na$  (c.)  $an^2$  (d.) None

16. The system of equations  $Kx + 3y = -3$ ,  $12x + Ky = -K$  will have infinitely many solutions, if the value of  $K$  is:

(a.) 3 (b.) -3 (c.) 12 (d.) 6

17. The graph of  $x = 5$  is perpendicular to

(a.)  $x$  – axis (b.)  $y$  – axis (c.) line  $y = x$  (d.) line  $y = -x$

18. A real number  $(2^2 \times 3^2 \times 7^2)/(2^5 \times 3^2 \times 5^3 \times 7)$  will have

(a.) Terminating decimal (b.) Non-terminating repeating decimal

(c.) Non – Terminating non – repeating (d.) Terminating repeating decimal

19. If polynomial of  $(x) = ax^3 + bx - c$  is divisible by the polynomial  $g(x) = x^2 + bx + c$  then  $ab = ?$

(a.) 1 (b.)  $1/c$  -1 (c.)  $-1/c$  (d.)  $1/c$

20. If the roots of a quadratic equations are equal, then.

(a.)  $b^2 - 4ac > 0$  (b.)  $b^2 = 4ac$

(c.)  $b^2 - 4ac < 0$  (d.) None of these

21. In an AP it is given that  $tp+1 = 2tq+1$  Find  $a : d$

(a.)  $2tp+q+1$  (b.)  $2t p+q+1$  (c.)  $p - q / 1$  (d.)  $q - p / 1$

22. The sum of  $n$  term of the series if  $an = 2n + 5$ .

(a.)  $n^2$  (b.)  $n^2 + 6$  (c.)  $n^2 + 5n$  (d.)  $n^2 + 6n$

23. The sum of all three digit numbers which are multiple of 7 where  $n = 128$

(a.) 7336 (b.) 70336 (c.) 70357 (d.) 70280

24. If 5 times the fifth term of an AP is equal to 8 times its eight terms then 13th term is

(a.) 0 (b.) 13 (c.) 40 (d.) 50

25. The distance of the point  $p(4, -3)$  from the origin is

(a.) 5 unit (b.) 7 units (c.) 1units (d.) 3 units

26. Co-ordinates of reflection of  $Q(-1, -3)$  in  $x$  – axis:

(a.)  $(-1, 3)$  (b.)  $(+1, 3)$  (c.)  $(1, -3)$  (d.) None of these

27. Abscissa of a point which divides the join of  $(3, 4)$  and  $(2, -1)$  in the ratio  $1 = 2$  internally is

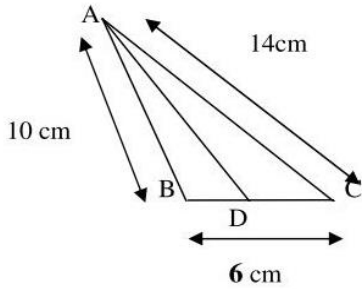
(a.)  $\frac{8}{3}$  (b.) 6 (c.)  $\frac{5}{3}$  (d.) None of these

28. The length of string between kite and a point on the ground is 93.5m if the string makes an angle with the level ground

such that  $\tan \theta = \frac{15}{8}$ , how high the kite is?

(a.) 82.5m (b.) 7.5m (c.) 78.05m (d.) 80.5m

29. In given fig. in  $\triangle ABC$ , AD is internal bisector of  $\angle A$  such that  $AB = 10\text{cm}$ ,  $AC = 14\text{cm}$  and  $BC = 6\text{cm}$  the  $CD = ?$



(a.) 10cm (b.) 3.5cm (c.) 414cm (d.) 6cm

30. If in two triangles, corresponding angles are equal, than the two triangles are:

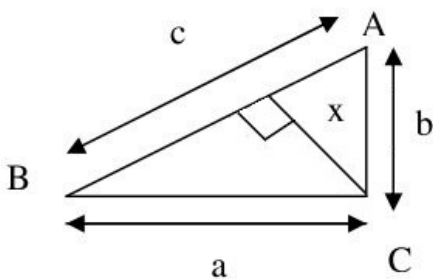
(a.) Equiangular (b.) Equiangular the similar

(c.) None of these (d.) Similar

31. In right angled  $\triangle ABC$ ,  $AC = b$ ,  $BC = a$ ,  $AB = c$  and  $\angle C = 90^\circ$   $CD \perp AB$  and  $CD = x$ . then  $ab =$

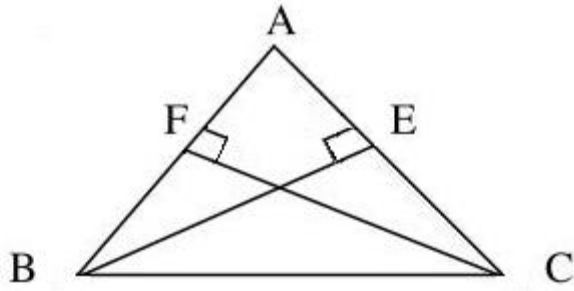
(a.)  $\frac{c}{x}$  (b.)  $cx$

(c.)  $2cx$  (d.)  $\frac{2c}{x}$



32. In  $\triangle ABC$ ,  $BE \perp AC$  and  $CF \perp AB$  then  $BC^2 =$  \_\_\_\_\_





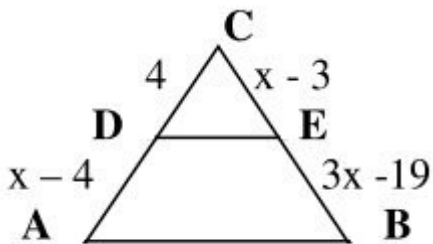
(a.)  $(AB \times AF) + (AC \times CE)$

(b.)  $(AB \times BF) + (AC \times CE)$

(c.)  $(AB \times CF) + (AC \times CE)$

(d.)  $AB + BC + AC$

33. Find the value of  $x$  in given figure, if  $DE \parallel AB$



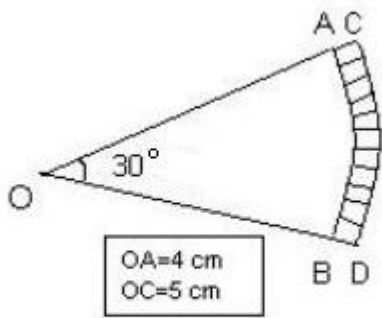
(a.) 8 and 9cm  $4x - 3$

(b.) 8 and 11 cm D E

(c.) 8 cm  $x - 4$   $3x - 19$

(d.) 11 cm A B

34. In fig given alongside the area of the shaded region is:



(a.)  $9\pi\text{cm}^2$  (b.)  $5\pi\text{cm}^2$

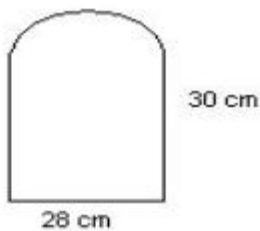
(c.)  $3\pi\text{cm}^2$  (d.) None of these

35. Area of largest triangle that can be inscribed in a semicircle of radius r unit is:

(a.)  $r^2 \text{ Sq units}$  (b.)  $\frac{1}{2} r^2 \text{ Sq units}$

(c.)  $r^2 \text{ Sq units}$  (d.)  $2r^2 \text{ Sq units}$

36. The perimeter of the window with rectangle base and semi-circular top as shown in adjoining fig is.



(a.) 142 cm (b.) 112 cm

(c.) 132 cm (d.) 160 cm

37. An umbrella has 8 ribs which are equally spaced. Assuming umbrella to be a flat circle of radius 45 cm, find area

between the two consecutive ribs of the umbrella

(a.)  $\text{cm}^2$  (b.)  $\text{cm}^2$

(c.)  $\text{cm}^2$  (d.)  $\text{cm}^2$

38. If the surface area of a sphere is  $154\text{cm}^2$ , then its volume is:

(a.)  $539\text{m}^3$  (b.)  $149(2/3)\text{m}^3$  (c.)  $179(2/3)\text{m}^3$  (d.) None of these

39. The shape of gilli in the gilli danda game is a combination of:

(a.) Two cones and one cylinder (b.) a cone and cylinder

(c.) Two cones (d.) two cylinders and a cone

40. A right circular cylinder of radius  $r$  cm and height  $h$  cm ( $h > 2r$ ) just encloses a sphere of diameters

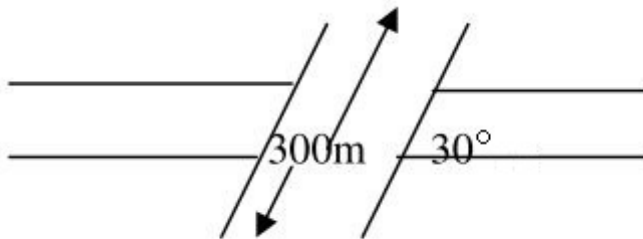
(a.)  $r$  (b.)  $2r$  (c.)  $3r$  (d.)  $4r$

41. If the ratio of volumes of two spheres  $1 : 8$ , then the ratio of their surface area is .

(a.)  $1 : 2$  (b.)  $1 : 8$  (c.)  $1 : 4$  (d.)  $2 : 1$

42. A bridge crossing a river makes an angle of  $30^\circ$  with the river bank. If the length along the bridge from bank to bank is

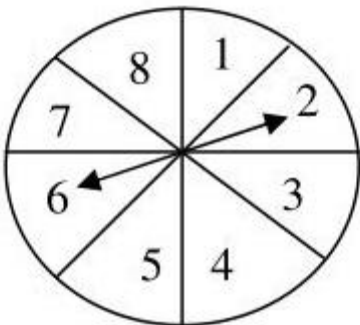
300m, then width of river is:



(a.) 450m (b.) 600m

(c.) 150m (d.) 150m

43. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers greater than 3 is:



(a.)  $5/8$  (b.)  $2/8$

(c.)  $3/8$  (d.)  $4/8$

44. A jar contains 24 marbles, some are green and other are red – A marble is drawn at random from the jar. If the

Probability that marble is green is  $2/3$ , then the number of red marbles in the jar is :

(a.) 7 (b.) 8 (c.) 10 (d.) 6

45. A marble is drawn at random from a bag. The probability that the marble is green, if the bag contains marbles whose colours are 6 blue, 4 green is

(a.)  $4/5$  (b.)  $1/5$  (c.)  $2/5$  (d.)  $1/10$

46. A child has a block in the shape of a cube with one letter written on each face as shown in the following. Find the probability of not getting 'A'

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| A | B | A | B | C | A | D |
|---|---|---|---|---|---|---|

(a.)  $1/7$  (b.)  $3/7$  (c.)  $1/2$  (d.)  $4/7$

47. Two dice are drawn simultaneously. The probability of getting doublet or total of 4 is:

(a.) None (b.)  $3/7$  (c.)  $4/9$  (d.)  $2/9$

48. The arithmetic mean of 1, 2, 3, ..., n is

(a.)  $n + 1/2$  (b.)  $n - 1/2$  (c.)  $n/2$  (d.)  $n + 1/2$

49. The mean of a discrete frequency distribution  $x_i/f_i : i = 1, 2, \dots, x$  is given by

(a.)  $\sum f_i$  (b.)  $\sum fix_i$  (c.)  $(\sum fix_i)/(\sum xi)$  (d.)  $(\sum fix_i)/(\sum fi)$

50. In a frequency distribution  $c = 3$ ,  $L = 66.5$ ,  $f = 42$ ,  $h = 10$ ,  $n = 90$ . Then the median of the distribution is:

(a.) 65.5 (b.) 78.5 (c.) 76.9 (d.) 76.5

51. If  $x$  is the mean of  $x_1, x_2, x_3, \dots$ , then the mean of  $x_1/k, x_2/k, \dots/k$

(a.) 1 (b.)  $K$  (c.)  $x/k$  (d.)  $x$

52. Two circular cylinders of equal volume have their heights in the ratio 1 : 2. The ratio of their radii is:

(a.) 1 : 1 (b.) 2 : 1 (c.)  $\sqrt{2}$  : 1 (d.) 1 : 4

53. The internal and external radii of a hemispherical bowl are  $r_1$  and  $r_2$  respectively. The curved surface area of the bowl

will be:

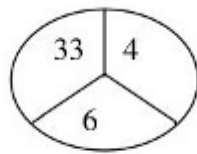
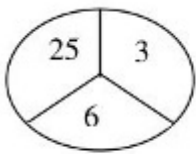
(a.)  $\pi (+)$  (b.)  $2\pi (+)$

(c.)  $2\pi (-)$  (d.)  $\pi (-)$

54. If L stands for +, M stands for -, N stands for  $\times$ , P stands for  $\div$ , then  $14N10L42P2M8 =$

(a.) 248 (b.) 216 (c.) 153 (d.) 251

56. Find the missing number in the given set of numbers.



(a.) 40 (b.) 41 (c.) 45 (d.) 43

57. If eye is called hand, hand is called mouth, mouth is called ear, ear is called nose and nose is called tongue, with which

of the following would a person hear?

(a.) Eye (b.) Nose (c.) Mouth (d.) Ear

58. Which expression is equivalent to  $5[4+3(x-6)]$ ?

(a.)  $15x - 10$  (b.)  $15x - 70$  (c.)  $15x - 14$  (d.)  $15x - 110$

59. When a number is divided by 6, its remainder is always:

(a.) Greater than 6 (b.) Greater or equal to 0 or less than 6

(c.) lies between 6 and 12 (d.) less than zero

60. The Nap brothers had their first successful flight near Kitty Hawk, North Carolina, Mr. Sam finds it easy to remember the year in which the flight occurred because the number, the square root of his telephone number is nearest to a whole. In which year did the flight occur?

(a.) 1902 (b.) 1903 (c.) 1904 (d.) 1905

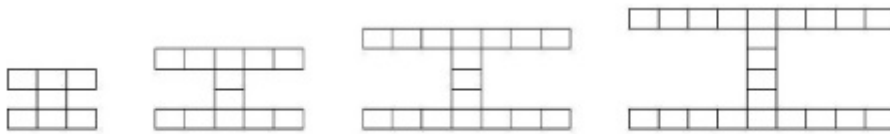
61. Find the missing character in the given question:

|   |   |    |    |
|---|---|----|----|
| 7 | 9 | 21 | 27 |
| 4 | 2 | 36 | 18 |
| 9 | 4 | 54 | ?  |

(a.) 24 (b.) 18

(c.) 36 (d.) 48

62. The square tiles given here are arranged to show a pattern. Which expression can be used to determine the number of square tiles in stage  $n$ ?

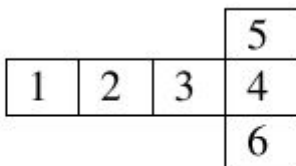


(a.)  $5n + 2$  (b.)  $4n + 3$  (c.)  $n^2 + 6$  (d.)  $n^3 + 6$

63. In the series 64122874215386217141328, how many pairs of successive number have a difference of 2 each?

(a.) Four (b.) Three (c.) Six (d.) Seven.

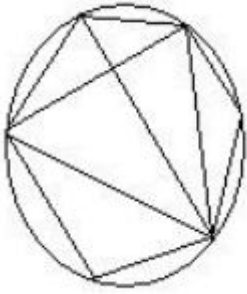
65. If you cut out the fold the pattern shown on the right to make a cube, which letter will be on the face of the cube opposite the face labelled 3?



(a.) 1 (b.) 2

(c.) 5 (d.) 6

66. How many triangles are there in the given figure?



(a.) 8 (b.) 10

(c.) 11 (d.) 12

67. John remembers that her brother Kabir's birthday falls after May but before May while Ria remembers that Kabir's birthday falls before May but after May. On what date Kabir's birthday falls?

(a.) May (b.) May (c.) May (d.) May

69. The given chart shows how much the party house charges for pizza parties for different number of people. If  $n$  stands for the number of people and  $c$  stands for the cost in Rs., which equation represents the information in the chart?

| Number of People | Cost (Rs.) |
|------------------|------------|
| 5                | 125        |
| 8                | 140        |
| 12               | 160        |
| 20               | 200        |

(a.)  $C = 5n + 40$  (b.)  $C = n + 45$

(c.)  $C = 5n + 100$  (d.)  $C = 2n + 35$

70. A is father of C and D is son of B. E is brother of A. if C is sister of D how is B related to E.

(a.) Daughter (b.) Brother (c.) Husband (d.) Sister-in-law

71. Sam is standing in the sun close to a lamp post. Sam is 5 feet tall and his shadow is 2 feet long. The shadow

of the lamp post is 8 feet long. How tall is the lam post?

(a.) 14ft (b.) 18ft

(c.) 16ft (c.) 20ft

72. Which of the following number does not have a multiplicative inverse?

(a.) 0 (b.)  $-1/3$  (c.) 1 (d.) 3

73. Neena and three of her friends worked together to make a quilt. The given table lists the fractional part of the quilt that each of the girl made. Which list shows the girl in order from the one who sewed the most to the one who sewed the least?

| Girl    | Parts Sewn |
|---------|------------|
| Nalini  | $3/8$      |
| Kamini  | $1/5$      |
| Shalini | $2/5$      |
| Reena   | $1/40$     |

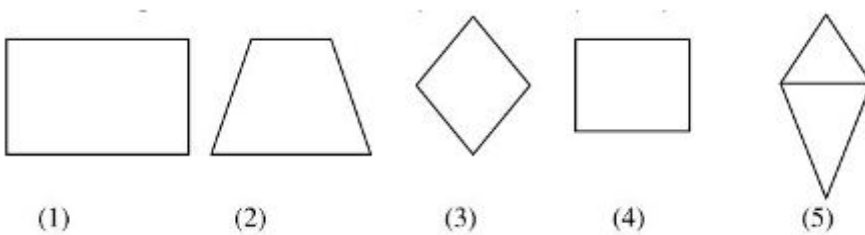
(a.) Reena, Nalini, Shalini, Kamini

(b.) Shalini, Nalini, Kamini, Reena

(c.) Reena, Kamini, Nalini, Shalini

(d.) Kamini, Shalini, Nalini, Reena

74. Which two quadrilaterals have exactly one line of symmetry?



(a.) 1 and 5 (b.) 2 and 3 (c.) 1 and 4 (d.) 2 and 5

75. In certain code INACTIVE is written as VITCANIE. How is ALIGATOR written that code?

(a.) ROTAGILA (b.) OTAGILAR (c.) ROTAGILE (d.) OTAGLIAR



---

---