

Section 1 – General English

1) Choose the correct synonym for the highlighted word:

That they suddenly formed an alliance makes me **suspicious**.

- A) mistrustful
- B) confident
- C) believable
- D) convinced

2) Fill in the blanks with appropriate idioms or phrases:

He wanted a break from the monotony of his job. So he _____ on an adventure.

- A) set aside
- B) set back
- C) set off
- D) set up

3) Choose the correct narration:

"How is your father?", asked my friend.

- A) My friend asked how was my father?
- B) My friend asked how is my father?
- C) My friend asked how my father is.
- D) My friend asked how my father was.

4) Fill in the blanks with the correct tense form of the verb.

I am feeling quite full. I _____.

- A) eat
- B) ate
- C) have just eaten
- D) will eat

5) Identify the clause of the underlined part of sentence:

You can go, whenever you want.

- A) Adverb clause of time
- B) Adverb clause of place
- C) Adverb clause of manner
- D) Adverb clause of reason

6) Fill in the blanks with the correct preposition:

The dog saw the cat on the otherside of the fence, so the dog jumped _____ the fence.

- A) above
- B) over
- C) into
- D) onto

Directions for questions 7 – 9:

Read the given passage and answer the questions that follows:

Bears often figure into the literature of Europe and North America, in particular that which is written for children. "The Brown Bear of Norway" is a Scottish fairy tale telling the adventures of a girl who married a prince magically turned into a bear, and who managed to get him back into a human form by the force of her love and after many trials and difficulties. With "Goldilocks and the Three Bears", a story from England, the three bears are usually depicted as brown bears. In German speaking countries, children are often told the fairytale of Snow White and Rose Red; the handsome prince in this tale has been transfigured into a brown bear. In the United States, parents often read to their preschool age children the book Brown Bear, Brown Bear, What Do

You See? to teach them their colours and how they are associated with different animals. The Russian bear is a common national personification for Russia (as well as the former Soviet Union) despite the country having no appointed national animal. The brown bear is Finland's national animal. The grizzly bear is the state animal of Montana. The California golden bear is the state animal of California. Both animals are subspecies of the brown bear, and the species was extirpated from the latter state. The coat of arms of Madrid depicts a bear reaching up into a strawberry tree to eat some of its fruit, whereas the Swiss city of Bern's coat of arms also depicts a bear and the city's name is popularly thought to derive from the German word for bear. The brown bear is depicted on the reverse of the Croatian 5 kuna coin, minted since 1993.

7) Which city is thought to have the origin of its name in the German word for bear?

- A) Madrid
- B) California
- C) Bern
- D) Croatia

8) She minted money from her house through her mint tea business. The underlined word means _____.

- A) money
- B) peppermint
- C) kuna
- D) made

9) Mint is the place _____ the coins of a country are produced.

- A) here
- B) where
- C) who
- D) there

10) Fill in the blanks with the appropriate articles:

Mr. Sharma became _____ Chancellor of a university in 1965.

- A) a
- B) an
- C) the
- D) no article

11) Rearrange the following jumbled up sentence into a meaningful one.

asked/I/come/to/him/today

- A) I asked to come him today.
- B) I asked him to come today.
- C) Today I come to him asked
- D) Today I come him to asked

12) Fill in the blanks with the appropriate article:

I like learning new languages. French is _____ easy language.

- A) a
- B) an
- C) the
- D) no article

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13) Fill in the blanks with the correct tense form of the verb.

I am hungry. I _____ to eat.

- A) want
- B) wants
- C) am wanting
- D) will wants

14) Choose the correct synonym for the highlighted word:

Don't believe anything she says. More than half of what she says is **fictional**.

- A) factual
- B) imaginary
- C) truthful
- D) honest

15) Fill in the blanks with the correct option:

I will _____ all your terms and conditions _____ the last one.

- A) accept, expect
- B) expect, accept
- C) accept, except
- D) expect, except

16) Fill in the blanks with the correct option:

I was wondering, _____ gift is this?

- A) Whom
- B) Whose
- C) When
- D) Who

17) Fill in the blanks with the correct option:

The vegetable cutlet made of potatoes and _____ broke into small _____.

- A) pieces, peas
- B) peas, pieces
- C) peas, peace
- D) peace, pieces

18) Rearrange the following jumbled up sentence into a meaningful one.

postman/tired/very/the/day/end/looked/at/of/the

- A) The end of day looked the very tired the postman.
- B) The very tired of the postman looked at the end of the day.
- C) The postman looked very tired at the end of the day.
- D) The very end of the tired day looked at the postman.

19) Fill in the blanks with a suitable modal verb:

There is no forecast of rain and it is sunny now. But it still _____ rain.

- A) may
- B) should
- C) must
- D) could

20) Choose the correct narration:

My brother had lost his charger and he asked me to give him mine.

A) My brother said, " Give me my charger."

B) I said, " Give me my charger."

C) My brother said, " Give me your charger."

D) I said, " Give me your charger."

Section 2 – General Studies

21) Ozone layer which absorbs harmful solar UV radiation is found in which layer of the atmosphere?

- A) Troposphere
- B) Stratosphere
- C) Mesosphere
- D) Ionosphere

22) What is the unit of measurement for the total amount of ozone in the atmosphere above a point on the earth's surface?

- A) Dobson Unit
- B) Darson Unit
- C) Datsun Unit
- D) Dalton Unit

23) Which type of inflation is caused due to excessive growth of money supply in the economy?

- A) Cost-push Inflation
- B) Cost-pull Inflation
- C) Demand-pull Inflation
- D) Demand-push Inflation

24) Who among the following conferred the title of 'Father of the Nation' on Mahatma Gandhi?

- A) C. Rajagopalachari
- B) Vallabhbhai Patel
- C) Jawaharlal Nehru
- D) Subhash Chandra Bose

25) Match the SAARC summit meetings held in the following places with respective years.

Group A	Group B
1. Dhaka	a. 1986
2. Islamabad	b. 1985
3. Khatmandu	c. 1988
4. Bangalore	d. 1987

- A) 1-d; 2-a; 3-b; 4-c
- B) 1-b; 2-c; 3-d; 4-a
- C) 1-c; 2-d; 3-a; 4-b
- D) 1-b; 2-d; 3-a; 4-c

26) What is the name of the satellite that was sent into orbit by a SAARC country for technical and scientific contribution?

- A) CARTOSAT
- B) METSAT
- C) GSAT-9
- D) PSAT-4

27) India being a tropical country, gets abundance of sunlight. Of late, solar cells have become popular in the country even in its remotest locations. These cells are also called:

- A) Photovoltaic cells
- B) Dry cells
- C) Galvanic cells
- D) Electrochemical cells

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28) The number of members in the United Nations Economic and Social Council is:

- A) 54
- B) 57
- C) 58
- D) 59

29) Which of the following is NOT a noble gas?

- A) Helium
- B) Nitrogen
- C) Argon
- D) Neon

30) Which of the following is a disease that results in inflammation of the skin and also known as eczema?

- A) Dermatitis
- B) Dysmenorrhoea
- C) Scabies
- D) Constipation

31) Match the following Constitutional Amendment Acts with their Points of significance:

Constitutional Amendment Act	Point of Significance
a. 61st	i. Introduction of Panchayat Raj
b. 86th	ii. Voting age reduced from 21 to 18
c. 73rd	iii. Free and compulsory education to children between 6 and 14 years.

- A) a-i, b-ii, c-iii
- B) a-ii, b-i, c-iii
- C) a-ii, b-iii, c-i
- D) a-iii, b-i, c-ii

32) In a biotic community, the primary consumers are

- A) Carnivores
- B) Detritivores
- C) Herbivores
- D) Omnivores

33) Which of the following energy sources cannot be replenished in a short period of time?

- A) Natural gas
- B) Hydro energy
- C) Geo thermal energy
- D) Wind energy

34) The National Disaster Management Authority (NDMA), the apex body for Disaster Management in India, is headed by the:

- A) President of India
- B) Prime Minister of India
- C) Defence Minister of India
- D) Home Minister of India

35) The Taj Mahal is built with white marble and is threatened by environmental pollution. Threat to Taj Mahal from Mathura refinery is due to the effect of which gas (es)?

- A) Oxides of Sulphur and Nitrogen
- B) Mercury vapours
- C) Oxides of Silicon and Arsenic
- D) Osmium tetroxide

36) Scurvy is caused by the deficiency of

- A) Vitamin A
- B) Vitamin C
- C) Vitamin B6
- D) Vitamin E

37) Choose the INCORRECT statement from the following.

- A) The main constituent of bio-gas is ethane
- B) Gobar-gas is produced when crops, vegetable wastes etc., decompose in the absence of oxygen
- C) Bio-mass is a renewable source of energy
- D) Planting more trees is encouraged to ensure clean environment

38) What was the theme of World AIDS Day for the year 2017?

- A) Right to health
- B) Close the Gap
- C) Getting to Zero
- D) Zero Discrimination

39) Which among the following countries are latest entry into the WTO membership?

- A) Afghanistan
- B) Bhutan
- C) Nepal
- D) Bangladesh

40) The energy that is harnessed from the volcanic regions under the earth's surface and is used to generate power and heat is known as

- A) Wave Energy
- B) Windmill Energy
- C) Spring Energy
- D) Geo-thermal Energy

41) Oil spills are a major marine ecosystem threat. Which Indian city faced this issue in January 2017?

- A) Kolkata
- B) Mumbai
- C) Visakhapatnam
- D) Chennai

42) The Mascarene Islands, located in the east of Madagascar is a group of Islands consisting of Reunion, Mauritius, Rodrigues. In which ocean are those islands located?

- A) Pacific
- B) Atlantic
- C) Indian
- D) Arctic

43) Who is the Indian member of the International court of Justice who was re-elected for 2nd term?

- A) Dalveer Bhandari
- B) Markandey Katju
- C) Raghunandan Swarup
- D) Mohd. Hidayatullah

44) The World AIDS Day is observed to raise awareness among people towards the problem of AIDS and HIV. It is observed every year all over the world on

- A) 1st December
- B) 1st May
- C) 1st October
- D) 1st August

45) Where is the headquarter of the National Human Rights Commission?

- A) New Delhi
- B) Mumbai
- C) Ahmedabad
- D) Kolkata

46) The economic reform, popularly known as, Liberalization, Privatization and Globalization was aimed at making the Indian economy as fastest growing economy and globally competitive. This process started in the:

- A) Early 1990s
- B) Early 1980s
- C) Early 2000s
- D) Late 1980s

47) When was the Universal Declaration of Human Rights adopted?

- A) December 10, 1948
- B) December 1, 1958
- C) December 10, 1946
- D) December 1, 1952

48) In which part of the constitution is the state enjoined to establish Panchayat Raj institutions?

- A) Preamble
- B) Directive Principles
- C) Fundamental Rights
- D) Fundamental Duties

49) Which International non-profit NGO is registered in Belgium under Disaster Management?

- A) TIEMS
- B) IEAM
- C) BDM
- D) ITDM

50) According to the economist Coulborn, "too much money chasing too few goods" is

- A) Globalization
- B) Inflation
- C) Liberalization
- D) Economic growth

Section 3 – Constitution of India

51) As of 31st Dec 2017, what is the age of retirement of Supreme Court judge?

- A) 55 years
- B) 65 years
- C) 60 years
- D) No age limit

52) Which Government of India (GOI) Act was referred under Article 6 of the Indian Constitution?

- A) GOI Act 1848
- B) GOI Act 1909
- C) GOI Act 1919
- D) GOI Act 1935

53) Code of Criminal Procedure falls in which of the following lists?

- A) Union List
- B) State List
- C) Concurrent List
- D) Not Related to Constitution

54) 'To protect the sovereignty, unity and integrity of India', is established under which of the following sections of the Indian Constitution?

- A) Fundamental Rights
- B) Fundamental Duties
- C) Directive Principles of State Policy
- D) Preamble of Constitution

55) The Election Commission was established in accordance with the Indian Constitution in the year:

- A) 1948
- B) 1949
- C) 1950
- D) 1951

56) Article 370 of the Indian Constitution is related to which of the following states?

- A) Assam
- B) Meghalaya
- C) Jammu & Kashmir
- D) Mizoram

57) Which of the following articles of Indian constitution deals with the Right to Freedom of Religion?

- A) Articles 14 to 18
- B) Articles 19 to 22
- C) Articles 23 to 24
- D) Articles 25 to 28

58) From which date did Article 370 become operative?

- A) Fifth March, 1948
- B) Fifth September, 1950
- C) Seventeenth November, 1952
- D) Twenty fifth December, 1954

59) Which part of the Indian Constitution deals with Fundamental Duties?

- A) Part 3
- B) Part 4
- C) Part 4A
- D) Part 5

60) Which age group has Right to education according to article 21 A of Indian Constitution?

- A) 3 to 16 years
- B) 4 to 14 years
- C) 5 to 13 years
- D) 6 to 14 years

61) Which of the following articles of Indian Constitution deals with the Rights of citizenship of persons who migrated to India from Pakistan?

- A) Article 5
- B) Article 6
- C) Article 8
- D) Article 9

62) Which article of the Indian constitution deals with the, 'Continuance of the rights of citizenship'?

- A) Article 7
- B) Article 8
- C) Article 9
- D) Article 10

63) Which schedule of Indian Constitution deals with Centre-State-Concurrent list?

- A) Sixth Schedule
- B) Seventh Schedule
- C) Eighth Schedule
- D) Ninth Schedule

64) Which one of the following falls under State List?

- A) Bankruptcy and insolvency
- B) Public health and sanitation; hospitals and dispensaries
- C) Insurance
- D) Population control and family planning

65) Which article of Indian Constitution empowers the parliament to make provisions for elections to legislatures?

- A) Article 324
- B) Article 325
- C) Article 327
- D) Article 329

66) Which article of Indian constitution provides, 'Right to Minorities to establish educational institutions'?

- A) Article 29
- B) Article 30
- C) Article 31
- D) Article 31A

67) Which article empowers the Supreme Court of India to review any judgement pronounced or made by it earlier?

- A) Article 137
- B) Article 138
- C) Article 139
- D) Article 139A

68) From which fund the salaries and other expenses of the Supreme Court are drawn?

- A) Public Accounts
- B) Grants
- C) Consolidated Funds
- D) Emergency funds

69) Based on whose recommendations fundamental duties were included in the Indian Constitution?

- A) Swaran Singh Committee
- B) Kher Committee
- C) Pant Committee
- D) Amitabh Kant Committee

70) Which of the following is dealt under Article 325 of Indian Constitution?

- A) Bar to interference by courts in electoral matters
- B) Elections to the House of the people
- C) No discrimination on the grounds of religion, race, caste or sex
- D) Power of Parliament to make provisions for elections to Legislatures

Section 4 - Constitution of Jammu and Kashmir

71) Who appoints the Governor of Jammu & Kashmir ?

- A) Chief Minister of Jammu & Kashmir
- B) Prime Minister of India
- C) Chief Justice of High Court of Jammu & Kashmir
- D) President of India

72) According to the constitution of J&K, 1956, when the office of the Chief Justice is vacant or when the Chief Justice is by reason of absence or otherwise unable to perform the duties of his office, the duties of the office, shall be performed by

- A) One of the other Judges of the Court as the President may appoint for the purpose
- B) One of the other Judges of the Court as the Governor may appoint for the purpose
- C) One of the other Judges of the Court as the Chief Justice of High Court may appoint for the purpose
- D) One of the other Judges of the Court as the Chief Justice of Supreme Court may appoint for the purpose

73) The first full-fledged High Court of Judicature for the Jammu and Kashmir State was established in the year

- A) 1928
- B) 1929
- C) 1935
- D) 1947

74) According to State Judiciary of J&K, a person who is an advocate or pleader shall be eligible to be appointed as a district judge if he has been for

- A) Not less than five years an advocate or pleader and is recommended by the High Court for appointment
- B) Not less than seven years an advocate or pleader and is recommended by the High Court for appointment
- C) Not less than ten years an advocate or pleader and is recommended by the High Court for appointment
- D) Not less than one year an advocate or pleader and is recommended by the High Court

75) Which of the following is a CORRECT statement in respect of Money Bills?

- A) Legislative Council will have to return the bill to the Legislative Assembly with its recommendations within a month of the receipt of bill after its transmission from Legislative Assembly
- B) A Money Bill shall be introduced in a Legislative Council
- C) If the Legislative Assembly does not accept any of the recommendations of the Legislative Council, the Money Bill shall not be passed by both Houses in the form in which it was passed by the Legislative Assembly, without any of the amendments recommended
- D) If a Money Bill passed by the Legislative Assembly and transmitted to the Legislative Council for its recommendations is not returned to the Legislative Assembly within the said period of fourteen days, it shall be deemed to have been passed by both House

76) As per section 99 under Part VII of J&K Constitution, a Judge of the High Court may resign his office by writing under his hand addressed to

- A) The Chief Justice of India
- B) The Governor of the state
- C) The President of India
- D) The Prime Minister of India

77) As per the Constitution of Jammu and Kashmir, no person to be ineligible for inclusion in electoral roll on grounds of religion, race, caste or sex, under section

- A) 136
- B) 137
- C) 138
- D) 139

78) As per the J&K Constitution, which of the following measures may be taken against the member if he sits or votes as a member of the legislative Assembly or the legislative Council even after knowing that he is not qualified or that he is disqualified for

- A) He is imposed a permanent ban on voting
- B) He is thrown out of the House forcibly
- C) He may be penalised
- D) He may be sent to jail

79) As per J&K Constitution, every person appointed to be a Judge of the High Court shall, before he enters upon his office, make and subscribe oath before

- A) The President of India
- B) The Prime Minister of India
- C) The Governor of the state or some person appointed in that behalf by him
- D) The Chief Justice of the state or some person appointed in that behalf by him

80) What is the meaning of the word Quorum?

- A) Minimum number of members required to be present in the House to make the proceedings of that meeting valid
- B) Maximum number of members allowed in the house to continue with the Parliamentary procedures
- C) The discipline of maintaining decorum in the house to continue the proceedings of the House
- D) Approval of majority members present during the sitting to make any critical decision of the House

81) Which of the following regions is the major producer of saffron in the state of Jammu and Kashmir?

- A) Leh district
- B) Kashmir valley
- C) Jammu district
- D) Suru valley

82) Gulmarg is Kashmir's most popular tourist resort. It is famously known as

- A) Mountain Queen
- B) Meadow of Flowers
- C) The Crown of Kashmir
- D) Gods own country

83) Which wildlife sanctuary is bounded to the north by Gumsar Lake, east by Rupri, south by Saransar and to the west by the Pir Panjal pass and is located in Shopian district of Kashmir?

- A) Lachipora Wildlife Sanctuary
- B) Karkoram Wildlife Sanctuary
- C) Changthang Wildlife Sanctuary
- D) Hirpora Wildlife Sanctuary

84) According to the Department of Geology and Mining, Magnesite is used as refractory bricks for furnaces and has a wide range of usage in pharmaceuticals. The magnesite reserves has its prominence in:

- A) Udhampur
- B) Puga valley
- C) Rajauri
- D) Baramulla

85) Which of the following places of Jammu and Kashmir is also known as 'Anglers Paradise'?

- A) Baramulla
- B) Kupwara
- C) Anantnag
- D) Pahalgam

86) A Permanent Indus Commission was set up as a bilateral commission to implement and manage the Treaty. The Commission solves disputes arising over

- A) water logging
- B) water cleaning
- C) water sharing
- D) water distributing

87) A fort built by Raja Bahulochan approximately 3000 years ago and remains to be the oldest and the most iconic of all monumental marvels in Jammu. This fort is known as:

- A) Bag-e-Bahu Fort
- B) Dhanidhar Fort
- C) Hari Parbat Fort
- D) Pari Mahal

88) This is one of the India's most scenically beautiful wildlife reserves. It is located 22 kilometres from Srinagar and forms almost half of the Dal Lake's catchment area. Which of the following is this?

- A) Dachigam
- B) Jasrota
- C) Coorg
- D) Tadoba

89) As of October 2017, who amongst the following is the Managing Director of Jammu and Kashmir State Power Development Corporation Limited?

- A) Mehbooba Mufti
- B) Kifayat Rizvi
- C) Shah Faesal
- D) Shazia Bashir

90) The temperature in Kashmir in winters may go down to -15°C in the hilly areas, while as the plains have a comparatively better temperature at -5 to -8°C . The local people wear woollen clothes and a long gown to save them from the chill. The gown is called:

- A) Mundu
- B) Puanchei
- C) Pheran
- D) Dhotar

91) Jammu, the winter capital of the maharajas (the former Hindu rulers of the region) and second largest city in the state, was historically the seat of which dynasty?

- A) Morya
- B) Dogra
- C) Aryan
- D) Agadha

92) River Jhelum is the main waterway of the Kashmir valley. This river is also known by the name:

- A) Sagarmati
- B) Vyeth
- C) Vipasa
- D) Kishan Ganga

93) The temperature in Jammu dips during the rainy season, however the humidity remains high. The average temperature in this region during peak summer is approximately in the range:

- A) 35° - 39°C
- B) 42° - 46°C
- C) 20° - 24°C
- D) 44° - 48°C

94) A revival of Jammu and Kashmir's first hydroelectric project constructed in 1905, is on the state government's radar. This was constructed as run-of-river scheme back in 1905, with the initial installed capacity of 4 Megawatts. What is the name of this project?

- A) Kiru
- B) Kirthai
- C) Salal
- D) Mohra

95) Which of the following is located on Gopadari Hill in the south-east of Srinagar and lies at a height of 1100 feet above surface level of the city?

- A) Venkateshwara Temple
- B) Somnath Temple
- C) Jagannath Temple
- D) Shankaracharya Temple

96) Which of the following is the summer capital of Jammu and Kashmir?

- A) Srinagar
- B) Jammu
- C) Kashmir
- D) Ladakh

97) Which architectural structure of Jammu and Kashmir is also known as 'Lhachen Palkhar'?

- A) Thiksey Monastery
- B) Kathi Darwaza
- C) Jama Masjid
- D) Leh Palace

98) According to the Department of Geology and Mining, Dolomite is found in large quantities in Rajouri, Udhampur, Reasi districts of Jammu and Kashmir. It is mainly used in the manufacture of:

- A) Refractory bricks
- B) Cement
- C) Crucibles
- D) Decorative stones

99) Which of the following languages is widely spoken amongst the Gujjars and Bakarwal tribes of Jammu and Kashmir region?

- A) Garo
- B) Gojri
- C) Kinnauri
- D) Kangri

100) What is known as harvest inspection and is conducted twice in a year for Kharif and Rabi crops, it is carried out by the Patwaris after spot inspection of each field for recording the condition of the standing crop including kharaba?

- A) Jamabandi
- B) Girdawari
- C) Parat-Patwar
- D) Misalhaquat

101) Which of the following is a major tributary of the Ravi river and its source is located in the Kailash Mountains at an elevation of 14,100 ft close to Bhaderwah Mountains of the State?

- A) Chenab
- B) Ujh
- C) Jhelum
- D) Tawi

102) It is printed register with Patwari, separately maintained for each village consisting of normally 100 leaves. Each leaf has a foil and counterfoil and is duly numbered. The title page depicts the name of village, Tehsil, District and date of issue etc. What is being referred here?

- A) Registrar Booklet
- B) Parat-Sarkar
- C) Parat - Patwar
- D) Mutation Register

103) The six rivers of the Indus basin flow across the Himalayan ranges to end in the Arabian sea south of Karachi. They originate from

- A) Tibet
- B) Bangladesh
- C) Pakistan
- D) Jammu and Kashmir

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104) Jammu and Kashmir State is capitalizing its potential of hydroelectricity with new hydro power projects installed by NHPC. One such project, Chutak Hydroelectric Project is on the river:

- A) Chenab
- B) Zaskar
- C) Suru
- D) Tawi

105) Nubra Valley Temperatures are repeatedly below zero degree for most of the months. The best time to visit the nubra valley is :

- A) February to April
- B) July to September
- C) December to February
- D) October to December

106) A fruit-seller bought 47kg 500g of mangoes from one garden, 64kg 900g of mangoes from another garden and 55kg 250g of mangoes from the third garden. If he sold 30kg 750g mangoes, then how many mangoes does he have now?

- A) 136kg 900g
- B) 167kg 750g
- C) 125kg 500g
- D) 154kg 150g

107) The ratio of the length and breadth of a plot is 5:4, if the breadth is 60 m less than the length, then the perimeter of the plot is

- A) 1080 m
- B) 1198 m
- C) 890 m
- D) 1280 m

108) A floor is 6 m long and 3 m wide. A square carpet of sides 2 m is laid on the floor. Then the area of the floor that is un-carpeted is:

- A) 10 sq.m
- B) 12 sq.m
- C) 14 sq.m
- D) 8 sq.m

109) The perimeter of a triangle is 24 cm and inradius of the triangle is 3.5 cm, then the area of the triangle is

- A) 35 sq. cm
- B) 49 sq. cm
- C) 42 sq. cm
- D) 21 sq. cm

110) Area of trapezium is 500 sq. cm. Length of one of the parallel sides is 20 cm and the distance between the parallel sides is 10 cm then the length of other parallel side is

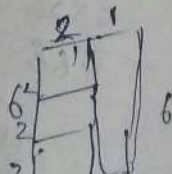
- A) 80 cm
- B) 48 cm
- C) 98 cm
- D) 60 cm

111) A right circular cone is 27 cm high and the radius of its base is 2 cm. The cone is melted and recast into a sphere. The diameter of the sphere is

- A) 4 cm
- B) 6 cm
- C) 8 cm
- D) 3 cm

112) If the diameter of the internal and external surface of a hollow hemispherical shell are 12 cm and 8 cm respectively, then the volume of the solid part in the hemisphere shell is

- A) $196\pi/3 \text{ cm}^3$
- B) $304\pi/3 \text{ cm}^3$
- C) $140\pi/3 \text{ cm}^3$
- D) $133\pi/3 \text{ cm}^3$



$$\frac{504}{6 \times 3} = 28$$

$$\frac{4}{3} \pi (6^3 - 4^3) = \frac{4}{3} \pi (216 - 64)$$

$$\frac{4}{3} \pi \times 152$$

51A

113) 0.2 metres is the height of water in a cylindrical container of radius r cm. What is the height of this quantity of water if it is poured into a cylindrical container of radius $\frac{1}{4}r$ cm?

- A) 0.125 metres
- B) 1.25 cm
- C) 12.5 cm
- D) 2.35 cm

114) A water tank contains 3235 litres of water. During a day 695 litres 532 ml. of water is pumped out from the tank. How much water is left in the tank?

- A) 25394.68 litres
- B) 253.9648 ml
- C) 2539648 ml
- D) 2539.468 litres

115) The volume of a sphere is 4851 cm^3 , then its diameter is

- A) 10.5 cm
- B) 21 cm
- C) 19 cm
- D) 17 cm

116) A man walking at the rate of 18 km per hour crosses a square field diagonally in 9 seconds. The area of the field is

- A) 200 sq.m
- B) 1012.5 sq.m
- C) 198.6 sq.m
- D) 1200 sq.m

117) If the total surface area of a cube is 384 sq. m , then its volume is

- A) 1331 m^3
- B) 512 m^3
- C) 81 m^3
- D) 64 m^3

118) The radius of a sphere, if its volume is 54.44 cm^3 is approximately

- A) 1.3 cm
- B) 4.2 cm
- C) 1.4 cm
- D) 2.4 cm

119) A wire is bent into the form of a square of side 28 cm. The wire is straightened and bent into the form of a circle then the radius of the circle so formed is

- A) 17.5 cm
- B) 19.25 cm
- C) 18.14 cm
- D) 12.56 cm

120) If the radius of a sphere is increased by 5%, then the volume will be increased approximately by

- A) 15.76%
- B) 23.75%
- C) 29.30%
- D) 35.64%

$$4851 = \frac{4}{3} \pi r^3$$

$$4851 \times \frac{3}{4 \times 3.14} = r^3$$

$$112.5 = r^3$$

$$r = 4.8$$

$$18 \text{ km/hr} = \frac{18 \times 5}{18} = 5 \text{ m/sec}$$

$$5 \times 9 = 45 \text{ m}$$

$$45^2 = 2025$$

$$\frac{2025}{4} = 506.25$$