1. **Find the square root of** $\dfrac{(0.064-0.008)(0.16-0.04)}{(0.16+0.08+0.04)(0.4+0.2)^3}$ **/** dk ox≷ey Kkr djA

   (a) $\dfrac{2}{3}$ (b) $\dfrac{1}{3}$ (c) 3 (d) $\dfrac{3}{2}$

2. **A number exceeds its two fifth by 75. The number is:**

   ,d la[;k vius $\dfrac{2}{5}$ ls 75 vf/d gSrks la[;k Kkr djA

   (a) 125 (b) 100 (c) 112 (d) 150

3. **The exponential form of** $\sqrt{\sqrt{2}\times\sqrt{3}}$ **is:/**

   $\sqrt{\sqrt{2}\times\sqrt{3}}$ dk /krkad : i D;k gS

   (a) $6^{-1/2}$ (b) $6^{1/2}$ (c) $6^{1/4}$ (d) 6

4. **A milk vendor has 21 litres of cow milk, 42 litres of toned milk and 63 litres of double toned milk. If he wants to pack them in cans so that each can contains same litres of milk and does not want to mix any two kinds of milk in a can, then the least number of cans required is:**

   ,d nw/ foØsrk ds ikl 21yh- xk; dk nw/] 42yh- VksaM nw/ rFkk 63 yh- Mcy VksaM nw/ gS ;g og bu nw/ dks dsuksa esa bl izdkj iSd djuk pkgrk gSfd iR;sd du esa cjkcj ek=kk esa nw/ gks vkSj nks izdkj ds nw/ dks ,d du esa og feyk;k Hkh ughagS rks dusa dh U;wure la[;k Kkr djA

   (a) 3 (b) 6 (c) 9 (d) 12

5. **A box has 1 rupee, 50 paisa and 25 paisa coins in the ratio 3 : 2 : 5 worth Rs. 252. The number of 25 paisa coins in the box is:**

   ,d lanwd esa 1: -] 50 iSls vkSj 25 iSls ds flDds 3 % 2 % 5 ds vuqikr esa gSa ftudk ;ksx 252: - gSA lanwd esa 25 iSls okys flDdksa dh la[;k fdruh gS\

   (a) 96 (b) 144 (c) 240 (d) 48

6. **If 4 years ago the ratio between the ages of P and Q was 5 : 6 and the sum of their ages at present is 52, what is the ratio of their present ages?**

   ;fn pkj o"kZ igys **P** vkSj **Q** ds chp vk;q dk vuqikr 5%6 Fkk vkSj oÙkZeku esa nksuksa dh vk;q dk ;ksx 52 gSrks mudh oÙkZeku vk;q dk vuqikr D;k gS\

   (a) $5 : 6$ (b) $6 : 7$ (c) $7 : 8$ (d) $4 : 5$

7. **A number is increased by x%; to get back to the original number, it is to be reduced by?**

   ,d la[;k dks **x%** c<k fn;k x;kA vkjfHkd la[;k ikIr djus ds fy, bls fdruk ifr'kr ?kVkuk gksxk\

   (a) $\dfrac{10x}{10+x}\%$ (b) $\dfrac{100x}{100+x}\%$ (c) $x\%$ (d) $\dfrac{x}{100+x}\%$

8. **The outer and inner diameter of a circular path be 728cm and 700cm respectively. The breadth of the path is:**

   ;fn ,d oÙkkdkj iFk dk ckg~,oavkarfjd 0;kl Øe'k% 728 lseh- vkSj 700 lseh- gks rks iFk dh pkSMkbZ fdruh gksxh\

   (a) 7 cm   (b) 14 cm   (c) 28 cm   (d) 20 cm

9. **A piece of wire when bent to form a circle will have a radius of 84cm. If the wire is bent to form a square, the length of a side of the square is:**

   oÙk cukus ds fy, ekMsus okys rkj dh f=kT;k 84 lseh gksxhA ;fn rkj dks oxZ cukus ds fy, ekMsk tk, rks oxZ dh ,d Hkqtk dh yEckbZ fdruh gksxh\

   (a) 152cm   (b) 168cm   (c) 132cm   (d) 225cm

10. **A parallelogram has sides 60m and 40m and one of its diagonals is 80m long. Its area is:**

60 eh- rFkk 40 eh- Hkqtkvksaokys lekUrj prqHkqZt dk ,d fod.kZ 80 eh- gS§ prqHkqZt dk {ks=iQy Kkr dj§A

(a) $500\sqrt{15}$ m² (b) $600\sqrt{15}$ m² (c) $40\sqrt{15}$ m² (d) $450\sqrt{15}$ m²

11. **15 men can finish a piece of work in 20 days, however it takes 24 women to finish it in 20 days. If 10 men and 8 women undertake to complete the work, then they will take.**

,d dk;Z dks 15 iq:"k 20 fnuksa esa iwjk dj ldrs gS§ tcfd mlh dk;Z dks 24 efgyk,a 20 fnuksa esa djrh gS§ 10 iq:"k vkSj 8 efgyk,a ml dk;Z dks fdrus fnuksa esa dj§xs\

(a) 20 days (b) 30 days (c) 10 days (d) 15 days

12. **4 men and 6 women complete a work in 8 days, 2 men and 9 women also complete in 8 days. The number of days in which 18 women complete the work is:**

4 iq:"k rFkk 6 efgyk,a fdlh dke dks 8 fnuksa esa lekIr djrs gS§ vkSj 2 iq:"k rFkk 9 efgyk,a Hkh dke dks 8 fnuksa esa lekIr djrs gS§rks 18 efgyk,a dke dks fdrus fnuksa esa lekIr dj§xh\

(a) $5\dfrac{1}{3}$ days (b) $5\dfrac{2}{3}$ days (c) $4\dfrac{1}{3}$ days (d) $4\dfrac{2}{3}$ days

13. **A train is 250m long. If the train takes 50 seconds to cross a tree by the railway line, then the speed of the train in km/hr is:**

,d jsyxkM+h 250 ehVj yEch gS ;fn og jsyos ykbu }kjk o{k dks ikj djus esa 50 lsds.M ysrh gS rks mldh pky fdruh fdeh@?kaVk gS

(a) 9 (b) 5 (c) 18 (d) 10

14. **A man borrows some amount at the rate of 12% per annum at simple interest. After 6 years 8 months, he paid Rs.720 as an interest. Find the amount borrowed by him.**

,d vkneh lk/kj.k C;kt ij 12» ifr o"kZ dh nj ls dqN jkf'k m/kkj yrk gS 6 o"kZ 8 eghus ds ckn ml us C;kt ds : i esa : -720 dk Hkqxrku fd;kA ml ds }kjk m/kkj yh xbZ jkf'k Kkr dj§A

(a) ₹ 900 (b) ₹ 960 (c) ₹ 920 (d) ₹ 1620

15. **The compound interest on Rs.30,000 at 7% per annum for a certain time is Rs.4,347. The time is:**

30]000 : - dh jkf'k ij 7» okf"kd nj ls fuf'pr le; ds fy, pØof¼ C;kt 4]47: - gS og le; gS

(a) 3 years (b) 4 years (c) 2 years (d) 2.5 years

16. **White selling to the retailer, a company allows 30% discount on the marked price of their products. If he retailer sells those products at marked price, his profit % will be:**

,d daiuh fjVsyj dks lekku cprs oDr viuh oLrq ds vafdr ewY; ij 30» NwV nrh gS ;fn fjVsyj mu oLrqvksa dks vafdr ewY; ij cprk gS rks mldk ifr'kr ykHk Kkr dj§A

(a) 30» (b) $\dfrac{17}{2}$» (c) 40» (d) $42\dfrac{6}{7}$»

17. **If $x(x+y+z)=20$, $y(x+y+z)=30$ and $z(x+y+z)=50$, then the value of 2(x+y+z) is:**

;fn $x(x+y+z)=20$, $y(x+y+z)=30$ vkSj $z(x+y+z)=50$ gS rks **2(x+y+z)** dk eku D;k gksxk\

(a) 20 (b) 10 (c) 15 (d) 18

18. **If for non-zero x, x² - 4x - 1 = 0, the value of $x^2+\dfrac{1}{x^2}$ is :**

;fn **x** 'kwU; ugha djkj ds fy,] **x² - 4x - 1 = 0** rks $x^2+\dfrac{1}{x^2}$ =?

(a) 4 (b) 10 (c) 12 (d) 18

19. **If (2, 0) is a solution of the linear equation 2x + 3y = K, then the value of K is:**

;fn js[kd lehdj.k **2x + 3y = K** dk gy (2] 0) gS rks **K** dk eku crkb,A

(a) 4 (b) 6 (c) 5 (d) 2

20. **The graph of linear equation y = x passes throughout the point.**

js[kd lehdj.k **y = x** dk ys[kkfp= (xzki) fdl fcUnq ls xqtjrk gS

(a) $\left(\dfrac{3}{2}, -\dfrac{3}{2}\right)$ (b) $\left(0, -\dfrac{3}{2}\right)$ (c) (1, 1) (d) $\left(-\dfrac{1}{2}, \dfrac{1}{2}\right)$

Directions (21-22): The graph given below shows the daily income of 50 workers in a factory. Study the graph and answer the questions:

funZ"k (21&22)% uhps fn, x;s xkzkQ ea fdl dkj[kkuk ea dk;Zjr 50 dkexkjksa ds vk; dks n'kkZ;k x;k gSA xkzkQ dk vè;;u fuEu iz'uksa dk mÙkj nsaA
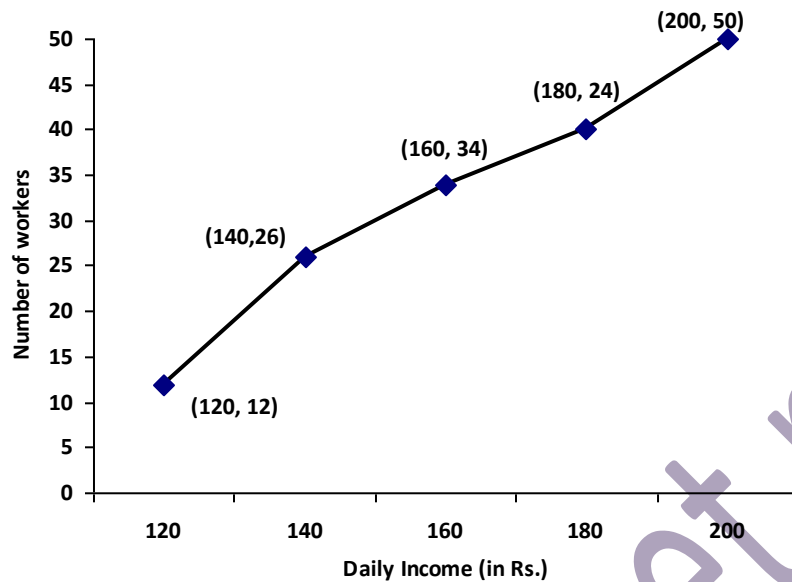
21. **What percentage of the factory workers earn between ₹ 150 and ₹ 180?**
    fdrus » deZpkjh : -150 rFkk : -180 ds chp dekrs gSA
    (a) 6%   (b) 16%   (c) 12%   (d) 20%

22. **The median wages in the factory is:**
    dkj[kkuksa ea etnwjh dk vkS'r ekè; fdruk gSA
    (a) ₹ 140   (b) ₹ 138   (c) ₹ 150   (d) ₹ 160

23. **If O is the orthocenter of triangle ABC and ∠BOC = 100°, the measure of ∠BAC is:**
    ;fn f=kHkqt **ABC** dk yEc dsaæ **O** gS rFkk **∠BOC = 100°** gS rks **∠BAC** dk eku crkb,\
    (a) 100°   (b) 180°   (c) 80°   (d) 200°

24. **The degree measure of 1 radian** $\left(\pi = \dfrac{22}{7} \right)$
    ,d jfM;u dk eki D;k gksxk (fMxzh ea)
    (a) 57°61'22" (approx.)   (b) 57°16'22" (approx.)
    (c) 57°21'16" (approx.)   (d) 57°62'16" (approx.)

25. **After 9'O clock at what time between 9 p.m. and 10 p.m. will the hour and minute hands of a clock point in opposite direction?**
    9 cts ds ckn] jkf=k 9 vkSj 10 cts ds chp ,d nhokj ?kMh dh ?kaVk vkSj feuV dh lqb;ka ,d nwljs dh foijhr fn'kk ea fdl le; gksxh\
    (a) 15 minutes past 9 (9 ctdj 15 feuV)   (b) 16 minutes past 9 (9 ctdj 16 feuV)
    (c) 16 $^4/_{11}$ minutes past 9 (9 ctdj 16 $^4/_{11}$ feuV)   (d) 17 $^1/_{11}$ minutes past 9 (9 ctdj 17 $^1/_{11}$ feuV)

26. **BORE : 10 : : HOTEL : ?**
    (a) 12   (b) 15   (c) 18   (d) 30

27. **Direction:** Two statements are given followed by two conclusions I and II. You have to consider the two statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions are definitely drawn from the given statements :
    funZ"k% nks dFku fn, x, gS ftuds vkxs nks fu"d"kZ I vkSj II fudkys x, x, gSA vki dks ekuuk gS fd oDrO; l R; gS pkgs os lkekU;r% Kkr rF;ksa ls fHkUu izrhr gksrk gS vki dks fu.kZ djuk gS fd fn, x, fu"d"kksZ ea ls dkS&ls fuf'pr : i ls oDrO;ksa }kjk lgh fudkyk tk ldrk gS ;fn dksbZ gksA

    Statements / dFku%

    Some peons are poor / dqN pijklh fu/Zu gkrs gSA

    X is poor / X fu/Zu gSA

Conclusions / fu"d"kk%

I. X is a peon / X pijkl h gA

II. X has a large family / X dk ifjokj cMk gA

(a) Only I follows / dDoy I gh fufgr gA

(b) Only II follows / dDoy II gh fufgr gA

(c) Both I and II follow / I vkSj II nkuksa fufgr gA

(d) Neither I nor II follows / u rks I vkSj u gh II fufgr gA

28. **Direction:** One/Two statement(s) is/are given followed by two conclusions I and II. You have to consider the two statements to be true even if /they seem(s) to be at variance from commonly known facts. You have to decide which of the given conclusions , if any follow(s) from the given statement(s) :

funZ'k% fuEufyf[kr izu ea ,dankS oDrO; fn;kefn, x;k@x;, gSaftl ftl dkftuds vkxs nks fu"d"kkZ fudkys x, gaA vkidks ekuuk gSfd oDrO; I R; gSSgSapkgsogos I keklU;r% Kku rF;ka ls fHkUu izrhr gksrk gksa@gksrs gkA vkidks fu.kZ djuk gSfd fn, x, fu"d"kkZdeas ls dkS&lk&ls fuf'pr : i ls oDrO;@oDrO;ka}jkj ls gh fudkyk tk ldrk gSa drs gaS ;fn dksbZ gkA

Statements / oDrO; %

(a) All frogs are tortoises / lHkh es<d dNq gA

(b) No tortoise is a crocodile. /
dksbZ Hkh dNqvk exjePN ughagA

Conclusions / fu"d"kkZ%

I. No crocodile is a frog / dksbZ Hkh exjePN es<d ughagA

II. No frog is a crocodile / dksbZ Hkh es<d exjePN ughagA

(a) Only I follows / dDoy I gh ykxw gA

(b) Only II follows / dDoy II gh ykxw gA

(c) Both I and II follow / I vkSj II nkuksa ykxw gA

(d) Neither I nor II follows / I ;k II dksbZ ykxw ughagA

29. **'Suma is shorter than 'Uma'. 'Neha is taller than 'Suma', 'Sudha' is taller than 'Uma' but shorter than 'Hema'. 'Uma' is taller than 'Neha'. Who is the tallest among them?**
lqek mek ls NksVh gSA ugk lqek ls yach gSA lqèkk mek ls yach gSyfdu gksek ls NksVh gSA mek ugk ls yach gSA muea ls lcls yach dkSu gA

(a) Hema/gsek (b) Uma/mek (c) Sudha/lqèkk (d) Neha/ugk

30. **If PAPER is written as 'OZOOQ' how 'PENCIL' can be written in the code?**
(a) QFODJM (b) OFOBHM (c) ODMDTM (d) ODMBHK (e) None

31. **In a certain code "INSTITUTION" is written as NOITUTITSNI, How is PERFECTION written in that code?**
(a) NOICTEFREP (b) NOITCEFERP (c) NOITCEFRPE (d) NOITCEFREP (e) NOITCEFPER

Directions (32): In alphabet series, some alphabets are missing which are given in that order as one of the alternative below it. Choose the correct alternative.

32. **abc __ ea __ dd __ bcc __**
(a) bbbb (b) abbbb (c) dcbbb (d) Can't be determined (e) None

Direction (33): If '+' is 'x', '-' is '+', 'x' is '÷' and '÷' is '-', then answer the following questions based on this information.

33. **6 + 7 × 3 - 8 ÷ 20 = ?**
(a) -3 (b) 7 (c) 2 (d) 1

34. **X and Y are brothers. R is the father of Y. T is the sister of S who is maternal uncle of X. How is related to R ?**
X vkSj Y HkkbZ gSA R, Y dk firk gSA T, S dh cgu gSA S, X dk ekek gSA T dk R ls D;k lac/k gSA

(a) Mother / ekrk (b) Wife / iRuh (c) Sister / cgu (d) Brother / HkkbZ

35. **Introducing a woman, a man said "Her mother is the only daughter of my mother-in-law." How is the man related to the woman?**
,d efgyk dk ifjp; nrs gq, ,d iq"k us dgk fd] ^^ml dh ekrk esjh lkl dh ,d ek=k iq=kh gSA** iq"k dk efgyk ds lkFkk D;k lac/k gA

(a) Son / iq=k (b) Brother / HkkbZ (c) Husband / ifr (d) Father / firk

36. **Which figures represents the relation among animals, vegetables and potatoes?**

fodYikesanh gbZdKu&lh vkdfr i'kqvka lfCt;ka vkaj vkaywds chp ds l<ca/ dks n'kkkrh gS

(a)   (b)   (c)   (d)

Direction: In the following question find the odd word from the given alternatives.

uhps fn, x;sfodYikesals fo"ke 'kCn dk p;u dhft,%

37. (a) Sky- Stars / vkdk'k&rkjs   (b) Moon-Planets / pkn&xzg

(c) Stadium-Players / LVsfM;e&f[kykMh   (d) University-Students / fo'ofo|ky; &fo|kFkhZ

38. **A man starts from his office and goes 5 km East. Then, he turns to the left and again walks for 3km. Again he turns left and walks 5 km. At what distance is he from the starting point?**

,d vkneh vius dk;kZy; ls pyk vkj 5 fdeh- iwoZ dh vkj x;kA fiQj og ck,¡ ?kwek vkj 3 fdeh pykA fiQj og nkckjk ck,¡ ?kwek vkj 5 fdeh pykA og vkjfEHkd fcanq ls fdruh nwj gS\

(a) 3 km   (b) 4 km   (c) 6 km   (d) 7 km

Directions: Read the following information carefully and then answer the question given below it:

Urban services have not expanded fast enough to cope with urban expansion. Low investment allocations have tended to be under spent. Both public (e.g. water and sewage) and private (e.g. low income area housing) infrastructure qualify has declined. The impact of the environment in which children live and the supporting services available to them when they fall ill, seems clear. The decline in average food availability and the rise in absolute poverty. Point in the same unsatisfactory directions.

'kgjh {ks=kka ds foLrkj ds fglkc ls 'kgjh lsokvka dk foLrkj ugha gqvk gSA lkoZtfud {ks= (ty ,oa ey) ,oa futh {ks= (de vk; ,oa vkoklh;) nkuka esa vojlajpukvka ds fglkc ls de fofu;kx forj.k dks j[kk x;k gSA bl dk iHkko lekftd ifjos'k esa cPpka ds thou Lrj ij ,oa chekjh ds :i esa Li"V fn[k jgk gSA [kk|ku dh miyC/rk fu/Lrrk ,oa xjhch dh fLFkfr dks ns[krs gq, vlarks"k iznk gksrk gSA

39. **There is nothing to boast about urban services.**
    (a) If the conclusion is definitely true
    (b) If the conclusion is probably true
    (c) If the data given in the passage is inadequate to answer.
    (d) If conclusion is probably false
    (e) If conclusion is definitely false

Directions: In each of the following problem, there is one question and three statements I, II and III given below the questions. You have to decide whether the data given in the statements is sufficient to answer the question. Read all the statements carefully and find which of the statements is/are sufficient to answer the given question. Choose the correct alternatives in each question.

funZsk% uhps fn, x, leL;kvka esa ,d izu ,oa muds rhu dFku fn;s x, gSA vkidks dFkuka dh {kerk ds vk/kj ij iznkua ds mÙkj pquus gSA fn;s x, dFkuka dks è;kuiwoZd i<+,,oa mi;qDr l{ke fodYi dks pudj mÙkj n%

40. **Five persons: A, B, C, D and E are sitting in a row. Who is sitting in the middle?**
    ikap 0;fDr **A, B, C, D** vkj **E**, ,d iafDr esa cBs gSA chp esa dku cBs gSA

    Statements:@dFku%

    I.   **B is between E and C/ B, E** vkj **C** ds chp esa gSA

    II. **B is the right of E / B, E** ds nk;s gSA

    III. **D is between A and E/ D, A** vkj **E** ds chp esa gSA

    (a) Only I and II   (b) Only II and III   (c) Only I and III   (d) All I, II and III
    (e) None of these

Directions: Read the following information carefully to answer the question that follow :

funZsk% fn;s x, lipukvka dks è;kuiwoZd i<+dj iznu dk mÙkj n%

Nine professors-G H I J K L M N and O are to appear on a series of three panels. Each panel will consist of three professors and each professor will appear exactly once. The panel must be arranged according to the following conditions:

ukS izksiQslj **G H I J K L M N** vkj **O** rhu iSuy ds Jà[kyk esa mifLFkr gSA iR;sd iSuy esa rhu izksiQslj gS vkj os ,d gh ckj iznV gkrs gSA iSuy uhps fn, x, fLFkfr ds vuqlkj Øec¼ fd;s x, gA

(a) I and N must be on the same panel/ I vkSj N leku iSuy esa gSA

(b) K and L must be on the same panel/ K vkSj L leku iSuy esa gSA

(c) O and J cannot be on the same panel/ O vkSj J leku iSuy esa ughgSA

(d) M must appear on the second panel/ M nwljs iSuy esa mifLFkr gSA

(e) Either J or M or both must appear on the panel with it./ ;k J ;k M ;k nksuksa iSuy esa mifLFkr gksrs gSA

41. If J and K appear on the 3rd panel, which of the following process must appear on 2nd?
;fn J vkSj K rhljs iSuy esa mifLFkr gksrs gSa rks rks fn, x, ifØ;k ds vuqlkj uhps ls dksu nwljs iSuy esa mifLFkr gSA

(a) G   (b) H   (c) I   (d) L   (e) O

Directions (42-43): Arrange the following words in a meaningful order:
fn, x, 'kCnksa dks vFkiwkZe esa 0; ofLFkr djsA

42. 1. Rainbow 2. Rain 3. Sun 4. Happy 5. Child

(a) 2, 1, 4, 3, 5   (b) 2, 3, 1, 5, 4   (c) 4, 2, 3, 5, 1   (d) 4, 5, 1, 2, 3

(e) None of these

43. 1. Table 2. Tree 3. Wood 4. Seed 5. Plant

(a) 4, 5, 3, 2, 1   (b) 4, 5, 2, 3, 1   (c) 1, 3, 2, 4, 5   (d) 1, 2, 3, 4, 5   (e) None of these

Directions : Read the following question carefully. Your answer will be one word that does not belong in the same classification as the others.
funZskk% fn, x, ilZu dksè;kuiwd i<A fn, x, oxhZdj.k esa fo tkrh; dks pquA

44. Get odd man out.

(a) Ink   (b) Pen   (c) Pencil   (d) Brush   (e) Chalk stick

Find the missing number :
fuEu Jskh esa ydr la[;k Kkr dhft,\

45. 1438, 1429, 1417, 1402, ?

(a) 1378   (b) 1384   (c) 1387   (d) 1392

46. With which of the following amines chloroform gives carbilamine reaction
Dykjksikske Zfdl ,ehu ds lakkstu esa ifo"V gkrk gSfd ,ehu dkffcZyehu vfHkfØ;k nsrs yxsa\

(a) Primary /izkFkfed   (b) Any type/fdl h Hkh idkj dk   (c) Tertiary/r`rh;d   (d) Secondary/f}rh;d

47. Glycol tastes-
Xykbdksy dk Lokn gkrk g&

(a) Sweet/ehBk   (b) Flat/ÝyS/V   (c) Sour/ [kV~Vk   (d) Salty/uedhu

48. Glycol gives on oxidation-
vkWDlhdj.k ij Xykbdksy nsrk g&

(a) Oxalic acid /vkWDlfyd vEy   (b) Glycolic acid/Xykbdksfyd vEy

(c) Glyoxal/ Xykbvksdlly   (d) All these/mijksDr lHkh

49. The molecular formula of a compound is C_3H_6O. It may be:
,d ;kSfxd ftl dk vkf.ovd lw=k C_3H_6O gS gks ldrk g&

(a) an unsaturated alcohol/,d volkn ,Ydkgy   (b) an aldehyde/,d ,fYMgkbM

(c) a ketone /,d dhVku   (d) All these /mi;Dr lHkh

50. Fehling solution can be used to test:
i0gfyax foy;u ijh{k.k fuEufyf[kr dsfy, mi;Dr gksldrk g&

(a) Aldehyde/,fYMgkbM   (b) Acid/vEy   (c) Alcohol /,Ydkgy   (d) Ether /bZFkj

51. The increased amount of lactic acid decomposes the milk of:
ySfDVd vEy dh ek=kk c<usij [kV~Vk (iQkMM+) nrh gA

(a) Bufalo milk/Hkal ds nw/ dks   (b) Human milk /ekuo nw/ dks

(c) Cow milk / xk; ds nw/ dks   (d) All these/mi;Dr lHkh

52. **Fats and oils are not soluble in/** olk vkSj rsy ugha?kqyrs gS&

(a) Benzene/cathu eñ (b) Chloroform/DykjksiksûeZ eñ (c) Either / bFkj eñ (d) Water /ty eñ

53. **The commonly used catalyst in hydrogenation of oil is:**
rsyksa ds gkbMªkstuhdj.k esa lokZF/kd lkekU; izpfyr mRizsjd gS&

(a) Tungsten/VaxLVu (b) Iron/ykSg (c) Cobalt / dkckYV (d) Nickel /fudsy

54. **The chemical formula of laughing gas is/** gWlkus okyh (ykfILkx) xSl dk jklk;fud uke gS&

(a) N_2O_3 (b) NO_2 (c) N_2O (d) NO

55. **Which of the following is used as fertilizer?**
fuEufyf[kr esa ls dkSu ,d moZjd ds :i esa iz;ksx fd;k tkrk gS\

(a) NH_4NO_3 (b) NH_4OH (c) NH_4Cl (d) NH_4SO_4

56. **A stone is dropped from the top of a tower. In the last second of the journey it travels 24.5 metres. Find the height of the tower?**
,d iRFkj ehukj ds f'k[kj ls fxjk;k tkrk gS\ og vafre ;k=kk ds vfUre lsdsM esa 24-5 ehVj pyrk gS\rks ehukj dh Åpkb Z gksxh\

(a) 78.4 m (b) 72 m (c) 44.1 m (d) 49 m

57. **A particle is moving in a circle with uniform speed. Its .....is constant.**
,d d.k ,dleku xfr ls ,d oÙk esa xfr'khy gS\ mldh@mldk ---------- vpj gksxh@gksxkA

(a) Kinetic Energy/xfrt ÅtkZ (b) Displacement/foLFkkiu

(c) Velocity/ OX (d) Acceleration/Roj.k

58. **The freezer in a refrigerator is fitted near the top-**
jfÝtjsVj esa ÝhÚtj dksf'k[kj ds ikl esa yxk;k tkrk gS&

(a) To keep it away from the hot compressor wiht is near the bottom./
blsrir lkihfM+k lsnwj j[kus dsfy,] tksfd ry ds ikl gksrk gS

(b) Because of convenience/lfo/kk ds dkj.k

(c) So that it can cool the whole interior by setting up convection currents/
blfy, fd ;g lEiwgu&/kkj,¡0;ofLFkr djdslEiw.kZ vkarfjd Hkkx dks B.Mk dj ldsA

(d) All the above/mi;ZDr lHkh lR; gS

59. **Siphon will fall to work if-**
lkbiQu viusdk;Zesa vlIiQy gksxk] ;fn&

(a) the densities of the liquid in the two vessels are equal/nksuka okfgdkvksa esa rjy dk ?kuRo leku gks

(b) The level of the liquid in the two vessels are at the same height/nksuka okfgdkvksa esa rjy dk Lrj leku Åpkb Z ij gkA

(c) Both the limbs are of unequal length/ bl dsnksuka vax vlleku yEckb Z dsgks

(d) The temperature of the liquids in the two vessels are the same/nksuka okfgdkvksa esa rjyksa dk rkieku leku gkA

60. **A red object, when seen through a thick blue glass, appears-**
,d yky oLrq dks tc ekVsuhys dkp ls ns[kk tkrk gS\ rks og fn[kkbZ nsxk&

(a) Red/yky (b) Blue/uhyk (c) Green/ gjk (d) Black/dkyk

61. **The principle underlying a microwave oven is:**
,d lw{e rjax vou dk dk;Zdkjh fl¼kUr gS&

(a) Mircrowaves vibrate the water molecules in food thereby generating heat/
lw{e rjxs [kk| esa ty ds v.kqvksa dksdfEir djrh gS] ftlls }kjkm"ek mRiUu gksrh gS

(b) heat generation by nuclear power/ukfHkdh; 'kfDr }kjk m"ek dksmRiUu djrk gS

(c) heat of microwaves is same as heat wave/ lw{e rjxksa dh m"ek] m"ek rjxksa ds leku gksrh gS

(d) All the above /mi;ZDr lHkh lR; gS

62. **The swing of a spinning cricket ball in the air can be explained on the basis of-**
ok;q esa ?kw.kZu fØdsV ckWy ds ipuksy (flox) dksfdl vk/kkj ij Li"V fd;k tk ldrk gS\

(a) Sudden change in wind direction/iou fn'kk esa vkdfLed ifjorZu

(b) buoyancy of air/Ok;q dh mRiykodrk

(c) Turbulence caused by wind/ iou ds dkj.k i{kkHk

(d) Bernoulli's theorem/cukSyh ies

63. Heart attack is caused due to the excess of .... in the body.
'kjhj esa ---------- dh vf/drk ls gn;?kkkr gkrk gSA

(a) Blood Urea/CyM ;fj;k (b) Cholesterol/dkWyLVªky

(c) Blood Protein/CyM ikVhu (d) Blood Sugar/CyM lQj

64. Which gas is produced in Gobar Gas plant?
xkcj xSl IykaV esa dkSu lk xSl mRiUu gkrk gSA

(a) Carbon Monoxide/dkcZu ekukDlkbM (b) Oxygen /VkDlhtu

(c) Methane/ feFku (d) Ammonia /vekfu;k

65. Normal human blood is-
lkekU; ekuo dk [kwu gkrk gS&

(a) Neutral/LFkwfrd (b) Slightly acidic /gYdk VEyh;

(c) Variable in its acidity or alkalinity/ vEyh; ;k vYdkuh; (d) Slightly Alkaline /gYdk vYdkbu

66. Yonex French open 2017 Badminton tournament was held in Paris. In Men's Singles category, who was the runner up?
;kuDl Úsp vkiu cSMfeaVu VwukZeaV 2017 dk vk;kstu ifjl esa gqvkA iq "k ,dy Jskh ds fofrrk dkSu Fkk\

(a) Kenta Nishimoto (b) John Smith (c) Sachin Tendulkar (d) None of these

67. Hosts India finished at what ranking overall at the ISSF World Cup 2017, in New Delhi?
vkbZ,l-,l-,i- oYMZ di 2017] fnYyh esaHkkjr dks dkSu lk Jskh feyk\

(a) Fourth (b) Seventh (c) Ninth (d) None of these

68. Name of Indian bowler who has climbed to the number one spot in the latest ICC 20 rankings.
gky ds vkbZlhlh-lh- 20 esaHkkjr ds dkSu ls xnckt ua ,d Jskh esa vk,\

(a) Rahul Dravid (b) John Smith (c) Jasprit Bumrah (d) None of these

69. Name of the person who is stop the Forbes list of top-earning dead celebrities for the fifth straight year with $75 million.
iksClZ lwph ds vuqdkj fiNys ikp o"kZesa lcls vf/d **$75** fefy;u dh dekbZ djus okys MSM lsysctfVt dk uke crkoA

(a) Michael Jackson (b) John Smith (c) Jasprit Bumrah (d) None of these

70. Rashtriya Ekta Diwas (National Unity Day) is celebrated across India on ___
jk"Vh; ,drk fnol Hkkjr ds ckgj -------- euk;k tkrk gSA

(a) 25 December (b) 31 October (c) 25 October (d) None of these

71. Tata Steel has elevated ____ as the Chief Executive Officer and Managing Director globally.
---------- VkVk LVhy ds eq[; dk;Zdkjh vf/dkjh ,oa izcU/ funs'kd ds :i pqus x,A

(a) Rastogi Mukul (b) T. V. Narendran (c) Heena Sindhu (d) None of these

72. Name the Railway Officer who was appointed private secretary to President Ram Nath Kovind?
jk"Vªifr jkeukFk dkfoUn ds futh lfpo ds :i esafdl jsyos inkf/dkjh dks fu;Dr fd;k x;k gSA

(a) Manish Goyel (b) Piyush Chatrarjee (c) Vikram Singh (d) None of these

73. The 210 metre high statue of which leader/warior has received environment clearance, making it the world's tallest statue, once built?
fo'o dk lcls Åpk efUUkZ 210 ehVj i;kZoj.k LoPNrk ds ladr ds :i fdl urk@;ks¼k cukbZ xbZ gSA

(a) Chhatrapati Shivaji Maharaj (b) Mahatma Buddha (c) Mahatma Gandhi (d) None of these

74. A 45 member contingent of the Indian Air Force had left for Israel to participate in exercise named ____.
45 lnL;h; Hkkjrh; ok;q lsuk vf/dkjh btjk;y ds lkFk lafMr ;q¼kH;kl fd;sFkk] fdl uke ls tkuk tkrk gSA

(a) White Flag-20   (b) Red Flag-17   (c) Blue Flag-17   (d) None of these

75. For which Indian State, Asian Infrastructure Investment Bank (AIIB) approved USD 2 million loan for projects across the state?

,f'k;u vojlajipuk fofu;ksx cSad **(AIIB)** us Hkkjr ds fdl jkT; dks jkT; ls ckgj dke djus ds fy, 2 fefy;u vesjdh Mkyj dh ½.k dh Lohdfr nh gSA

(a) TamilNadu   (b) Andhra Pradesh   (c) Goya   (d) Bihar