## CALCULATION EXAM 2020

## SECTION 1 - Total 30 marks

Calculate the House cusps to within a degree for the following two sets of data:
Q1
(a) 19 March 1989

Sydney, NSW
Standard Time Zone
Daylight Savings

0:53 am
$33 \mathrm{S52} 151 \mathrm{E} 13$

- 10 hours east of Greenwich
yes -1 hour

LST from Solar Fire $=11$ hours 42 minutes 16 seconds [using Southern Tables] and adjusted for Northern Tables = $\mathbf{2 3}$ Hours $\mathbf{4 2}$ minutes $\mathbf{1 6}$ seconds

Closest sideral time to look us in Table of Houses is therefore 11 hours 44 minutes / 23 hours 44 minutes [or 11 hours 40 / 23 hours 40 would still give correct answers - within a 1 degree orb]

Houses cusps [not interpolated]
Mc = 25 Virgo 38
$11^{\text {th }}=0$ Scorpio 49
$12^{\text {th }}=8$ Sagittarius 7
ASC = 11 Capricorn 35
$2^{\text {nd }}=2$ Aquarius 56
$3^{\text {rd }}=26$ Libra 40

LST Local Sidereal Time : 23 hours 43 minutes 18 seconds (hand calculation
Hand Calculation House Cusps [interpolated] Solar Fire Computer

```
MC = 25 Virgo 10 25 Virgo 10
114h}=0\mathrm{ Scorpio 20
12}\mp@subsup{}{}{\mathrm{ th }}=7\mathrm{ Sagittarius 41
1 }\mp@subsup{1}{}{\mathrm{ st }}=11\mathrm{ Capricorn 13
2 nd = 2 Aquarius 34
3 ^ { \text { rd } } = 2 6 \text { Aquarius } 1 6
```

25 Virgo 10
0 Scorpio 18
7 Sagittarius 37
11 Capricorn 07
2 Aquarius 30
26 Aquarius 14

Sect 1 Q1
Natal Chart
19 Mar 1989, Sun
0:53 am AEDT -11:00
Sydney, NSW
$33^{\circ} \mathrm{S} 52^{\prime} 151^{\circ} \mathrm{E} 13^{\prime}$
Gevenons:
7ryenal
Flocitics
7ran Nout

(b) 25 August 1970

Rheinberg, Germany
Standard Time Zone
Daylight Savings

12:10pm
51 N33 6E 35

- 1 hour east of Greenwich

No

LST from Solar Fire is 9 hours 49 minutes 33 seconds [for Northern Tables and adjusted for Southern Tables is 21 hours 49 minutes $\mathbf{3 3}$ seconds

Closest sidereal time to look up in the Table of Houses would therefore be 9 hours 48 minutes for Northern Tables or 21 hours 48 minutes for Southern tables [ but 9 hours 52minutes and 21hours 52 minutes would also give cusps within the one degree orb]

House Cusps [not interpolated]
MC = 24 Leo 42
11th = 27 Virgo 14
$12^{\text {th }}=21$ Libra 25
ASC $=9$ Scorpio 44

```
2 nd = 8 Sagittarius 20
3 rd = 14 Capricorn 59
```

LST Local Sidereal Time : 9 hours 49 minutes 40 seconds (hand calculation)[my hand calculation was 2149 33, same as Solar Fire]

## Hand Calculation House Cusps Solar Fire Computer

```
MC = 25 Leo 08
11 th = 27 Virgo 07
12}\mp@subsup{}{}{\mathrm{ th }}=21\mathrm{ Libra 44
1 st }=10\mathrm{ Scorpio 02
2nd}=8\mathrm{ Sagittarius 40
3 rd = 15 Capricorn 34
25 Leo 06
27 Virgo 35
21 Libra 48
10 Scorpio }1
    8 Sagittarius }5
    15 Capricorn 33
```


## Sect 1 Q1b <br> Natal Chart <br> 25 Aug 1970, Tue <br> 12:10 pm CET -1:00 <br> Rheinberg, Germany $51^{\circ} \mathrm{N} 33^{\prime} 006^{\circ} \mathrm{E} 35^{\prime}$ <br> Gewnenti: <br> 7ryan:ay <br> Floctita <br> 7ruen Noto <br> Rating: B



Q2
Calculate the longitudinal positions of the following planets to within 30 minutes of zodiacal longitude. All data below is in GMT.

1. Sun: 26 October 1956
11:45am
Hand Calculation $=3$ Scorpio 02
Solar Fire $=3$ Scorpio 02
2. Moon
4 August 1954
9:00pm
Hand Calculation $=21$ Libra 02
Solar Fire $=21$ Libra 02
3. Mercury: 9 July 1987 1:20pm
Hand Calculation $=8$ Cancer45 retrograde
Solar Fire $=8$ Cancer 44 Retrograde
4. Venus: 28 February 1958 2:21am
Hand Calculation $=2$ Aquarius 30
Solar Fire $=2$ Aquarius 29
5. Mars: 27 August 1984 10:15 am
Hand Calculation = 5 Sagittarius 17
Solar Fire = 5 Sagittarius 17

END OF SECTION 1

## SECTION 2 - Total 20 Marks

Use the chart provided to answer all the questions in Section 2


Using the aspect grid supplied find only the following aspects using the stated maximum orbs. Use only the ten main planets provided. Chiron and the Nodes are not required.
Conjunction.................... 8 degree orb.
Square .............................. 8 degree orb.
Opposition......................... 8 degree orb.
Trine ............................... 8 degree orb.
Sextile ............................... 6 degree orb.
Quincunx ......................... 4 degree orb.

Choose 20 aspects from a possible 22 = half a mark each

See Grid below . . . .


Using the planets only [and the above orbs], name one aspect pattern and list the planets that form this pattern. T square=Mars, Jupiter, Pluto, Venus,

RE Q2 - Being able to identify 3 planets in a t-square still gives full marks as a long as there are planets at each leg of the pattern

What is the Lunation Phase for this chart? Gibbous Moon Phase

Convert Moon and Sun to celestial longitude then subtract. = Moon 28032 - Sun

131 12=14920 therefore Gibbous

1 mark

2 marks

1 mark

Venus Leo in the 3rd

Using the nocturnal formula, calculate the Part of Fortune to nearest degree 26 Sagittarius 58

Formula: ASC + Sun - Moon: Convert to celestial longitude
Asc 26 Taurus 18 + Sun 11 Leo 12 - Moon 10 Capricorn 32
$5618+13112=18730(+360$ before subtracting as figure too small) $=54730$
$54730-28032=26658$ therefore 26 Sagittarius 58

## END OF SECTION 2

## SECTION 3 - TOTAL 30 MARKS



All questions in this section relate to Prince Harry's chart, except for Questions 8, 9 and 10.
All answers to be in GMT.

Working out sheets to be provided with the answers in this section unless specified otherwise

Prince Harry's ACD: Midnight ephemeris: ACD = 25 January 1984
Noon ephemeris: ACD = 27 Jul 1984

Please note: There may be a slight difference in answers in this section depending on which Ephemerides is used. The examiners will allow for this.

## Q 1 Calculate a [12] monthly Secondary Progressed Moon table for Prince Harry for 2020, starting from January 25 to the nearest $\mathbf{3 0}$ minutes of arc.

ACD date using midnight ephemeris is 25 January 1984
$2020-1984=36$ years
Add 36 days to UTime of birth [15 September 1984] = October 211984

Moon position for this day is $\mathbf{8}$ degrees Virgo 33minutes 23 seconds

## Monthly Adjustment .using Michelsen 24 hour Moon

Subtract 8 Virgo 3323 from 23 seconds Virgo 24 minutes 30 seconds
$=14$ degrees 51 minutes 7 and divide by 12

```
= 1 degree 14 minutes
Hand Calculations
January 25 2020 = ACD * 8 Virgo 33 minutes 23 seconds
February 25 9 Virgo 47
March 25 11 Virgo 1
April 25 12 Virgo 15
May 25 13 Virgo 29
June 25 14 Virgo 43
July 25 15 Virgo 57
August 25 17 Virgo 10
September 25 18 Virgo 24
October 25 19 Virgo 38
November 25 20 Virgo 52
December 25 22 Virgo 6 [Solar Fire gives the degree as 22 Virgo 7 minutes for 12am]
```

Q 2 How old will Harry be when he experiences his $2^{\text {nd }}$ Secondary Progressed New Moon? What degree and sign was it in?

Look to find the relevant Moon Phase = 24 October 1984 at 1 Scorpio 16
Subtract this from the GMT DOB $=39$ days marks

Answer = 39 years at 1 Scorpio 16 (Solar Fire: 29 July 2023 = 1 Scorpio 15)

Q 3 At what age will Harry's Progressed Venus conjunct his natal Midheaven?

Position of MC = 17 Scorpio 04
Ephemeris date that Venus reaches this point = October 9 reaches 16 Scorpio 18 [by October 10 it has passed the point and is at 17 Scorpio 31]

Find the difference between these dates = 24 days

## Answer = 24 years old [but will pay 25]

Q4 How old will Harry be when his Solar Arc Saturn conjuncts his Natal Mars?

Saturn is 12 Scorpio 5022250
Difference $=34$ degrees 7 minutes 3407

Sun is 22 Virgo 56 + 34 degrees $7=27$ Libra 3 minutes 172 56+
Sun reaches this position before midnight on 20 October 3407
Subtract 20 October from 15 September = 35 days $20703=27$ Libra 03 count down
using DOB as 0 till Sun reaches this position

Answer = during his $35^{\text {th }}$ year

Q5 During 2021 and 2022 transiting Neptune will oppose Harry's natal Sun. List the exact GMT dates. No working out sheet required.

1. May 252021 [also accept May 26]
2. July 272021 [also accept July 28]
3. March 152022
4. 1 November 2022

Q 6 Using a one-degree orb, both separating and applying, list the GMT periods when Uranus will conjunct Harry's IC No working out sheet required.

Time when Uranus is between 16 Taurus 4 minutes and 18 Taurus 4 minutes

1. May 272022 [pay May 28] to July 10 [pay July 9]
2. October 102022 [pay October 11] to November 29 or 30 Nov
3. March 152023 [pay March 16] to April 242023

Q 7 List the exact GMT date when Harry experienced his most recent Jupiter return.
No working out sheet required.

## Jupiter = 3 Capricorn 33

Date was December 182019 [pay December 19?]

Q8 List the exact [GMT] dates and zodiacal degrees of all Solar and Lunar Eclipses for 2021. No working out sheet required.
[Total] Lunar on May 26 at 5 degrees of Sag 26 minutes
[Annual]r Solar on June 10 at 19 Gemini 47
[Partial] Lunar on November 19 at 27 Taurus 14
[Total] Solar on December 4 at 12 Sagittarius 22
Q9 What were the exact [GMT] periods when Venus was retrograde during 2020? No working out sheet required.

May 13 to June 25

Q 10 Calculate the GMT Adjusted Calculation Date for the following birth data:
August 201960 at 1.30 pm [13.30 hours]
Melbourne, Australia
Standard Time Zone: -10 hours (no daylight savings time)

1. GMT time of birth $=3.30 \mathrm{am}$ on August 201960
2. 24 hours -3 hours 30 minutes $=20$ hours 30 minutes
3. Add 20 hours 30 minutes to GMT sidereal time of birth $215319=41$ hours 83 minutes 19 seconds
4. Round up to 42 hours 23 minutes 19 seconds
5. Subtract 24 hours [as over 24] = 18 hours 23 minutes 19 seconds
6. Look back to find the date that this was the sidereal time = $\mathbf{2 7}$ June $\mathbf{1 9 6 0}$

## Answer is June 271960

or

1. GMT time of birth $=3.30 \mathrm{am}$ August 1960
2. Sidereal time from ephemeris=21 5319 subtract
3. GMT birthtime $=33000$
4. $\quad$ Difference $=$ ACD Sidereal time 182319
5. Turn back in ephemeris to this time= ACD = 27 June 1960

## SECTION 4 - TOTAL 20 MARKS

## Answer ONLY $\mathbf{2 0}$ questions of a possible $\mathbf{2 5}$

## No working out sheets are required for Section 4.

Please fill in your answers in the answer book provided.

1. Mars detriment occurs in what sign?
a. Aries
b. Libra
c. Aquarius
d. Cancer
2. The maximum separation between Venus and the Sun in a geocentric chart is what degree?
a. 88
b. 48
c. 28
d. None of the above
3. Ceres is now defined as an:
a. Kuiper Belt Object
b. Dwarf Planet
c. Comet
d. both b and c
4. The Sun reaches its maximum declination north and south of the equator [and is overhead at the Tropic of Capricorn and Cancer] at
a. The Equinoxes
b. The Solstices
c. Beginning of Spring
d. None of these
5. Which aspect is NOT a $4^{\text {th }}$ Harmonic aspect?
a. Conjunction
b. Square
c. Opposition
d. Sextile
6. The Inferior Conjunction of Venus and the Sun returns to the same sign of the zodiac every
a. 5 years
b. 8 years
c. 19 months
d. 40 years
7. Which of these bodies is not a Kuiper Belt Object
a. Uranus
b. Pluto
c. Eris
d. Make Make
8. Which of the following pairs of planets are in mutual reception?
a. Venus in Libra and Mars in Aries
b. Jupiter in Leo and Sun in Sagittarius
c. Mars in Pisces and Saturn in Aries
d. Moon in Aries and Mercury in Cancer
9. The dwarf planet Eris has a cycle of
a. 248 years
b. 84 years
c. 557 years
d. None of the above
10. An aspect of 40 degrees is known as:
a. Septile
b. Novile
c. Quintile
d. Decile
11. Which planet spends the least amount of its time going retrograde
a. Venus
b. Mars
c. Uranus
d. Mercury
12. Which of the following planets could be the final dispositor in a chart?
a. Mars in Leo
b. Mars in Aries
c. Saturn in Capricorn
d. Both b and c
13. Mars moves retrograde
a. Once every 25-6 months
b. Once a year
c. Twice a year
d. None of the above
14. The Saturn Jupiter conjunction takes place every
a. 18 years
b. 20 years
c. 29 years
d. None of the above
15. In Roman mythology, the god Saturn was the father of:
a. Jupiter
b. Pluto
c. Neptune
d. All of the above
16. In Medical Astrology the kidneys are ruled by:
a. Libra
b. Taurus
c. Virgo
d. Scorpio
17. The time it takes the Vernal Equinox to completely precess through one sign of the zodiac is known as the "Great Month". The Great Month is approximately:
a. 2160 years
b. 365 days
c. 25,800 years
d. 12,000 years
18. The Black Moon Lilith is the
a. Lunar perigee
b. Point where the Moon crosses the ecliptic
c. Lunar apogee
d. A satellite of the Moon
19. Saturn is said to be dignified in what house?
a. Tenth house
b. First house
c. Eleventh house
d. Ninth house
20. Which sign is not a mutable sign?
a. Aries
b. Virgo
c. Gemini
d. Pisces
21. During 2020 what aspect is Pluto making to Jupiter?
a. Square
b. Conjunction
c. Sextiles
d. Trine
22. Using the derived house system, which house would represent your mother's brother
a. 6th house
b. 10th house
c. $3^{\text {rd }}$ house
d. None of the above
23. A person has Chiron at 0 degrees Aquarius, Sun at 2 degrees of Scorpio and Uranus at 2 degrees of Leo. The aspect pattern formed is known as?
a. Grand Trine
b. Yod
c. Kite
d. T square
24. When finding an auspicious date for an operation you would use
a. Relationship Astrology
b. Mundane Astrology
c. Horary Astrology
d. Electional Astrology
25. The Chiron return occurs around the age of
a. Between ages 29-30
b. Between ages 49-51
c. Between ages 58-59
d. None of the above
